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**Department of Defense
Fiscal Year (FY) 2023 Budget Estimates**

April 2022



Navy

Justification Book Volume 1 of 1

Procurement, Marine Corps

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The estimated cost of this report for the Department of the Navy (DON) is \$55,014.

The estimated total cost for supporting the DON budget justification material is approximately \$4,190,764 during the 2022 fiscal year. This includes \$88,845 in supplies and \$4,101,919 in labor.

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Navy • Budget Estimates FY 2023 • Procurement

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Department of Defense Appropriations Act, 2023

Procurement, Marine Corps

For expenses necessary for the procurement, manufacture, and modification of missiles, armament, military equipment, spare parts, and accessories therefore; plant equipment, appliances, and machine tools, and installation thereof in public and private plants; reserve plant and Government and contractor-owned equipment layaway; vehicles for the Marine Corps, including the purchase of passenger motor vehicles for replacement only; and expansion of public and private plants, including land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title, \$3,681,506,000 to remain available for obligation until September 30, 2025 of which \$16,233,000 shall be available for the Marine Corps Reserve.

Fiscal Year (FY) 2023 Overseas Operations Costs funding accounted for in the Base budget include:

- Combat or direct combat support expenses that discontinue once combat operations end at major contingency locations [\$0].
- In-theater and in-CONUS expenses that remain after combat operations cease and have been previously funded in OCO [\$0].

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation -----	FY 2021 (Base + OCO) -----	FY 2022 Less Supplementals Enactment -----	FY 2022 Division B Division C P.L.117-43 Enactment* -----	FY 2022 Division B P.L.117-70 Enactment** -----
Procurement, Marine Corps	2,725,225	3,093,770		
Total Department of the Navy	2,725,225	3,093,770		

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 14:43:36

*Includes enacted funding pursuant to the Extending Government Funding and Delivering Emergency Assistance Act (Public Law 117-43).

**Includes enacted funding pursuant to the Further Extending Government Funding Act (Public Law 117-70).

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation -----	FY 2022 Division A P.L. 117-86 Enactment*** -----	FY 2022 Division N P.L. 117-103 Enactment**** -----	FY 2022 Total Supplemental Enactment -----	FY 2022 Total Enactment -----
Procurement, Marine Corps				3,093,770
Total Department of the Navy				3,093,770

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation -----	FY 2023 Request -----
Procurement, Marine Corps	3,681,506
Total Department of the Navy	3,681,506

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2021 (Base + OCO) -----	FY 2022 Less Supplementals Enactment -----	FY 2022 Division B Division C P.L.117-43 Enactment* -----	FY 2022 Division B Division C P.L.117-70 Enactment** -----
02. Weapons and combat vehicles	649,736	831,929		
03. Guided missiles and equipment	244,250	116,928		
04. Communications And Electronics Equipment	1,198,361	1,433,376		
05. Support Vehicles	419,392	367,384		
06. Engineer and Other Equipment	186,191	311,334		
07. Spares and Repair Parts	27,295	32,819		
Total Procurement, Marine Corps	2,725,225	3,093,770		

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2022 Division A P.L. 117-86 Enactment*** -----	FY 2022 Division N P.L. 117-103 Enactment**** -----	FY 2022 Total Supplemental Enactment -----	FY 2022 Total Enactment -----
02. Weapons and combat vehicles				831,929
03. Guided missiles and equipment				116,928
04. Communications And Electronics Equipment				1,433,376
05. Support Vehicles				367,384
06. Engineer and Other Equipment				311,334
07. Spares and Repair Parts				32,819
Total Procurement, Marine Corps				3,093,770

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2023 Request -----
02. Weapons and combat vehicles	756,138
03. Guided missiles and equipment	439,310
04. Communications And Electronics Equipment	1,673,343
05. Support Vehicles	277,964
06. Engineer and Other Equipment	499,952
07. Spares and Repair Parts	34,799
Total Procurement, Marine Corps	3,681,506

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2021 (Base + OCO) Quantity	Cost	FY 2022 Less Supplementals Enactment Quantity	Cost	FY 2022 Division B Division C P.L.117-43 Enactment* Quantity	Cost	FY 2022 Division B P.L.117-70 Enactment** Quantity	Cost	S e c
Budget Activity 02: Weapons and combat vehicles											

Tracked Combat Vehicles											
1	AAV7A1 PIP	A		87,476		36,836					U
2	Amphibious Combat Vehicle Family of Vehicles	A	72	436,805	83	520,697					U
3	LAV PIP	A		37,403		22,116					U
Artillery and Other Weapons											
4	155mm Lightweight Towed Howitzer	B		59		32					U
5	Artillery Weapons System	A		49,687	117	221,347					U
6	Weapons and Combat Vehicles Under \$5 Million	A		38,306		30,901					U
				-----		-----					
Total Weapons and combat vehicles				649,736		831,929					
Budget Activity 03: Guided missiles and equipment											

Guided Missiles											
7	Tomahawk	A									U
8	Naval Strike Missile (NSM)	A									U
9	Ground Based Air Defense	A		17,686		9,349					U
10	Anti-Armor Missile-Javelin	A	98	19,888	1	937					U
11	Family Anti-Armor Weapon Systems (FOAAWS)	A		21,891		20,481					U
12	Anti-Armor Missile-TOW	A		33,640		9,793					U

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Department of the Navy
FY 2023 President's Budget
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Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2022 Division A P.L. 117-86 Enactment*** Quantity	Cost	FY 2022 Division N P.L. 117-103 Enactment**** Quantity	Cost	FY 2022 Total Supplemental Enactment Quantity	Cost	FY 2022 Total Enactment Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
Budget Activity 02: Weapons and combat vehicles											

Tracked Combat Vehicles											
1	AAV7A1 PIP	A							36,836		U
2	Amphibious Combat Vehicle Family of Vehicles	A						83	520,697		U
3	LAV PIP	A							22,116		U
Artillery and Other Weapons											
4	155mm Lightweight Towed Howitzer	B							32		U
5	Artillery Weapons System	A						117	221,347		U
6	Weapons and Combat Vehicles Under \$5 Million	A							30,901		U

Total Weapons and combat vehicles									831,929		
Budget Activity 03: Guided missiles and equipment											

Guided Missiles											
7	Tomahawk	A									U
8	Naval Strike Missile (NSM)	A									U
9	Ground Based Air Defense	A							9,349		U
10	Anti-Armor Missile-Javelin	A						1	937		U
11	Family Anti-Armor Weapon Systems (FOAAWS)	A							20,481		U
12	Anti-Armor Missile-TOW	A							9,793		U

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2023 Request Quantity	Cost	S e c
----	-----	-----	-----	-----	-----
Budget Activity 02: Weapons and combat vehicles					

Tracked Combat Vehicles					
1	AAV7A1 PIP	A		5,653	U
2	Amphibious Combat Vehicle Family of Vehicles	A	74	536,678	U
3	LAV PIP	A		57,099	U
Artillery and Other Weapons					
4	155mm Lightweight Towed Howitzer	B		1,782	U
5	Artillery Weapons System	A		143,808	U
6	Weapons and Combat Vehicles Under \$5 Million	A		11,118	U

Total Weapons and combat vehicles				756,138	
Budget Activity 03: Guided missiles and equipment					

Guided Missiles					
7	Tomahawk	A	13	42,958	U
8	Naval Strike Missile (NSM)	A	115	174,369	U
9	Ground Based Air Defense	A		173,801	U
10	Anti-Armor Missile-Javelin	A	4	18,495	U
11	Family Anti-Armor Weapon Systems (FOAAWS)	A		21,419	U
12	Anti-Armor Missile-TOW	A		663	U

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Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2021 (Base + OCO) Quantity	Cost	FY 2022 Less Supplementals Enactment Quantity	Cost	FY 2022 Division B Division C P.L.117-43 Enactment* Quantity	Cost	FY 2022 Division B P.L.117-70 Enactment** Quantity	Cost	S e c
----	-----	----	-----	----	-----	----	-----	----	-----	----	-
13	Guided MLRS Rocket (GMLRS)	A	1022	151,145	536	76,368					U
	Total Guided missiles and equipment			244,250		116,928					
Budget Activity 04: Communications And Electronics Equipment											

Command and Control Systems											
14	Common Aviation Command and Control System (C	A		35,057		18,247					U
Repair and Test Equipment											
15	Repair and Test Equipment	A		24,405		33,554					U
Other Support (Tel)											
16	Modification Kits	A		5,206		167					U
Command and Control System (Non-Tel)											
17	Items Under \$5 Million (Comm & Elec)	A		69,725		103,158					U
18	Air Operations C2 Systems	A		9,577		1,291					U
Radar + Equipment (Non-Tel)											
19	Ground/Air Task Oriented Radar (G/ATOR)	A	8	276,673	8	339,369					U
Intell/Comm Equipment (Non-Tel)											
20	GCSS-MC	A		634							U
21	Fire Support System	A		24,934		33,808					U
22	Intelligence Support Equipment	B		58,887		61,860					U

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(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2022 Division A P.L. 117-86 Enactment***		FY 2022 Division N P.L. 117-103 Enactment****		FY 2022 Total Supplemental Enactment		FY 2022 Total Enactment		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
13	Guided MLRS Rocket (GMLRS)	A							536	76,368	U
Total Guided missiles and equipment										116,928	
Budget Activity 04: Communications And Electronics Equipment											
Command and Control Systems											
14	Common Aviation Command and Control System (C	A								18,247	U
Repair and Test Equipment											
15	Repair and Test Equipment	A								33,554	U
Other Support (Tel)											
16	Modification Kits	A								167	U
Command and Control System (Non-Tel)											
17	Items Under \$5 Million (Comm & Elec)	A								103,158	U
18	Air Operations C2 Systems	A								1,291	U
Radar + Equipment (Non-Tel)											
19	Ground/Air Task Oriented Radar (G/ATOR)	A							8	339,369	U
Intell/Comm Equipment (Non-Tel)											
20	GCSS-MC	A									U
21	Fire Support System	A								33,808	U
22	Intelligence Support Equipment	B								61,860	U

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No ----	Item Nomenclature -----	Ident Code -----	FY 2023 Request Quantity	Cost	S e c -
13	Guided MLRS Rocket (GMLRS)	A	44	7,605	U
Total Guided missiles and equipment				----- 439,310	
Budget Activity 04: Communications And Electronics Equipment -----					
Command and Control Systems					
14	Common Aviation Command and Control System (C	A		30,292	U
Repair and Test Equipment					
15	Repair and Test Equipment	A		58,024	U
Other Support (Tel)					
16	Modification Kits	A		293	U
Command and Control System (Non-Tel)					
17	Items Under \$5 Million (Comm & Elec)	A		83,345	U
18	Air Operations C2 Systems	A		11,048	U
Radar + Equipment (Non-Tel)					
19	Ground/Air Task Oriented Radar (G/ATOR)	A		61,943	U
Intell/Comm Equipment (Non-Tel)					
20	GCSS-MC	A		1,663	U
21	Fire Support System	A		48,322	U
22	Intelligence Support Equipment	B		182,894	U

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2021 (Base + OCO) Quantity	Cost	FY 2022 Less Supplementals Enactment Quantity	Cost	FY 2022 Division B Division C P.L.117-43 Enactment* Quantity	Cost	FY 2022 Division B P.L.117-70 Enactment** Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
24	Unmanned Air Systems (Intel)	A		20,889		24,299					U
25	DCGS-MC	A		37,510		28,633					U
26	UAS Payloads	A		5,489		3,074					U
	Other Support (Non-Tel)										
29	Marine Corps Enterprise Network (MCEN)	A		73,612		90,974					U
30	Common Computer Resources	A		32,977		77,315					U
31	Command Post Systems	A		26,993		48,633					U
32	Radio Systems	A		338,997		401,346					U
33	Comm Switching & Control Systems	A		30,575		42,294					U
34	Comm & Elec Infrastructure Support	A		43,782		95,943					U
35	Cyberspace Activities	A		43,985		25,377					U
36	Cyber Mission Forces	A									U
37	DON UAS Video 5	A		23,700							U
38	DON TRR (Ashore)	A		10,957							U
999	Classified Programs			3,797		4,034					U
				-----		-----		-----		-----	
	Total Communications And Electronics Equipment			1,198,361		1,433,376					

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2022 Division A P.L. 117-86 Enactment*** Quantity	Cost	FY 2022 Division N P.L. 117-103 Enactment**** Quantity	Cost	FY 2022 Total Supplemental Enactment Quantity	Cost	FY 2022 Total Enactment Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
24	Unmanned Air Systems (Intel)	A							24,299		U
25	DCGS-MC	A							28,633		U
26	UAS Payloads	A							3,074		U
	Other Support (Non-Tel)										
29	Marine Corps Enterprise Network (MCEN)	A							90,974		U
30	Common Computer Resources	A							77,315		U
31	Command Post Systems	A							48,633		U
32	Radio Systems	A							401,346		U
33	Comm Switching & Control Systems	A							42,294		U
34	Comm & Elec Infrastructure Support	A							95,943		U
35	Cyberspace Activities	A							25,377		U
36	Cyber Mission Forces	A									U
37	DON UAS Video 5	A									U
38	DON TRR (Ashore)	A									U
999	Classified Programs								4,034		U
	Total Communications And Electronics Equipment								1,433,376		

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No ----	Item Nomenclature -----	Ident Code -----	FY 2023 Request Quantity -----	Cost -----	S e c -
24	Unmanned Air Systems (Intel)	A		47,595	U
25	DCGS-MC	A		47,998	U
26	UAS Payloads	A		8,619	U
	Other Support (Non-Tel)				
29	Marine Corps Enterprise Network (MCEN)	A		276,763	U
30	Common Computer Resources	A		40,096	U
31	Command Post Systems	A		58,314	U
32	Radio Systems	A		612,450	U
33	Comm Switching & Control Systems	A		51,976	U
34	Comm & Elec Infrastructure Support	A		26,029	U
35	Cyberspace Activities	A		17,759	U
36	Cyber Mission Forces	A		4,036	U
37	DON UAS Video 5	A			U
38	DON TRR (Ashore)	A			U
999	Classified Programs			3,884	U
	Total Communications And Electronics Equipment			1,673,343	

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2021 (Base + OCO) Quantity	Cost	FY 2022 Less Supplementals Enactment Quantity	Cost	FY 2022 Division B Division C P.L.117-43 Enactment* Quantity	Cost	FY 2022 Division B P.L.117-70 Enactment** Quantity	Cost	S e c e
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Budget Activity 05: Support Vehicles											

Administrative Vehicles											
39	Commercial Cargo Vehicles	A		20,832		17,848					U
Tactical Vehicles											
40	Motor Transport Modifications	A		26,922		17,647					U
41	Joint Light Tactical Vehicle		752	368,675	636	322,013					U
42	Family of Tactical Trailers	A		2,963							U
43	Trailers	A				9,876					U
				-----		-----		-----		-----	
Total Support Vehicles				419,392		367,384					

Budget Activity 06: Engineer and Other Equipment

Engineer and Other Equipment											
44	Environmental Control Equip Assort	A		455							U
45	Tactical Fuel Systems	A		501		2,161					U
46	Power Equipment Assorted	A		20,381		16,040					U
47	Amphibious Support Equipment	A		5,752		12,319					U
48	EOD Systems	A		17,349		94,472					U
Materials Handling Equipment											
49	Physical Security Equipment	A		23,063		87,120					U

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2022 Division A P.L. 117-86 Enactment*** Quantity	Cost	FY 2022 Division N P.L. 117-103 Enactment**** Quantity	Cost	FY 2022 Total Supplemental Enactment Quantity	Cost	FY 2022 Total Enactment Quantity	Cost	S e c
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Budget Activity 05: Support Vehicles											

Administrative Vehicles											
39	Commercial Cargo Vehicles	A							17,848		U
Tactical Vehicles											
40	Motor Transport Modifications	A							17,647		U
41	Joint Light Tactical Vehicle							636	322,013		U
42	Family of Tactical Trailers	A									U
43	Trailers	A							9,876		U

Total Support Vehicles									367,384		
Budget Activity 06: Engineer and Other Equipment											

Engineer and Other Equipment											
44	Environmental Control Equip Assort	A									U
45	Tactical Fuel Systems	A							2,161		U
46	Power Equipment Assorted	A							16,040		U
47	Amphibious Support Equipment	A							12,319		U
48	EOD Systems	A							94,472		U
Materials Handling Equipment											
49	Physical Security Equipment	A							87,120		U

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2023 Request Quantity	Cost	S e c
----	-----	-----	-----	-----	-----
Budget Activity 05: Support Vehicles					

Administrative Vehicles					
39	Commercial Cargo Vehicles	A		35,179	U
Tactical Vehicles					
40	Motor Transport Modifications	A		17,807	U
41	Joint Light Tactical Vehicle		413	222,257	U
42	Family of Tactical Trailers	A			U
43	Trailers	A		2,721	U

Total Support Vehicles				277,964	
Budget Activity 06: Engineer and Other Equipment					

Engineer and Other Equipment					
44	Environmental Control Equip Assort	A			U
45	Tactical Fuel Systems	A		7,854	U
46	Power Equipment Assorted	A		5,841	U
47	Amphibious Support Equipment	A		38,120	U
48	EOD Systems	A		201,047	U
Materials Handling Equipment					
49	Physical Security Equipment	A		69,967	U

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 14:43:36

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2021 (Base + OCO) Quantity	Cost	FY 2022 Less Supplementals Enactment Quantity	Cost	FY 2022 Division B Division C P.L.117-43 Enactment* Quantity	Cost	FY 2022 Division B P.L.117-70 Enactment** Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
General Property											
50	Field Medical Equipment	A		4,187		8,105					U
51	Training Devices	B		82,367		31,638					U
52	Family of Construction Equipment	A		22,284		39,638					U
53	Ultra-Light Tactical Vehicle (ULTV)	A		678		15,439					U
Other Support											
54	Items Less Than \$5 Million	A		9,174		4,402					U
Total Engineer and Other Equipment				186,191		311,334					
Budget Activity 07: Spares and Repair Parts											

Spares and Repair Parts											
55	Spares and Repair Parts	A		27,295		32,819					U
Total Spares and Repair Parts				27,295		32,819					
Total Procurement, Marine Corps				2,725,225		3,093,770					

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 14:43:36

*Includes enacted funding pursuant to the Extending Government Funding and Delivering Emergency Assistance Act (Public Law 117-43).

**Includes enacted funding pursuant to the Further Extending Government Funding Act (Public Law 117-70).

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2022 Division A P.L. 117-86 Enactment*** Quantity	Cost	FY 2022 Division N P.L. 117-103 Enactment**** Quantity	Cost	FY 2022 Total Supplemental Enactment Quantity	Cost	FY 2022 Total Enactment Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
General Property											
50	Field Medical Equipment	A							8,105		U
51	Training Devices	B							31,638		U
52	Family of Construction Equipment	A							39,638		U
53	Ultra-Light Tactical Vehicle (ULTV)	A							15,439		U
Other Support											
54	Items Less Than \$5 Million	A							4,402		U
									-----	-----	
Total Engineer and Other Equipment									311,334		
Budget Activity 07: Spares and Repair Parts											

Spares and Repair Parts											
55	Spares and Repair Parts	A							32,819		U
									-----	-----	
Total Spares and Repair Parts									32,819		
									-----	-----	
Total Procurement, Marine Corps									3,093,770		

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 14:43:36

***Includes enacted funding pursuant to the Further Additional Extending Government Funding Act (Public Law 117-86).

****Includes enacted funding pursuant to the Ukraine Supplemental Appropriations Act (Public Law 117-103).

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Department of the Navy
FY 2023 President's Budget
Exhibit P-1 FY 2023 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2023 Request Quantity	Cost	S e c
----	-----	-----	-----	-----	-----
General Property					
50	Field Medical Equipment	A		21,780	U
51	Training Devices	B		86,272	U
52	Family of Construction Equipment	A		27,605	U
53	Ultra-Light Tactical Vehicle (ULTV)	A		15,033	U
Other Support					
54	Items Less Than \$5 Million	A		26,433	U
Total Engineer and Other Equipment				499,952	
Budget Activity 07: Spares and Repair Parts					

Spares and Repair Parts					
55	Spares and Repair Parts	A		34,799	U
Total Spares and Repair Parts				34,799	
Total Procurement, Marine Corps				3,681,506	

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Appropriation 1109N: Procurement, Marine Corps

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2	02	01	2025	Amphibious Combat Vehicle Family of Vehicles.....	Volume 1 - 5
3	02	01	2038	LAV PIP.....	Volume 1 - 17
4	02	02	2185	155MM Ltwt Towed Howitzer.....	Volume 1 - 27
5	02	02	2212	Artillery Weapons System.....	Volume 1 - 31
6	02	02	2220	Wpns & Cmbt Vehs under \$5 million.....	Volume 1 - 41

Appropriation 1109N: Procurement, Marine Corps

Line #	BA	BSA	Line Item Number	Line Item Title	Page
7	03	01	2101	Tomahawk.....	Volume 1 - 53
8	03	01	2292	Naval Strike Missile (NSM).....	Volume 1 - 61
9	03	01	3006	Ground Based Air Defense (GBAD).....	Volume 1 - 69
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Appropriation 1109N: Procurement, Marine Corps

Line #	BA	BSA	Line Item Number	Line Item Title	Page
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13	03	01	3025	Guided MLRS Rocket (GMLRS).....	Volume 1 - 107

Appropriation 1109N: Procurement, Marine Corps

Line #	BA	BSA	Line Item Number	Line Item Title	Page
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15	04	07	4181	Repair and Test Equipment.....	Volume 1 - 123
16	04	09	4652	Modification Kits.....	Volume 1 - 137
17	04	14	4620	Items under \$5 million (Comm & Elec).....	Volume 1 - 141
18	04	14	4640	Air Operations C2 Systems.....	Volume 1 - 155
19	04	15	4655	Ground/Air Task Oriented Radar (G/ATOR).....	Volume 1 - 161
20	04	16	4616	GCSS-MC.....	Volume 1 - 175
21	04	16	4733	Fire Support System.....	Volume 1 - 179
22	04	16	4747	Intelligence Support Equipment.....	Volume 1 - 189
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29	04	19	4625	Marine Corps Enterprise Network (MCEN).....	Volume 1 - 227
30	04	19	4630	Common Computer Resources.....	Volume 1 - 239
31	04	19	4631	Command Post Systems.....	Volume 1 - 253
32	04	19	4633	Radio Systems.....	Volume 1 - 263
33	04	19	4634	Comm Switching & Control Systems.....	Volume 1 - 283
34	04	19	4635	Comm & Elec Infrastructure Supt.....	Volume 1 - 289
35	04	19	4645	Cyberspace Activities.....	Volume 1 - 295
36	04	19	4646	Cyber Mission Forces.....	Volume 1 - 299

Appropriation 1109N: Procurement, Marine Corps

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40	05	02	5050	Motor Transport Modifications.....	Volume 1 - 307
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Appropriation 1109N: Procurement, Marine Corps

Line #	BA	BSA	Line Item Number	Line Item Title	Page
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Appropriation 1109N: Procurement, Marine Corps

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45	06	01	6277	Tactical Fuel Systems.....	Volume 1 - 361
46	06	01	6366	Power Equipment Assorted.....	Volume 1 - 369
47	06	01	6518	Amphibious Support Equipment.....	Volume 1 - 379
48	06	01	6520	EOD Systems.....	Volume 1 - 391
49	06	02	6438	Physical Security Equipment.....	Volume 1 - 401
50	06	03	6522	Field Medical Equipment.....	Volume 1 - 405
51	06	03	6532	Training Devices.....	Volume 1 - 411
52	06	03	6544	Family of Construction Equipment.....	Volume 1 - 421
53	06	03	6545	Ultra-Light Tactical Vehicle (ULTV).....	Volume 1 - 427
54	06	04	6670	Items Less Than \$5 Million.....	Volume 1 - 435

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Appropriation 1109N: Procurement, Marine Corps

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Line Item Title	Line Item Number	Line #	BA	BSA	Page
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AAV7A1 PIP	2021	1	02	01.....	Volume 1 - 1
Air Operations C2 Systems	4640	18	04	14.....	Volume 1 - 155
Amphibious Combat Vehicle Family of Vehicles	2025	2	02	01.....	Volume 1 - 5
Amphibious Support Equipment	6518	47	06	01.....	Volume 1 - 379
Anti-Armor Missile-Javelin	3011	10	03	01.....	Volume 1 - 81
Anti-Armor Missile-TOW	3017	12	03	01.....	Volume 1 - 101
Artillery Weapons System	2212	5	02	02.....	Volume 1 - 31
Comm & Elec Infrastructure Supt	4635	34	04	19.....	Volume 1 - 289
Comm Switching & Control Systems	4634	33	04	19.....	Volume 1 - 283
Command Post Systems	4631	31	04	19.....	Volume 1 - 253
Commercial Cargo Vehicles	5006	39	05	01.....	Volume 1 - 303
Common Aviation Command and Control System (CAC2S)	4644	14	04	04.....	Volume 1 - 117
Common Computer Resources	4630	30	04	19.....	Volume 1 - 239
Cyber Mission Forces	4646	36	04	19.....	Volume 1 - 299
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Family Anti-Armor Weapon Systems (FOAAWS)	3016	11	03	01.....	Volume 1 - 91
Family of Construction Equipment	6544	52	06	03.....	Volume 1 - 421
Family of Tactical Trailers	5097	42	05	02.....	Volume 1 - 345
Field Medical Equipment	6522	50	06	03.....	Volume 1 - 405
Fire Support System	4733	21	04	16.....	Volume 1 - 179
GCSS-MC	4616	20	04	16.....	Volume 1 - 175
Ground Based Air Defense (GBAD)	3006	9	03	01.....	Volume 1 - 69
Ground/Air Task Oriented Radar (G/ATOR)	4655	19	04	15.....	Volume 1 - 161
Guided MLRS Rocket (GMLRS)	3025	13	03	01.....	Volume 1 - 107
Intelligence Support Equipment	4747	22	04	16.....	Volume 1 - 189
Items Less Than \$5 Million	6670	54	06	04.....	Volume 1 - 435
Items under \$5 million (Comm & Elec)	4620	17	04	14.....	Volume 1 - 141
Joint Light Tactical Vehicle	5095	41	05	02.....	Volume 1 - 315
LAV PIP	2038	3	02	01.....	Volume 1 - 17
Marine Corps Enterprise Network (MCEN)	4625	29	04	19.....	Volume 1 - 227
Modification Kits	4652	16	04	09.....	Volume 1 - 137
Motor Transport Modifications	5050	40	05	02.....	Volume 1 - 307
Naval Strike Missile (NSM)	2292	8	03	01.....	Volume 1 - 61

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Line Item Title	Line Item Number	Line #	BA	BSA	Page
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Power Equipment Assorted	6366	46	06	01.....	Volume 1 - 369
Radio Systems	4633	32	04	19.....	Volume 1 - 263
Repair and Test Equipment	4181	15	04	07.....	Volume 1 - 123
Spares and Repair Parts	7000	55	07	01.....	Volume 1 - 445
Tactical Fuel Systems	6277	45	06	01.....	Volume 1 - 361
Tomahawk	2101	7	03	01.....	Volume 1 - 53
Trailers	5132	43	05	02.....	Volume 1 - 349
Training Devices	6532	51	06	03.....	Volume 1 - 411
UAS Payloads	4787	26	04	16.....	Volume 1 - 221
Ultra-Light Tactical Vehicle (ULTV)	6545	53	06	03.....	Volume 1 - 427
Unmanned Air Systems	4757	24	04	16.....	Volume 1 - 207
Wpns & Cmbt Vehs under \$5 million	2220	6	02	02.....	Volume 1 - 41

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles							P-1 Line Item Number / Title: 2021 / AAV7A1 PIP					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M, 0206629M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,299.062	87.476	36.836	5.653	0.000	5.653	18.259	14.753	0.013	0.013	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,299.062	87.476	36.836	5.653	0.000	5.653	18.259	14.753	0.013	0.013	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,299.062	87.476	36.836	5.653	0.000	5.653	18.259	14.753	0.013	0.013	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
The AAV7A1 Product Improvement Program (PIP) is the Assault Amphibious Vehicle (AAV) Modifications Line which includes life-cycle support to ensure cost-effective combat readiness for the AAV Family of Vehicles (FOV). This is accomplished through continuous review of sub-systems to maintain system supportability and safety, procurement of replacement systems for obsolescence, and fielding of Engineering Change Proposals (ECP) for capability-based improvements of fleet assets, reduced total ownership cost initiatives, and improved AAV sustainment initiatives. The AAV Modifications Line procures modernized components and subsystems that impact safe and reliable use of AAV such as Intercom Modernization, Tactical Communication Modernization (TCM), replacement of the legacy manned turret system with a modernized Remote Weapons Station (RWS) for Personnel-variants (P-variant), technical refresh of servers and laptops for Command-variants (C-Variant), and associated support for the AAV FOV. Based on CMC Force Design initiatives, the procurement of planned modifications for the AAV PIP were completed in FY 2022, Assured Position Navigation and Timing (APNT) and Hydraulic Modernization efforts have been cancelled, and the TCM order has been reduced from 446 to just 305 systems; what remains is installation of the Intercom System and Tactical Communication Modernization (TCM) systems and sustainment of the fleet for major dead-lining issues, safety of use, and obsolescence through system retirement in FY 2027. Similarly, modifications for Reserve vehicles were completed in FY 2022; funding provided will go towards sustainment of the fleet for major dead-lining issues, safety of use, and obsolescence through system retirement in FY 2027.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	87.142	36.496	5.299	-	5.299	17.809	14.269	0.004	0.004		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.334	0.340	0.354	-	0.354	0.450	0.484	0.009	0.009		
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	87.476	36.836	5.653	-	5.653	18.259	14.753	0.013	0.013		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles						P-1 Line Item Number / Title: 2021 / AAV7A1 PIP				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M, 0206629M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / AAV7A1 PIP				- / 1,299.062	- / 87.476	- / 36.836	- / 5.653	- / 0.000	- / 5.653
P-40	Total Gross/Weapon System Cost				- / 1,299.062	- / 87.476	- / 36.836	- / 5.653	- / 0.000	- / 5.653
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:
 FY 2023 Base Appropriation Request: \$5.653M (\$5.299M Active; \$0.354M Reserve). Funding provides for installation of the Intercom and Tactical Communication Modernization (TCM) systems plus unplanned modifications to the AAV fleet which may be required for major dead lining issues, safety of use, and obsolescence. Intercom Systems and Tactical Communication Modernization (TCM) systems will be installed through FY 2023 and FY 2024, respectively. TCM replaces the current fielded radios, which will be obsolete by FY 2024 due to the NSA cryptographic modernization mandate and will be unable to communicate with other units unless TCM is installed. Efforts to sustain the fleet will continue in Engineering Maintenance and Technical Support (EMTS), material procurements to replace legacy parts and components, Field Service Representatives (FSRs), and AAV Command variant (AAV-C) software and hardware technology refreshes, firmware, and licenses necessary to maintain the Authority to Operate (ATO) AAV-C until the ACV-C variant is fielded. Integrated Logistics Support, and Publications and Technical Data support will continue at a declining rate as AAVs are retired from the fleet. Estimated retirement date for the AAV FOV is FY 2027.

The decrease from FY 2022 to FY 2023 of \$31.183M is a result of many efforts. \$19.7M was realigned internal to the Marine Corps to procure Open Water Safety Craft (OWSC)/Assault Amphibious Safety Boat (AASB) in support waterborne operations. These funds were realigned to Budget Line Item 6518 (Amphibious Support Equipment) for proper BLI alignment prior to execution. The remaining decrease is attributed to reduced requirements for Vehicle Modifications due to the cancellation of Assured Position Navigation and Timing (APNT) system, cancellation of Hydraulic Modernization efforts, and the decrease in TCM from 446 to just 305 systems based on CMC Force Design initiatives. Production Engineering Support also decreased due to the end of the AAV PIP and the transition of the program to sustainment and retirement.

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1						P-1 Line Item Number / Title: 2021 / AAV7A1 PIP						Item Number / Title [DODIC]: 1 / AAV7A1 PIP						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1,299.062		87.476		36.836		5.653		0.000		5.653				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				1,299.062		87.476		36.836		5.653		0.000		5.653				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				1,299.062		87.476		36.836		5.653		0.000		5.653				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Surface Vehicle	-	-	856.947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.2) Vehicle Modifications ⁽¹⁾	-	-	174.837	-	-	64.283	-	-	28.503	-	-	0.667	-	-	-	-	-	0.667
1.1.3) Reserve Vehicle Modifications ⁽²⁾	-	-	2.576	-	-	0.334	-	-	0.340	-	-	0.354	-	-	-	-	-	0.354
1.1.4) Survivability Upgrade	-	-	179.465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.5) Engineering Change Orders (ECO) ⁽³⁾	-	-	4.501	-	-	0.371	-	-	0.378	-	-	0.337	-	-	-	-	-	0.337
Subtotal: Recurring Cost	-	-	1,218.326	-	-	64.988	-	-	29.221	-	-	1.358	-	-	-	-	-	1.358
Non Recurring Cost																		
1.2.1) Nonrecurring Engineering and Tooling	-	-	7.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	7.059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Flyaway Cost	-	-	1,225.385	-	-	64.988	-	-	29.221	-	-	1.358	-	-	-	-	-	1.358
Support Cost																		
2.1) Peculiar Training Equipment & Simulators	-	-	3.986	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1						P-1 Line Item Number / Title: 2021 / AAV7A1 PIP						Item Number / Title [DODIC]: 1 / AAV7A1 PIP						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
2.2) Integrated Logistics Support ⁽⁴⁾	-	-	18.550	-	-	5.472	-	-	3.038	-	-	3.506	-	-	-	-	-	3.506
2.3) Production Engineering Support ⁽⁵⁾	-	-	38.354	-	-	2.741	-	-	3.128	-	-	-	-	-	-	-	-	-
2.4) Acceptance Testing	-	-	0.116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) Support Equipment ⁽⁶⁾	-	-	7.636	-	-	13.487	-	-	0.437	-	-	-	-	-	-	-	-	-
2.6) Pubs & Tech Data ⁽⁷⁾	-	-	5.035	-	-	0.788	-	-	1.012	-	-	0.789	-	-	-	-	-	0.789
Subtotal: Support Cost	-	-	73.677	-	-	22.488	-	-	7.615	-	-	4.295	-	-	-	-	-	4.295
Gross/Weapon System Cost	-	-	1,299.062	-	-	87.476	-	-	36.836	-	-	5.653	-	-	0.000	-	-	5.653

Footnotes:

- ⁽¹⁾ The decrease in Vehicle Modifications from FY 2022 to FY 2023 (\$27.836M) is due to the \$19.7M realignment internal to the Marine Corps to procure Open Water Safety Craft (OWSC)/Assault Amphibious Safety Boat (AASB) in support of waterborne operations (funds were realigned to Budget Line Item 6518, Amphibious Support Equipment, for proper BLI alignment prior to execution), the reduced level of vehicle modifications per CMC Force Design (cancellation of Assured Position Navigation and Timing (APNT) system and Hydraulic Modernization efforts, and reduction of TCM order from 446 by 141 to 305 systems). Funding provides for installation of the Intercom and Tactical Communication Modernization (TCM) systems plus unplanned modifications to the AAV fleet which may be required for major dead lining issues, safety of use, and obsolescence.
- ⁽²⁾ The \$0.014M increase in Reserve Unit Vehicle Mods from FY22 to FY23 is the result of the normal rate of inflation.
- ⁽³⁾ The decrease in Engineering Change Orders from FY22 to FY23 (\$0.041M) is the result reduced engineering changes anticipated for vehicles due to earlier than planned retirement from the fleet.
- ⁽⁴⁾ The increase in Integrated Logistics Support between FY 2022 and FY 2023 (\$0.468M) is attributed to increased maintenance and technical support requirements as AAVs are transitioned out of the fleet. This element of cost provides Engineering Maintenance and Technical Support, Field Service Representatives (FSRs), and material procurements necessary to sustain the fleet until retirement.
- ⁽⁵⁾ The decrease in Production Engineering Support between FY 2022 and FY 2023 (\$3.128M) is due to the conclusion of the AAV Product Improvement Program (PIP) in FY 2022. Beginning with FY 2023, this effort transitioned to O&M,MC as the program shifts to sustainment and retirement.
- ⁽⁶⁾ The decrease in Support Equipment from FY2022 to FY2023 (\$0.437M) is attributed to completion of TCM Test Sets and TCM Support Equipment procurements for the Assault Amphibian Schools in FY 2022.
- ⁽⁷⁾ The decrease in Publications and Technical Data from FY 2022 to FY 2023 (\$0.223M) is attributed to a reduced amount of planned changes to technical publications resulting from the end of the AAV Product Improvement Program (PIP) phase. While there is a normal amount of technical changes from year to year, it is expected that the reduced amount of planned changes will result in a reduced need to update Technical Publications overall for the AAV system.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles							P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: 472												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	112	72	83	74	-	74	80	104	105	-	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	639.849	436.805	520.697	536.678	0.000	536.678	558.066	864.895	844.662	99.405	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	639.849	436.805	520.697	536.678	0.000	536.678	558.066	864.895	844.662	99.405	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	639.849	436.805	520.697	536.678	0.000	536.678	558.066	864.895	844.662	99.405	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	13.557	18.970	20.127	-	20.127	20.657	21.102	21.476	21.864	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	4,861K	4,746K	5,419K	6,002K	-	6,002K	5,790K	7,311K	7,243K	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	5,713K	6,067K	6,273K	7,252K	-	7,252K	6,976K	8,316K	8,044K	-	Continuing	Continuing
Description: This is a CMC Force Design program. ACV provides protected mobility to otherwise dismounted infantry formations and enables littoral maneuver from ship-to-shore and from shore-to-shore. Equipped with modern communications systems and weapons for infantry support-by-fire, the ACV significantly improves the ability of Fleet Marine Forces to access, seize, and hold key maritime terrain in the execution of Expeditionary Advanced Base Operations. The Amphibious Combat Vehicle is imperative to realizing Marine Corps requirements for Fleet Marine Force 2030. The capability to project power from the sea ensures joint freedom of maneuver against increasingly sophisticated area denial and anti-access strategies across the range of military operations in areas vital to our national interest. To this end, an ACV creates operational and tactical options through rapid maneuver on sea and land, provides for the seamless transition of combat power from sea to land, enables rapid response to crisis, enables the introduction of joint follow-on forces and can impose disproportionate costs on our enemies who must extend their defenses. This program has delivered the initial capability of Personnel variants (ACV-Ps) in Nov 2020 and is on track to deliver the initial capability of Command variants (ACV-Cs) in 4QFY23, Improved Lethality 30MM variants (ACV-30s) in 3QFY26, and Recovery variants (ACV-Rs) in 4QFY27. The Amphibious Combat Vehicle (ACV) replaces the legacy Assault Amphibious Vehicle (AAV) in the Assault Amphibious (AA) battalions within the Marine Divisions. ACV-equipped AA companies will provide protected mobility and general support lift to elements of Marine Infantry battalions. The ACV, an advanced generation, eight-wheeled armored personnel carrier, will mitigate current and projected capability gaps by providing improved lethality against dismounted enemy troops, more effective land and water tactical mobility, and increased force protection and survivability from blasts, fragmentation, and kinetic energy threats. The initial ACV Increment (FY 2018 - FY 2021) Personnel variant will deliver combat ready Marines from ship-to-shore in order to mass forces at littoral penetration points and continue to maneuver onward to inland objectives. Subsequent procurements (FY 2022 - FY 2026) are planned to expand the personnel carrier quantities and to procure command and control, improved lethality, and tactical recovery capabilities. In an Acquisition Decision Memorandum (ADM) dated 8 Jan 2019, ASN(RD&A), the Milestone Decision Authority, combined the ACV 1.1 and ACV 1.2 programs into a single ACV Family of Vehicles (FOV) that continues the established phased development and procurement approach. This approach allows the Marine Corps to procure a modernized assault amphibian to serve as the platform to perform missions across the range of military operations to include joint forcible entry operations. In an ADM dated 12 July 2019, ASN(RD&A) authorized a third lot of LRIP consisting of 56 vehicles and directed that acquisition documentation reflecting this change should be updated as part of the Full Rate Production (FRP) Milestone decision approval process. The first lot of full rate production was procured in FY 2021. The merger and additional lot of LRIP are updates from the FY 2020 acquisition strategy.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles						P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: 472										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Amphibious Combat Vehicle	P-5a, P-21			112 / 639.849	72 / 436.805	83 / 520.697	74 / 536.678	- / 0.000	74 / 536.678
P-40	Total Gross/Weapon System Cost				112 / 639.849	72 / 436.805	83 / 520.697	74 / 536.678	- / 0.000	74 / 536.678
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Baseline Appropriation Request: \$536.678M. Funds will procure Lot 6, the third Full Rate Production (FRP) lot of 74 vehicles (57 ACV-P vehicles and 17 ACV-C vehicles), plus procurement of related items such as Production Support, Systems Engineering/Program Management (SE/PM), Engineering Change Orders (ECOs), Government Furnished Equipment (GFE), and Integrated Logistics Support (ILS). The increase between FY 2022 and FY 2023 of \$15.981M is a result of a different planned mix of variant quantities, vehicle modifications, GFE, nonrecurring engineering, training equipment and support requirements. There are large increases and decreases in the cost elements on the P5 that make up the net increase of \$15.981M. These increases and decreases are explained in detail on the P5.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1							P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles						Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				112			72			83			74			-			74		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				639.849			436.805			520.697			536.678			0.000			536.678		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				639.849			436.805			520.697			536.678			0.000			536.678		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				639.849			436.805			520.697			536.678			0.000			536.678		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			13.557			18.970			20.127			-			20.127		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				5,713K			6,067K			6,273K			7,252K			-			7,252K		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Flyaway - Cost																					
Recurring Cost																					
1.1.1) ACV-Personnel Variant (ACV-P) ^(†) ⁽¹⁾	3,428K	112	383.986	3,558K	72	256.192	3,787K	69	261.333	3,950K	57	225.135	-	-	-	3,950K	57	225.135			
1.1.2) ACV-Command Variant (ACV-C) ^(†) ⁽²⁾	-	-	-	-	-	-	4,421K	14	61.898	4,487K	17	76.279	-	-	-	4,487K	17	76.279			
1.1.5) Government Furnished Equipment - Communication Suites ⁽³⁾	-	-	37.764	-	-	28.580	-	-	24.622	-	-	29.114	-	-	-	-	-	29.114			
1.1.6) Government Furnished Equipment - Remote Weapons Station ⁽⁴⁾	-	-	3.775	-	-	5.486	-	-	20.474	-	-	16.405	-	-	-	-	-	16.405			
1.1.7) Engineering Change Orders ⁽⁵⁾	-	-	21.984	-	-	14.559	-	-	25.992	-	-	26.746	-	-	-	-	-	26.746			
1.1.8) System Engineering Program Management ⁽⁶⁾	-	-	70.764	-	-	26.067	-	-	27.301	-	-	28.132	-	-	-	-	-	28.132			
Subtotal: Recurring Cost	-	-	518.273	-	-	330.884	-	-	421.620	-	-	401.811	-	-	-	-	-	401.811			
Subtotal: Flyaway - Cost	-	-	518.273	-	-	330.884	-	-	421.620	-	-	401.811	-	-	-	-	-	401.811			
Flyaway - Non-Recurring Cost																					
Non Recurring Cost																					

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1						P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles						Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
2.1.2) Nonrecurring Engineering & Industrial Tooling ⁽⁷⁾	-	-	18.907	-	-	7.583	-	-	3.676	-	-	7.896	-	-	-	-	-	7.896
2.1.3) Vehicle Modifications ⁽⁸⁾	-	-	7.281	-	-	3.224	-	-	24.494	-	-	34.404	-	-	-	-	-	34.404
Subtotal: Non Recurring Cost	-	-	26.188	-	-	10.807	-	-	28.170	-	-	42.300	-	-	-	-	-	42.300
Subtotal: Flyaway - Non-Recurring Cost	-	-	26.188	-	-	10.807	-	-	28.170	-	-	42.300	-	-	-	-	-	42.300
Support Cost																		
3.1) Production Support ⁽⁹⁾	-	-	18.176	-	-	10.622	-	-	10.431	-	-	11.662	-	-	-	-	-	11.662
3.2) Acceptance Testing ⁽¹⁰⁾	-	-	7.310	-	-	4.726	-	-	5.208	-	-	5.318	-	-	-	-	-	5.318
3.3) Peculiar Training Equipment and Simulators ⁽¹¹⁾	-	-	4.811	-	-	1.785	-	-	2.660	-	-	1.977	-	-	-	-	-	1.977
3.4) Pubs & Tech Data ⁽¹²⁾	-	-	6.451	-	-	7.013	-	-	4.080	-	-	4.275	-	-	-	-	-	4.275
3.5) Support Equipment ⁽¹³⁾	-	-	12.152	-	-	3.459	-	-	10.935	-	-	12.545	-	-	-	-	-	12.545
3.6) Integrated Logistics Support (ILS) ⁽¹⁴⁾	-	-	46.488	-	-	67.509	-	-	37.593	-	-	56.790	-	-	-	-	-	56.790
Subtotal: Support Cost	-	-	95.388	-	-	95.114	-	-	70.907	-	-	92.567	-	-	-	-	-	92.567
Gross/Weapon System Cost	5,713K	112	639.849	6,067K	72	436.805	6,273K	83	520.697	7,252K	74	536.678	-	-	0.000	7,252K	74	536.678

(†) indicates the presence of a P-5a

Footnotes:

(1) The decrease in ACV-P Vehicle Cost between FY 2022 and FY 2023 of \$36.198M is attributed to reduced procurement quantity of 12 less ACV-P variants (decreased from 69 to 57, or 17.4% less) at an increased cost per vehicle. Based on the revised quantity, the program negotiated with the prime contractor for FRP Lots 2-4 (FY 2022 through FY 2024) and reached settlement in December 2021. The year-to-year change between FY 2022 and FY 2023 in the negotiated values per ACV-P vehicle equates to approximately \$162K (4.1%); the change in FY 2022 unit cost from PB-22 to PB-23 is approximately \$145K (4.0%). The program planned to order 1,122 vehicles, however, following the CMC Force Design total production was reduced 44% from 1,122 by 490 vehicles to 632 vehicles. Though the program planned to procure 92 vehicles in FY 2022 under PB-22, the increased cost per unit reduced the quantity to 83. Material pricing was also impacted by supply chain challenges due to COVID-19. The unit cost increase in FY 2023 for ACV-P was determined to be fair and reasonable for the overall reduction in procurement. This element of cost includes the direct materials, direct labor, and overhead costs necessary to manufacture the ACV-P Surface Vehicle.

(t) indicates the presence of a P-5a

Footnotes:

(1) The decrease in ACV-P Vehicle Cost between FY 2022 and FY 2023 of \$36.198M is attributed to reduced procurement quantity of 12 less ACV-P variants (decreased from 69 to 57, or 17.4% less) at an increased cost per vehicle. Based on the revised quantity, the program negotiated with the prime contractor for FRP Lots 2-4 (FY 2022 through FY 2024) and reached settlement in December 2021. The year-to-year change between FY 2022 and FY 2023 in the negotiated values per ACV-P vehicle equates to approximately \$162K (4.1%); the change in FY 2022 unit cost from PB-22 to PB-23 is approximately \$145K (4.0%). The program planned to order 1,122 vehicles, however, following the CMC Force Design total production was reduced 44% from 1,122 by 490 vehicles to 632 vehicles. Though the program planned to procure 92 vehicles in FY 2022 under PB-22, the increased cost per unit reduced the quantity to 83. Material pricing was also impacted by supply chain challenges due to COVID-19. The unit cost increase in FY 2023 for ACV-P was determined to be fair and reasonable for the overall reduction in procurement. This element of cost includes the direct materials, direct labor, and overhead costs necessary to manufacture the ACV-P Surface Vehicle.

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1	P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles	Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(2) The increase in ACV-C Vehicle Cost between FY 2022 and FY 2023 of \$14.381M is due to procurement of 3 additional vehicles in FY 2023 (increased from 14 to 17, or 23.2%) at an increased cost per vehicle. The program planned to order 1,122 vehicles, however, following the CMC Force Design total production was reduced 44% from 1,122 by 490 vehicles to 632 vehicles. Based on the revised quantity, the program negotiated with the prime contractor for FRP Lots 2-4 (FY 2022 through FY 2024) and reached settlement in December 2021. The year-to-year change between FY 2022 and FY 2023 in the negotiated values per ACV-C vehicle equates to approximately \$66K (1.5%); the change in FY 2022 unit cost from PB-22 to PB-23 is approximately \$718K (19.3%). Material pricing was also impacted by supply chain challenges due to COVID-19. The unit cost increase in FY 2023 for ACV-C was determined to be fair and reasonable for the overall reduction in procurement. This element of cost includes the direct materials, direct labor, and overhead costs necessary to manufacture the ACV-C Surface Vehicle. Instead of transporting personnel, the role of the Command variant is to host workstations within the vehicle to support Command and Control functions. While mostly common with the ACV-P vehicle, vehicle configuration also includes cabling and power supply to support Command and Control workstations. The command and control workstations are provided to the contractor as Government Furnished Equipment (GFE) and are accounted for under the GFE Communication Suites cost element. This is the final procurement lot of ACV-C variants. (3) The increase of \$4.492M between FY 2022 and FY 2023 in GFE communication suites is primarily due to a unit price reduction and economies of scale achieved in FY 2022 on radio transceivers (RT-2034) by procuring jointly with the Army. The FY 2023 value represents the full cost of RT-2034s in the event the USMC is not able to combine the buy with the Army in FY 2023. (4) The decrease in RWS GFE between FY 2022 and FY 2023 of \$4.069M is primarily attributed to procurement of 12 less ACV-P variants in FY 2023 and due to the completion of the order of manufacturing line test sets for RWS in FY 2022. Prior to FY 2022, the program acquired existing CROWS systems from the Army and refurbished these systems with parts and components in order to bring them to a configuration suitable for ACV. In FY 2022 and beyond, the program is procuring new CROWS systems because no additional systems remain to refurbish from the Army. GFE Remote Weapons Station (RWS) procurement for ACV-P (FY 2018 - FY 2024) includes the Mk-153 Common Remotely Operated Weapon Station (CROWS), which consists of a single-mount weapons station and weapon (either an M2 0.50cal heavy machine gun or a Mk-19 40mm automatic grenade launcher), Main Processing Unit (MPU), Display and Control Panel (DCP), Control Grip, Laser Range Finder (LRF), Thermal camera system (TIM), Day camera system (VIM), Sight Servo Assembly (SSA) system, and Main Frame Assembly (MFA). In FY 2025 and FY 2026, procurement of the ACV-P variant RWS is complete and the RWS configuration includes instead procurement of the ACV-30 RWS consisting of the Mk-44 30mm gun, a 7.62mm coax machine gun, and a dual-mount weapon station. Unlike the ACV-P, the RWS for ACV-30 is a dual-mount weapon station and will be procured by the prime contractor as Contractor Furnished Equipment (CFE). As such, the cost of the ACV-30 dual-mount is accounted for in the ACV-30 Surface Vehicle cost element. However, the Mk-44 30mm gun and 7.62mm coax machine gun will remain GFE and be accounted for in this cost element in FY 2025 and FY 2026. (5) The increase in ECO between FY2022 and FY2023 of \$0.754M is primarily attributed to engineering changes resulting from follow-on reliability growth testing. ECOs result from fact of life changes to vehicle configuration such as performance, safety, and reliability which are captured while vehicles are still being manufactured on a production line. Design costs for these changes are reported in the Nonrecurring and Industrial Tooling cost element. Engineering changes are reported separately from the Surface Vehicle cost element so that capability improvements to the vehicle can be easily tracked and monitored. Once approved, these changes become part of the approved vehicle baseline configuration. For FY 2023, the following ECOs are included: 0001 (Gunner Control Handle), 0002 (Non-skid), 0009 (Brake Fluid Reservoir Access), 0011 (Driver's Station Ergonomics), 0022 (Redesigned Ventilation Provisions), 0029 (Seat Belt Retainer Loop), 0036 (Environmental Control System), 0040 (Spall Liner removal), 0041 (Safety-wire on open ports), 0046 (Spent Casings collector), 0047 (MFOCS integration), 0048 (SL-3 Tow Rope), 0051 (Optimize Sea Towing Provisions for Operations in Open Seas), 0052 (Diplexer for MUOS), 0053 (Multi-User Multi-Station (MUMS) controls for RWS), 0054 (AN/PRC-158 radio upgrade mod), 0056 (SL-3 vehicle equipment update), 0055, GFE Comm suite Cables to CFE, 0057 (Improved ramp extension handle), 0058 (Improved Tow Pintle), 0059 (Conditioned Based Maintenance - Data Storage & Collection), and 0062 (MFOCS integration) for 80 vehicles. (6) The increase between FY 2022 to FY 2023 of \$0.831M, or approximately 3%, is in line with normal inflation and is primarily based on the contract cost in accordance with the awarded fixed price incentive contract. All terms were competitively-derived, negotiated, and accepted by the Government. Systems Engineering/Program Management (SE/PM) is a recurring charge from the Prime Contractor. Recurring systems engineering includes the costs of maintainability/reliability engineering, maintenance engineering, value engineering, production engineering costs associated with the system, periodic system design/evaluation, and analysis of test results during production. Recurring program management includes the overall planning, direction, and control of the definition, development, and production of the system/program, including the functions of business management. (7) The increase in Nonrecurring Engineering & Industrial Tooling from FY 2022 to FY2023 of \$4.220M is due to increased cost of engineering design labor from the prime contractor and an increased number of expected design changes anticipated for FY 2023. Nonrecurring Engineering & Industrial Tooling provides the nonrecurring design labor and design materials for engineering changes required to address fact of life changes to vehicle configuration such as performance, safety, or reliability. Once designed changes are approved, the recurring cost of approved changes become part of the Engineering Change Order (ECO) or the Vehicle Modification cost elements, depending upon whether the changes are incorporated in a forward-fit mode on the vehicle production line (ECOs) or in a retrofit mode after vehicle manufacturing is complete (Vehicle Modifications). This cost element also addresses vehicle tooling and preservation, packaging, and storage cost of tooling. (8) The increase in Vehicle Modifications from FY 2022 to FY 2023 of \$9.910M is due to scheduled increases of retrofits to previously procured LRIP systems. Below provides the details of increase. The FY 2023 request provides procurements of RWS Multi-User Multi-Station (MUMS)(ECP-0053) for 26 LRIP Lot 1 vehicles and 30 LRIP Lot 2 vehicles, Mobile Family of Computing Systems (MFOCS) converter retrofit for LRIP Lot 1 and 2 vehicles (56 vehicles), Conditioned-based Maintenance retrofit (ECP-0059) for 26 LRIP Lot 1 vehicles, and the SL3 Update (ECP-0056) for 30 LRIP Lot 2 vehicles. Retrofitting vehicles produced in earlier lots of production brings vehicles to the approved configuration baseline, adds key capabilities already present in vehicles produced later in the production line, and brings the		

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1	P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles	Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
vehicles to a consistent configuration for ease of maintenance and upkeep. Vehicle modifications are alterations to the vehicle configuration which address fact of life changes to vehicle configuration such as performance, safety, or reliability but are not possible to be made on the production line and instead have to be retrofit to the vehicles after they have been manufactured; the design costs for these changes are reported in the Nonrecurring and Industrial Tooling cost element. ⁽⁹⁾ The increase in Production Support from FY 2022 to FY 2023 of \$1.231M is attributed to an increase in New Equipment Training Team (NETT) requirements in FY 2023 as a result of increased system fielding. ⁽¹⁰⁾ The increase between FY 2022 and FY 2023 of \$0.110M, or 2.1% is attributed to normal inflation. Acceptance Testing provides effort/materials associated with vehicle inspections that are conducted to determine if the requirements and the specifications of the vehicle and/or contract are met. It is funded in the fiscal year in which the item is procured as part of the full funding policy. ⁽¹¹⁾ The decrease between FY 2022 and FY 2023 of \$0.683M is attributed to completion of procurement of unique training parts for the Assault Amphibian Schools (AAS) in FY 2022, reduced procurement quantities for CROWS-II Appended Trainers, and completion of delivery of first article training devices by the prime contractor. ⁽¹²⁾ The increase in Pubs and Tech Data from FY 2022 to FY 2023 of \$0.195M is attributed to an increase in prime contract fielding and support Costs per the negotiated terms and conditions of the contract. ⁽¹³⁾ The increase from FY 2022 to FY 2023 of \$1.610M is attributed to procurement of Supplemental Egress Breathing Devices (SEBD), CROWS-II Diagnostic Acquisition Cases (DAQ), Recovery Variant tool kits, and CROWS-II Transport cases in FY 2023. Support equipment are devices required to inspect, test, service, adjust, calibrate, measure, repair, overhaul, assemble, disassemble, handle, store, or otherwise support the lifecycle management of the ACV. ⁽¹⁴⁾ The increase between FY 2022 and FY 2023 of \$19.197M is driven by the increased number of vehicles fielded to operational units and the resulting costs therein. Through FY 2022, cumulative fielding is planned for 160 vehicles; in FY 2023, the delivery of another 79 vehicles is planned, an increase of approximately 50% over previously delivered vehicles. The increase supports Interim Contractor Support, Total Package Fielding support, Initial Spares Storage requirement, and the transitioning of Engineering and Field Service Representatives from the AAV program to the ACV program as AAVs are retired from the fleet. ILS includes Logistics Management Information (LMI) procurement and platform support products necessary for the planning and preparation to support the fielded system until organic support capability is established. ILS cost is based on Total Package Fielding (TPF) support which includes the logistics support products that are required to support a new or modified materiel system and is designed to ensure that units are provided with fully supportable materiel systems with minimal disruption to the unit's day-to-day mission. This effort will enable a journeyman level repair technician(s) to disassemble, clean, inspect, overhaul/rebuild, repair/refurbish, reassemble and test, at a Government Depot, all secondary repairables identified by the Contractor during its Supportability Analyses and Level of Repair Analyses and documented in the LMI data tracking system. The cost is based on the contract cost in accordance with the awarded fixed price incentive contract. All terms were negotiated and accepted by the Government.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1			P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles						Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) ACV-Personnel Variant (ACV-P) ^(†)		2018	BAE Systems / York, PA	C / FPIF	MCSC	Jun 2018	Oct 2019	26	3,649K	Y		Dec 2017
1.1.1) ACV-Personnel Variant (ACV-P) ^(†)		2019	BAE Systems / York, PA	C / FPIF	MCSC	Dec 2018	Jun 2020	30	3,464K	Y		Dec 2017
1.1.1) ACV-Personnel Variant (ACV-P) ^(†)		2020 ⁽¹⁵⁾	BAE Systems / York, PA	C / FPIF	MCSC	Nov 2019	Feb 2021	56	3,307K	Y		Dec 2017
1.1.1) ACV-Personnel Variant (ACV-P) ^(†)		2021	BAE Systems / York, PA	C / FPIF	MCSC	Nov 2020	Feb 2022	72	3,558K	Y		Dec 2017
1.1.1) ACV-Personnel Variant (ACV-P) ^(†)		2022	BAE Systems / York, PA	C / FFP	MCSC	Nov 2021	Feb 2023	69	3,787K	Y		Dec 2020
1.1.1) ACV-Personnel Variant (ACV-P) ^(†)		2023	BAE Systems / York, PA	C / FFP	MCSC	Nov 2022	Feb 2024	57	3,950K	Y		Dec 2020
1.1.2) ACV-Command Variant (ACV-C) ^(†)		2022	BAE Systems / York, PA	C / FFP	MCSC	Apr 2022	Sep 2023	14	4,421K	Y		Dec 2020
1.1.2) ACV-Command Variant (ACV-C) ^(†)		2023	BAE Systems / York, PA	C / FFP	MCSC	Mar 2023	Sep 2024	17	4,487K	Y		Dec 2020

^(†) indicates the presence of a P-21

Footnotes:

⁽¹⁵⁾ FY20 award of 56 vehicles will occur via two actions due to the continuing resolution quantity restrictions. The first vehicle award (qty 30) occurred Nov 19.

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1										P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles										Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle																				
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2018										Fiscal Year 2019										B A L A N C E													
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT				Calendar Year 2018										Calendar Year 2019																				
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P									
1.1.1) ACV-Personnel Variant (ACV-P) ⁽¹⁾																																								
	1	2018	NAVY	26	0	26											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26						
	1	2019	NAVY	30	0	30											A -										-	-	-	-	-	-	-	-	-	-	-	-	-	30
	1	2020	NAVY	56	0	56																										56								
	1	2021	NAVY	72	0	72																										72								
	1	2022	NAVY	69	0	69																										69								
	1	2023	NAVY	57	0	57																										57								
1.1.2) ACV-Command Variant (ACV-C) ⁽²⁾																																								
	2	2022	NAVY	14	0	14																										14								
	2	2023	NAVY	17	0	17	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P										

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																		
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1										P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles										Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle																		
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2020										Fiscal Year 2021														B A L A N C E							
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT				Calendar Year 2020										Calendar Year 2021																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								
1.1.1) ACV-Personnel Variant (ACV-P) ⁽¹⁾																																						
	1	2018	NAVY	26	0	26	3	3	3	3	5	4	1	4																			0					
	1	2019	NAVY	30	0	30	-	-	-	-	-	-	-	-	2	5	5	5	4	3	3	3											0					
	1	2020	NAVY	56	0	56		A -	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	5	5	4	4	22								
	1	2021	NAVY	72	0	72																			A -	-	-	-	-	-	-	-	-	-	-	-	-	72
	1	2022	NAVY	69	0	69																											69					
	1	2023	NAVY	57	0	57																											57					
1.1.2) ACV-Command Variant (ACV-C) ⁽²⁾																																						
	2	2022	NAVY	14	0	14																											14					
	2	2023	NAVY	17	0	17	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022																			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1										P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles													Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle																			
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2022												Fiscal Year 2023												BALANCE											
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023																							
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP												
1.1.1) ACV-Personnel Variant (ACV-P) ⁽¹⁾																																										
	1	2018	NAVY	26	26	0																										0										
	1	2019	NAVY	30	30	0																										0										
	1	2020	NAVY	56	34	22	4	6	6	6																					0											
	1	2021	NAVY	72	0	72	-	-	-	-	6	6	6	6	6	6	6	6	6	6	6											0										
	1	2022	NAVY	69	0	69		A -	-	-	-	-	-	-	-	-	-	-	-	-	6	7	7	7	7	7	7	7	7	14												
	1	2023	NAVY	57	0	57													A -	-	-	-	-	-	-	-	-	-	-	-	-	-	57									
1.1.2) ACV-Command Variant (ACV-C) ⁽²⁾																																										
	2	2022	NAVY	14	0	14													A -	-	-	-	-	-	-	-	-	-	-	-	-	-	1	13								
	2	2023	NAVY	17	0	17																									A -	-	-	-	-	-	-	-	-	-	-	17
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP												

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1										P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles													Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle											
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2024												Fiscal Year 2025												BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT				Calendar Year 2024												Calendar Year 2025												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1.1.1) ACV-Personnel Variant (ACV-P) ⁽¹⁾																																		
	1	2018	NAVY	26	26	0																											0	
	1	2019	NAVY	30	30	0																											0	
	1	2020	NAVY	56	56	0																											0	
	1	2021	NAVY	72	72	0																											0	
	1	2022	NAVY	69	55	14																											4	-
	1	2023	NAVY	57	0	57	-	-	-	-	6	6	6	6	6	6	6	3	-	1	5	6	0											
1.1.2) ACV-Command Variant (ACV-C) ⁽²⁾																																		
	2	2022	NAVY	14	1	13	2	7	4																								0	
	2	2023	NAVY	17	0	17	-	-	-																								-	-
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1					P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles				Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	BAE Systems - York, PA	48	60	120	0	9	15	24	0	9	12	21
2	BAE Systems - York, PA	48	60	120	0	9	15	24	0	9	12	21

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles							P-1 Line Item Number / Title: 2038 / LAV PIP					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,884.501	37.403	22.116	57.099	0.000	57.099	41.967	0.726	0.759	0.774	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,884.501	37.403	22.116	57.099	0.000	57.099	41.967	0.726	0.759	0.774	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,884.501	37.403	22.116	57.099	0.000	57.099	41.967	0.726	0.759	0.774	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Light Armored Vehicle (LAV) Modification and Sustainment line is critical to keeping the 1983 built family of LAVs (FOLAV) operationally ready and effective through the projected sunset date of FY 2035. LAV Modification and Sustainment actions include maintenance of authority to operate (ATO), authority to connect (ATC), obsolescence management of C4ISR equipment, safety modifications, support equipment/tool sustainment, end-item product data management, and technical and engineering data management. The LAV Modification and Sustainment resources a wide range of necessary vehicle/communications/weapon modifications essential to fleet life-cycle management and sustainment.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles						P-1 Line Item Number / Title: 2038 / LAV PIP				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	LAV PIP	P-5a, P-21			- / 1,884.501	- / 37.403	- / 22.116	- / 57.099	- / -	- / 57.099
P-40	Total Gross/Weapon System Cost				- / 1,884.501	- / 37.403	- / 22.116	- / 57.099	- / 0.000	- / 57.099
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Baseline Appropriation: \$57.099M LAV Modification and Sustainment (MOD): \$57.099M will fund the procurement (radios & ancillary equipment), integration, and fielding of 282 Tactical Communication Modernization (TCM) vehicle radio sets that will resolve current operational deficiencies and will interface with the new intercom system. The TCM requirement is mandated by the National Security Administration (NSA) and must be achieved by 2024. Failure to meet this mandate will result in loss of the Authority to Operate (ATO) and the fleet rendered combat ineffective. The \$34.983M increase and quantity increase of 193 TCM sets between FY 2022 and FY 2023 is required to align with the contracting and acquisition strategy to meet the NSA mandate by 2024. NSA MANDATE: The FOLAV Fleet needs to upgrade all Radios to NSA Compliant radios by 2024 in accordance with Chairman of the Joint Chiefs of Staff Notice (CJCSN) 6510, June 2014, Information Assurance Cryptographic Modernization Requirements.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1							P-1 Line Item Number / Title: 2038 / LAV PIP							Aggregated Items Title: LAV PIP						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) LAV Reset ⁽¹⁾																				
1.1) Training Devices	A		-	-	1.848	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) Special Tools & Support Equipment	A		-	-	2.898	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) Reset Kits ^(†)	A		452,183.33	60	27.131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) ILS	A		-	-	2.708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) Refurb Test Vehicles/Field Service Reps.	A		-	-	0.988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) Refurb. Differentials	A		-	-	1.530	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.7) Systems Eng/ Program Mgmt Support	A		-	-	5.049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) LAV Reset			-	-	42.152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2) Prior Years Cumulative Funding																				
2.1) Prior Years Cumulative Funding	A		-	-	1,779.842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) Prior Years Cumulative Funding			-	-	1,779.842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3) LAV Modification and Sustainment																				
3.1) New Equipment Training	A		-	-	-	-	-	-	-	-	0.017	-	-	0.017	-	-	-	-	-	0.017
3.2) PVT/FAT ⁽²⁾	A		-	-	-	-	-	0.642	-	-	1.000	-	-	-	-	-	-	-	-	-
3.3) Systems Eng/ Program Mgmt Support ⁽³⁾	A		-	-	2.709	-	-	3.482	-	-	4.189	-	-	4.269	-	-	-	-	-	4.269
3.4) M&S Kits (Intercom) ^(†)	A		29,920.18	664	19.867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5) Refurbishments/ Installations/ Warehousing ⁽⁴⁾	A		-	-	0.732	-	-	1.390	-	-	0.172	-	-	2.160	-	-	-	-	-	2.160
3.6) M&S Tactical Communication Modernization (TCM) Kits ^{(5)(†)}	A		256,196.08	51	13.066	246,664.63	59	14.553	172,618.60	89	15.363	176,407.00	282	49.747	-	-	-	176,407.00	282	49.747
3.7) M&S Electrical System Modification (ESM) Kits ^(†)	A		38,877.23	448	17.417	45,261.74	149	6.744	-	-	-	-	-	-	-	-	-	-	-	-
3.8) LAV-25 Slip Rings ^(†)	A		37,120.42	191	7.090	34,422.76	123	4.234	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1								P-1 Line Item Number / Title: 2038 / LAV PIP								Aggregated Items Title: LAV PIP			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.9) Engineering Change Proposals (ECP) - Intercoms	A		-	-	0.015	-	-	0.086	-	-	-	-	-	-	-	-	-	-	-	-
3.10) Engineering Change Proposals (ECP) - TCM ⁽⁶⁾	A		-	-	1.441	-	-	4.179	-	-	0.450	-	-	0.906	-	-	-	-	-	0.906
3.11) Engineering Change Proposals (ECP) - ESM ⁽⁷⁾	A		-	-	0.170	-	-	2.093	-	-	0.925	-	-	-	-	-	-	-	-	-
Subtotal: 3) LAV Modification and Sustainment			-	-	62.507	-	-	37.403	-	-	22.116	-	-	57.099	-	-	-	-	-	57.099
Total			-	-	1,884.501	-	-	37.403	-	-	22.116	-	-	57.099	-	-	-	-	-	57.099

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ Relevant Program History: FY20 decreased from \$51.686M to \$5.5M due to the cancellation of the LAV Reset Program and realignment of \$46.186M to LAV Modification and Sustainment program. \$5.500M funded the efforts required to close out the cancelled Reset program which included special tools and equipment, Integrated Logistics Support (ILS), and program management. The realigned funds procured two high-priority efforts of the Reset Program, the Electrical System Modification (ESM) and the LAV-25 slip rings. The realigned funds also moved the Intercom System (ICS) Replacement and a portion the Tactical Communications Modernization (TCM) vehicle radios sets from FY21 to FY20. Congressional notification and approval of this realignment was granted in May 2020.

⁽²⁾ FY22 to FY23 decrease of \$1.000M is due to the completion of TCM testing.

⁽³⁾ FY22 to FY23 increase of \$0.080M is due to annual inflation.

⁽⁴⁾ FY22 to FY23 increase of \$1.988M is due to LAV installation contact teams fielding MOD program hardware at the Reserve units and cost for warehousing of kits.

⁽⁵⁾ FY22 to FY23 increase of \$34.384M is due to an increase of 193 vehicle radio sets. The 193 additional radio sets are needed to meet NSA mandate for TCM compliance by 2024 by continuing to field to LAR Battalions. The current budgeted mix per year meets both the Marine Corps mission requirements for LAV-C2 prioritization, as well as the NSA mandate for TCM compliance by 2024. NSA MANDATE DETAILS: The FOLAV Fleet needs to upgrade all Radios to NSA Compliant radios by CY2024 in accordance with Chairman of the Joint Chiefs of Staff Notice (CJCSN) 6510, June 2014, Information Assurance Cryptographic Modernization Requirements.

⁽⁶⁾ FY22 to FY23 increase of \$0.456M is due to the addition of the ECP for Mounted Family of Computer Systems (MFOCS) A-Kit requirement and System Technical Support.

⁽⁷⁾ FY22 to FY23 decrease of \$0.925M is due to the completion of ESM kit ECPs in FY22.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1			P-1 Line Item Number / Title: 2038 / LAV PIP						Aggregated Items: LAV PIP			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) LAV Reset												
1.3) Reset Kits		2019	GDLS / London, ON. Canada	C / FFP	TACOM, Warren, MI	Jan 2019	Jan 2019	60	452,181.00	Y		Aug 2018
3) LAV Modification and Sustainment												
3.4) M&S Kits (Intercom) ^(†)		2020	Atlantic Diving Supply / Virginia Beach, Virginia	C / FFP	Philadelphia, PA	Jan 2020	Jul 2020	545	30,662.39	N	Aug 2019	Aug 2019
3.6) M&S Tactical Communication Modernization (TCM) Kits ^{(5)(†)}		2020	Harris Corp. ⁽⁸⁾ / Rochester, NY	C / FFP	APG	Mar 2021	May 2021	51	256,201.73	Y		May 2020
3.6) M&S Tactical Communication Modernization (TCM) Kits ^{(5)(†)}		2021	Harris Corp. ⁽⁸⁾ / Rochester, NY	C / FFP	APG	Mar 2021	May 2021	59	246,664.63	Y		May 2020
3.6) M&S Tactical Communication Modernization (TCM) Kits ^{(5)(†)}		2022	Harris Corp. ⁽⁸⁾ / Rochester, NY	C / FFP	APG	Feb 2022	Apr 2022	89	172,618.60	Y		May 2020
3.6) M&S Tactical Communication Modernization (TCM) Kits ^{(5)(†)}		2023	Harris Corp. ⁽⁸⁾ / Rochester, NY	C / FFP	APG	Feb 2023	Apr 2023	282	176,407.00	Y		May 2020
3.7) M&S Electrical System Modification (ESM) Kits ^(†)		2020	GDLS / London, ON. Canada	C / FFP	TACOM, Warren, MI	Sep 2020	May 2021	448	38,417.41	Y		Jun 2020
3.7) M&S Electrical System Modification (ESM) Kits ^(†)		2021	GDLS / London, ON. Canada	C / FFP	TACOM, Warren, MI	Aug 2021	Apr 2022	149	45,261.74	Y		Jun 2020
3.8) LAV-25 Slip Rings ^(†)		2020	Moog Inc. / Blacksburg, VA	C / FFP	TACOM, Warren, MI	Jun 2020	Mar 2021	180	37,283.33	Y		Apr 2020
3.8) LAV-25 Slip Rings ^(†)		2021	Moog Inc. / Blacksburg, VA	C / FFP	TACOM, Warren, MI	Jun 2021	Mar 2022	123	34,422.76	Y		Apr 2020
^(†) indicates the presence of a P-21 Footnotes: ⁽⁸⁾ The P-40A units are in vehicle sets. In FY21, PM-LAV is procuring 59 vehicle sets of radios, 37 for the LAV-C2 variant (qty 185 radios) and 22 for the Mission Role Variants (MRV) (qty 44 radios) for total of number of radios being procured in FY21 is 229. FY22 number of MRV vehicle sets is 89 (qty 178 radios) and FY23 number of MRV vehicle sets is 282 (qty 564 radios).												

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1										P-1 Line Item Number / Title: 2038 / LAV PIP													Aggregated Items: LAV PIP										
Items <i>(Units in Each)</i>							Fiscal Year 2021												Fiscal Year 2022													BALANCE	
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021												Calendar Year 2022														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
3) LAV Modification and Sustainment																																	
3.4) M&S Kits (Intercom)																																	
Prior Years Deliveries: 119																																	
	1	2020	NAVY		545	135	410	45	45	46	46	46	46	46	45	45																	0
3.6) M&S Tactical Communication Modernization (TCM) Kits ⁽⁵⁾																																	
	2	2020	NAVY		51	0	51						A -	-	30	21																0	
	2	2021	NAVY		59	0	59						A -	-	12	12	12	12	11													0	
	2	2022	NAVY		89	0	89															A -	-	30	30	29						0	
	2	2023	NAVY		282	0	282																										282
3.7) M&S Electrical System Modification (ESM) Kits																																	
	3	2020	NAVY		448	0	448	-	-	-	-	-	-	-	37	37	37	37	37	37	38	37	38	38	38							0	
	3	2021	NAVY		149	0	149									A -	-	-	-	-	-	-	-	18	18	25	27	27	27	7			
3.8) LAV-25 Slip Rings																																	
Prior Years Deliveries: 11																																	
	4	2020	NAVY		180	0	180	-	-	-	-	-	15	15	15	15	15	15	15	15	15	15	15									0	
	4	2021	NAVY		123	0	123									A -	-	-	-	-	-	-	-	15	15	15	15	15	15	15	18		
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1					P-1 Line Item Number / Title: 2038 / LAV PIP				Aggregated Items: LAV PIP			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Atlantic Diving Supply - Virginia Beach, Virginia	200	1,000	2,000	0	2	6	8	0	2	6	8
2	Harris Corp. ⁽⁸⁾ - Rochester, NY	100	240	360	0	6	2	8	0	5	2	7
3	GDLS - London, ON. Canada	200	500	1,000	2	0	5	5	0	11	8	19
4	Moog Inc. - Blacksburg, VA	50	180	180	3	0	9	9	0	8	9	17

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽⁸⁾ The P-40A units are in vehicle sets. In FY21, PM-LAV is procuring 59 vehicle sets of radios, 37 for the LAV-C2 variant (qty 185 radios) and 22 for the Mission Role Variants (MRV) (qty 44 radios) for total of number of radios being procured in FY21 is 229. FY22 number of MRV vehicle sets is 89 (qty 178 radios) and FY23 number of MRV vehicle sets is 282 (qty 564 radios).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons							P-1 Line Item Number / Title: 2185 / 155MM Ltwt Towed Howitzer					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,412.748	0.059	0.032	1.782	0.000	1.782	1.789	1.823	1.857	1.893	-	1,421.983
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,412.748	0.059	0.032	1.782	0.000	1.782	1.789	1.823	1.857	1.893	-	1,421.983
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,412.748	0.059	0.032	1.782	0.000	1.782	1.789	1.823	1.857	1.893	-	1,421.983
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The LW155 (also known as the M777A2 Howitzer) provides all weather, day/night, reinforcing, and direct/general support fires to maneuver forces. It is a joint program between the Marine Corps and Army, and supports various foreign military purchases of the weapon system. The M777A2 howitzer was first fielded by the Marine Corps in April 2005 and completed fielding in April 2013. The M777A2 howitzer has been significantly utilized in the Middle East in support of Operation Inherent Resolve. This budget line supports system updates to maintain and increase performance and lethality. M777A2 howitzer is the prominent weapon of the Marine indirect fires triad and currently the only cannon in the Service. This Budget Line Item supports modernization efforts to the M777A2 howitzer to include upgrades to the Digital Fire Control System (DFCS) to allow continued operation in Global Positioning System (GPS) contested environments.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.053	0.028	1.776	-	1.776	1.783	1.817	1.851	1.887		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.006	0.004	0.006	-	0.006	0.006	0.006	0.006	0.006		
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.059	0.032	1.782	-	1.782	1.789	1.823	1.857	1.893		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons						P-1 Line Item Number / Title: 2185 / 155MM Ltwt Towed Howitzer				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / 155MM Ltwt Towed Howitzer - Active				- / 1,412.748	- / 0.059	- / 0.032	- / 1.782	- / 0.000	- / 1.782
P-40	Total Gross/Weapon System Cost				- / 1,412.748	- / 0.059	- / 0.032	- / 1.782	- / 0.000	- / 1.782
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:
 FY 2023 Base Appropriation Request: \$1.782M (\$1.776M Active; \$0.006M Reserve)

FY 2023 funding will continue to support the retrofitting of previously procured hardware modifications such as software defined radios and chrome cannon tubes. Additionally, FY 2023 funding supports the procurement of Digital Fire Control System (DFCS) modification kits to allow for continued operation in Global Positioning System (GPS) contested environments. Upgrades to the DFCS will allow the howitzer to continue to conduct precision and near precision fires missions while mitigating the expected effects of GPS challenged environments.

Increase of \$1.750M from FY 2022 to FY 2023 is the commencement of procuring upgraded Digital Fire Control System components.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2							P-1 Line Item Number / Title: 2185 / 155MM LtwT Towed Howitzer						Item Number / Title [DODIC]: 1 / 155MM LtwT Towed Howitzer - Active								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1,412.748			0.059			0.032			1.782			0.000			1.782		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				1,412.748			0.059			0.032			1.782			0.000			1.782		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				1,412.748			0.059			0.032			1.782			0.000			1.782		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Support - Active Cost																					
1.1) Hardware/electronic obsolescence and improvement ECP & Retrofits	-	-	25.451	-	-	0.053	-	-	0.028	-	-	0.052	-	-	-	-	-	0.052			
1.2) Software Defined Radio	-	-	36.991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.3) Chrome Cannon Tubes	-	-	32.358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.4) Digital Fire Control System Modifications ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	1.724	-	-	-	-	-	1.724			
Subtotal: Support - Active Cost	-	-	94.800	-	-	0.053	-	-	0.028	-	-	1.776	-	-	-	-	-	1.776			
Support - Reserves - 155MM LtwT Towed Howitzer Cost																					
2.1) Systems Engineering/Program Management	-	-	0.577	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2.2) Hardware/electronic obsolescence and improvement ECP & Retrofits	-	-	2.130	-	-	0.006	-	-	0.004	-	-	0.006	-	-	-	-	-	0.006			
Subtotal: Support - Reserves - 155MM LtwT Towed Howitzer Cost	-	-	2.707	-	-	0.006	-	-	0.004	-	-	0.006	-	-	-	-	-	0.006			
Support - Prior Years Cost																					
3.1) Prior Years Cumulative Funding	-	-	1,315.241	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2						P-1 Line Item Number / Title: 2185 / 155MM LtwT Towed Howitzer							Item Number / Title [DODIC]: 1 / 155MM LtwT Towed Howitzer - Active					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
	Subtotal: Support - Prior Years Cost	-	-	1,315.241	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	1,412.748	-	-	0.059	-	-	0.032	-	-	1.782	-	-	0.000	-	-	1.782

Footnotes:

(1) FY 2023 funding supports the procurement of Digital Fire Control System (DFCS) modification kits to allow for continued operation in Global Positioning System (GPS) contested environments (\$1.724M).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons							P-1 Line Item Number / Title: 2212 / Artillery Weapons System					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	117	-	-	-	-	-	-	-	-	117
Gross/Weapon System Cost (<i>\$ in Millions</i>)	762.552	49.687	221.347	143.808	0.000	143.808	285.025	279.566	322.426	227.069	61.792	2,353.272
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	762.552	49.687	221.347	143.808	0.000	143.808	285.025	279.566	322.426	227.069	61.792	2,353.272
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	762.552	49.687	221.347	143.808	0.000	143.808	285.025	279.566	322.426	227.069	61.792	2,353.272
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	1,892K	-	-	-	-	-	-	-	-	17,696K
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	1,892K	-	-	-	-	-	-	-	-	20,113K
Description: This line item both modernizes and sustains essential expeditionary long-range precision fires capabilities integral to the design of the National Defense Strategy (NDS) driven force in accordance with the Commandant's Planning Guidance. Funding procures launchers, carriers, missiles, training equipment, and associated support. The three primary weapons systems are: 1) As the Marine Corps' first Ground Based Anti-Ship Missile (GBASM) capability, the Navy/Marine Expeditionary Ship Interdiction System (NMESIS) is a force design priority central to the Marine Corps' contribution to the Naval Expeditionary Force's (NEF) surface warfare campaign. This is a critical service modernization capability requirement focused specifically on countering the nation's pacing threat. Ground-based launchers add a new type of threat against a peer adversary, stress different surveillance and offensive systems, are hard to detect and track in a cluttered environment, and add a significant level of persistence and depth to existing anti-ship capabilities. NMESIS will be employed by Medium-range Missile (MMSL) batteries within the Marine Divisions and will be especially suited for operations with Marine Littoral Regiments and Marine Expeditionary Units and when integrated into sensor and communication networks supporting a naval/maritime mission thread, and synchronized with employment of other missile systems, the NMESIS-equipped MMSL batteries will serve as a component of the NEF "stand-in force" providing lethal, precision anti-ship fires supporting sea denial and sea control operations. NMESIS consists of two Naval Strike Missiles (NSM) and a launcher/weapon control system integrated on to a ground-based, teleoperated carrier (called ROGUE-Fires). It will provide a ground based anti-access/area denial, anti-ship capability. 2) The High Mobility Artillery Rocket System (HIMARS), which is the weapon system employed by 10 active and reserve artillery batteries, is a C-130 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing all rockets and missiles in the Multiple Launch Rocket System (MLRS) Family of Munitions (MfOM). HIMARS provides Naval Expeditionary Forces with 24 hour ground-based, responsive, indirect fires to accurately engage targets at range (60+km) with high volumes of lethal effects under all weather conditions throughout all phases of combat operations. The system includes one launcher, two Re-Supply Systems, and the MfOM. HIMARS efforts align with the National Defense Strategy (NDS) to build a more lethal Joint Force in contested environments through capabilities that are able to strike diverse targets inside the adversary's weapons engagement zone (WEZ). HIMARS will be capable of firing the Army-developed Precision Strike Missile (PrSM) Spiral 1 enabling engagement of moving land and maritime targets to complement the capabilities provided by the NMESIS. Efforts also include the modernization and obsolescence mitigation of HIMARS in order to provide improved operational capabilities. 3) Long Range Fires details are held at a higher classification.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons						P-1 Line Item Number / Title: 2212 / Artillery Weapons System				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / ARTILLERY WEAPONS SYSTEMs	P-5a, P-21			- / 762.552	- / 49.687	117 / 221.347	- / 143.808	- / 0.000	- / 143.808
P-40	Total Gross/Weapon System Cost				- / 762.552	- / 49.687	117 / 221.347	- / 143.808	- / 0.000	- / 143.808
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Baseline Appropriation Request: \$143.808M Funding continues procurement of the HIMARS high frequency communications suite, intercom systems and integration into the HIMARS Multiple Launch Rocket System (MLRS) Family of Munitions (MFoM) launcher and resupply vehicle to comply with NSA cryptologic mandate. Funding continues procurement of Reduced Range Practice Rockets (RRPR) required to maintain the Standards in Training Commission (STRC) inventory levels. The RRPR is currently the only live training rocket that meets the annual certification and pre-deployment requirements for HIMARS capable units. In FY 2023, NMESIS transitions to Low Rate Initial Production (LRIP) (QTY: 24 NMESIS) and begins procurement of associated equipment sets. These assets will provide the initial equipment for three additional MMSL batteries enabling the Marine Corps to support a rotational force by the end of 2024. Launchers and carriers are procured in a one-to-one relationship while the Weapon Control System (WCS), ROGUE-Fires leader kits, and re-supply are purchased in different ratios in relation to the stand-up of individual batteries. In addition, FY 2023 procures the initial spares to support Fleet Marine Force supply requirements and initiates procurement of NMESIS training missiles which will be used for unit-level training purposes to provide end-to-end simulation of fire missions without launching a missile. The net decrease of \$77.539M from FY 2022 to FY 2023 reflects the transition of Marine Corps NSM missile procurement to BLI 2292 and the Tomahawk missile procurement to BLI 2101 in FY 2023.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2						P-1 Line Item Number / Title: 2212 / Artillery Weapons System						Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		117		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				762.552		49.687		221.347		143.808		0.000		143.808				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				762.552		49.687		221.347		143.808		0.000		143.808				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				762.552		49.687		221.347		143.808		0.000		143.808				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		1,892K		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) HIMARS Launcher ^(†)	7,212K	20	144.248	4,964K	6	29.781	-	-	-	-	-	-	-	-	-	-	-	-
1.1.2) FMTV Carrier ^(†)	620,150.00	20	12.403	751,666.67	6	4.510	-	-	-	-	-	-	-	-	-	-	-	-
1.1.3) NSM Launcher ^(†) (1)	-	-	-	-	-	-	-	-	-	1,958K	24	46.987	-	-	-	1,958K	24	46.987
1.1.4) ROGUE-Fires Carrier for NSM Launcher ^(†) (2)	-	-	-	-	-	-	-	-	-	1,088K	24	26.112	-	-	-	1,088K	24	26.112
1.1.5) Production Engineering Services ⁽³⁾	-	-	-	-	-	0.795	-	-	0.798	-	-	3.977	-	-	-	-	-	3.977
1.1.9) M31 Guided Multiple Launch Rocket Systems	399,281.82	1,210	483.131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	639.782	-	-	35.086	-	-	0.798	-	-	77.076	-	-	-	-	-	77.076
Non Recurring Cost																		
1.2.1) HIMARS Modifications and Comm Equipment ⁽⁴⁾	-	-	-	-	-	8.518	-	-	11.522	-	-	11.839	-	-	-	-	-	11.839
1.2.2) Reduced Range Practice Rocket (RRPRs) ^(†) (5)	6,501.04	4,788	31.127	6,207.18	864	5.363	7,949.00	847	6.733	8,187.00	686	5.616	-	-	-	8,187.00	686	5.616

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2						P-1 Line Item Number / Title: 2212 / Artillery Weapons System						Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1.2.3) NSM Missile ^(†) (6)	-	-	-	-	-	-	1,524K	69	105.186	-	-	-	-	-	-	-	-	-
1.2.4) NMESIS Training Missiles ^(†) (7)	-	-	-	-	-	-	-	-	-	254,666.67	24	6.112	-	-	-	254,666.67	24	6.112
1.2.7) NMESIS Leader Kit ⁽⁸⁾	-	-	-	-	-	-	-	-	-	-	-	9.054	-	-	-	-	-	9.054
1.2.8) NMESIS Weapon Control System (WCS) ⁽⁹⁾	-	-	-	-	-	-	-	-	-	-	-	12.190	-	-	-	-	-	12.190
1.2.9) NMESIS Re- supply System ⁽¹⁰⁾	-	-	-	-	-	-	-	-	-	-	-	8.197	-	-	-	-	-	8.197
1.2.10) NMESIS Peculiar Support Equipment (PSE) ⁽¹¹⁾	-	-	-	-	-	-	-	-	-	-	-	0.274	-	-	-	-	-	0.274
1.2.11) Program Management Admin (12)	-	-	-	-	-	0.720	-	-	1.108	-	-	2.035	-	-	-	-	-	2.035
1.2.12) NMESIS Initial Spares ⁽¹³⁾	-	-	-	-	-	-	-	-	-	-	-	9.029	-	-	-	-	-	9.029
1.2.13) NMESIS Training ⁽¹⁴⁾	-	-	-	-	-	-	-	-	-	-	-	2.386	-	-	-	-	-	2.386
1.2.14) TACTICAL TOMAHAWK (VLS) ^(†) (15)	-	-	-	-	-	-	2,000K	48	96.000	-	-	-	-	-	-	-	-	-
1.2.15) Prior Year Costs	-	-	91.643	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	122.770	-	-	14.601	-	-	220.549	-	-	66.732	-	-	-	-	-	66.732
Subtotal: Flyaway Cost	-	-	762.552	-	-	49.687	-	-	221.347	-	-	143.808	-	-	-	-	-	143.808
Gross/Weapon System Cost	-	-	762.552	-	-	49.687	1,892K	117	221.347	-	-	143.808	-	-	0.000	-	-	143.808
(†) indicates the presence of a P-5a																		
Footnotes:																		
(1) In FY 2023, NMESIS transitions to Low Rate Initial Production (LRIP) (QTY: 24 NMESIS) and begins procurement of associated equipment sets.																		
(2) In FY 2023, NMESIS transitions to Low Rate Initial Production (LRIP) (QTY: 24 NMESIS) and begins procurement of associated equipment sets.																		

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2	P-1 Line Item Number / Title: 2212 / Artillery Weapons System	Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(3) Increase of \$3.179M from FY 2022 to FY 2023 for production engineering support required to complete HIMARS launcher production deliveries through Q2FY23 and initiates NMESIS production engineering in support of LRIP and preparation for fielding. (4) HIMARS Comms Mod increase of \$0.317M from FY 2022 to FY 2023 due to increase quantity of components VHF, HF and intercom systems to comply with the NSA cryptological mandate. Comm Mod Equipment hardware includes: Radios, Intercoms, A and B-kits. (5) RRPFRs FY 2023 unit cost matches the Army's Budget Exhibit estimate. Decrease of \$1.117M from FY 2022 to FY 2023 reflects reduced procurement quantities. (6) FY 2022 Unit cost decrease due to stepladder price adjustments after USMC and DON combined NSM procurements in FY 2022. Beginning in FY 2023, Marine Corps NSM procurement is funded in BLI 2292. (7) FY 2023 initiates procurement of NMESIS Training Missiles (type: Encanistered Missile - Training Round) which will be used for unit-level training purposes to provide end-to-end simulation of fire missions without launching a missile. (8) FY 2023 is the initial year of NMESIS system procurement. NMESIS battery set consists of Weapon Control Systems, Leader Kits, and Re-supply systems to include Resupply vehicle (RSV) conversion kit and Resupply Trailers. (9) FY 2023 is the initial year of NMESIS system procurement. NMESIS battery set consists of Weapon Control Systems, Leader Kits, and Re-supply systems to include Resupply vehicle (RSV) conversion kit and Resupply Trailers. (10) FY 2023 is the initial year of NMESIS system procurement. NMESIS battery set consists of Weapon Control Systems, Leader Kits, and Re-supply systems to include Resupply vehicle (RSV) conversion kit and Resupply Trailers. (11) FY 2023 is the initial year of NMESIS system procurement. NMESIS specific PSE consists of HSK Toolkit, First Destination Transportation charges and TCA Laptops. (12) FY 2023 program management required to support HIMARS communication modernization effort, HIMARS production deliveries through 2QFY23, and initiates NMESIS production in support of LRIP and preparation for fielding. (13) FY 2023 is the initial year of NMESIS system procurement. Initial spares procures provisioning for FMF supply requirements. (14) FY 2023 is the initial year of NMESIS system procurement. Training includes New Equipment Training (NET), Schoolhouse, Maintainer, and Software Training. (15) FY 2022 Unit cost includes missile, canisters, and associated support equipment to procure 48 Block V Tomahawk AURs. Beginning in FY 2023, Marine Corps Tomahawk procurement is funded in BLI 2101.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2			P-1 Line Item Number / Title: 2212 / Artillery Weapons System						Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) HIMARS Launcher		2021	Lockheed / Dallas, Tx	SS / FPIF	Huntsville, AL	Jul 2021	Aug 2022	6	4,964K	Y	Dec 2021	
1.1.2) FMTV Carrier		2021	Lockheed / Dallas, Tx	SS / FFP	Huntsville, AL	Jul 2021	Jan 2023	6	751,666.67	Y	Dec 2021	
1.1.3) NSM Launcher ^(†)		2023	Raytheon, Tuscon, AZ / Tucson, AZ	C / FFP	Quantico, VA	Oct 2022	Oct 2023	24	1,958K	N	Oct 2022	
1.1.4) ROGUE-Fires Carrier for NSM Launcher ^(†)		2023	Oshkosh Corp / Oshkosh WI	C / FFP	Quantico, VA	Oct 2022	Mar 2024	24	1,088K	N		
1.2.2) Reduced Range Practice Rocket (RRPRs) ^(†)		2021	Lockheed Martin / Dallas, TX	MIPR	Chambersburg, PA	Oct 2020	Feb 2022	864	6,207.18	Y	Apr 2023	
1.2.2) Reduced Range Practice Rocket (RRPRs) ^(†)		2022	Lockheed Martin / Dallas, TX	MIPR	Chambersburg, PA	Oct 2021	Feb 2023	847	7,949.00	Y	Apr 2024	
1.2.2) Reduced Range Practice Rocket (RRPRs) ^(†)		2023	Lockheed Martin / Dallas, TX	MIPR	Chambersburg, PA	Oct 2022	Feb 2024	686	8,187.00	N		
1.2.3) NSM Missile ^(†)		2022	Raytheon, Tuscon, AZ / Tucson, AZ	C / FFP	NAVSEA	Dec 2021	Dec 2023	69	1,524K	Y		Feb 2017
1.2.4) NMESIS Training Missiles ^(†)		2023	Raytheon, Tuscon, AZ / Tucson, AZ	C / FFP	Quantico, VA	Oct 2022	Oct 2023	24	254,666.67	N		
1.2.14) TACTICAL TOMAHAWK (VLS) ^(†)		2022	Raytheon, Tuscon, AZ / Tucson, AZ	SS / FPIF	NAVAIR	Dec 2022	Jan 2025	48	2,000K	Y		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / Artillery Weapons System													Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs										
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021												Fiscal Year 2022												BALANCE		
OCO#	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021												Calendar Year 2022														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.3) NSM Launcher ⁽¹⁾																																	
	1	2023	NAVY	24	0	24																							24				
1.1.4) ROGUE-Fires Carrier for NSM Launcher ⁽²⁾																																	
	2	2023	NAVY	24	0	24																							24				
1.2.2) Reduced Range Practice Rocket (RRPRs) ⁽⁵⁾																																	
Prior Years Deliveries: 4788																																	
	3	2021	NAVY	864	0	864	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	72	72	72	72	72	72	288				
	3	2022	NAVY	847	0	847													A -	-	-	-	-	-	-	-	-	-	-	-	-	-	847
	3	2023	NAVY	686	0	686																							686				
1.2.3) NSM Missile ⁽⁶⁾																																	
	4	2022	NAVY	69	0	69													A -	-	-	-	-	-	-	-	-	-	-	-	-	-	69
1.2.4) NMESIS Training Missiles ⁽⁷⁾																																	
	5	2023	NAVY	24	0	24																							24				
1.2.14) TACTICAL TOMAHAWK (VLS) ⁽¹⁵⁾																																	
	6	2022	NAVY	48	0	48																							48				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / Artillery Weapons System													Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs									
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023												Fiscal Year 2024												BALANCE	
OCO#	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023												Calendar Year 2024													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1.1.3) NSM Launcher ⁽¹⁾																																
	1	2023	NAVY		24	0	24	A -	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2	0	
1.1.4) ROGUE-Fires Carrier for NSM Launcher ⁽²⁾																																
	2	2023	NAVY		24	0	24	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	10	
1.2.2) Reduced Range Practice Rocket (RRPRs) ⁽⁵⁾																																
Prior Years Deliveries: 4788																																
	3	2021	NAVY		864	576	288	72	72	72	72																				0	
	3	2022	NAVY		847	0	847	-	-	-	-	71	70	71	70	71	70	71	70	71	71											0
	3	2023	NAVY		686	0	686	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	57	57	57	57	57	57	57	57	230		
1.2.3) NSM Missile ⁽⁶⁾																																
	4	2022	NAVY		69	0	69	-	-	-	-	-	-	-	-	-	-	-	-	7	-	7	7	-	8	8	-	8	8	16		
1.2.4) NMESIS Training Missiles ⁽⁷⁾																																
	5	2023	NAVY		24	0	24	A -	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	18							0	
1.2.14) TACTICAL TOMAHAWK (VLS) ⁽¹⁵⁾																																
	6	2022	NAVY		48	0	48	A -			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48		
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / Artillery Weapons System													Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs											
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2025												Fiscal Year 2026													BALANCE		
OCO#	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025												Calendar Year 2026															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1.1.3) NSM Launcher ⁽¹⁾																																		
	1	2023	NAVY	24	24	0																											0	
1.1.4) ROGUE-Fires Carrier for NSM Launcher ⁽²⁾																																		
	2	2023	NAVY	24	14	10	2	2	2	2	2																						0	
1.2.2) Reduced Range Practice Rocket (RRPRs) ⁽⁵⁾																																		
Prior Years Deliveries: 4788																																		
	3	2021	NAVY	864	864	0																											0	
	3	2022	NAVY	847	847	0																											0	
	3	2023	NAVY	686	456	230	57	57	58	58																							0	
1.2.3) NSM Missile ⁽⁶⁾																																		
	4	2022	NAVY	69	53	16	8	8																										0
1.2.4) NMESIS Training Missiles ⁽⁷⁾																																		
	5	2023	NAVY	24	24	0																											0	
1.2.14) TACTICAL TOMAHAWK (VLS) ⁽¹⁵⁾																																		
	6	2022	NAVY	48	0	48	-	-	-	4	4	4	4	4	4	4	4	4	4	4													0	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2				P-1 Line Item Number / Title: 2212 / Artillery Weapons System					Item Number / Title [DODIC]: 1 / ARTILLERY WEAPONS SYSTEMs		

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Raytheon, Tuscon, AZ - Tucson, AZ			TBD	0	0	18	18	0	0	0	0
2	Oshkosh Corp - Oshkosh WI			TBD	0	0	8	8	0	0	9	9
3	Lockheed Martin - Dallas, TX	504	5,760	11,520	0	2	15	17	0	2	16	18
4	Raytheon, Tuscon, AZ - Tucson, AZ			TBD	0	0	24	24	0	0	24	24
5	Raytheon, Tuscon, AZ - Tucson, AZ			TBD	0	0	12	12	0	0	0	0
6	Raytheon, Tuscon, AZ - Tucson, AZ	90	350	450	0	0	0	0	0	3	25	28

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons							P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	218.509	38.306	30.901	11.118	0.000	11.118	14.004	48.299	52.820	63.062	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	218.509	38.306	30.901	11.118	0.000	11.118	14.004	48.299	52.820	63.062	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	218.509	38.306	30.901	11.118	0.000	11.118	14.004	48.299	52.820	63.062	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Company and Battalion Mortars provides procurement, modification, and sustainment of mortars and mortar fire control systems to enable access to immediate indirect fires in support of mounted and dismounted forces to the company and battalion level. This program sustains the lightweight company and battalion mortar capability Stock List - Item 3 (SL-3) including more than 50 mortar components, incorporates component product improvements and modifications such as improved sights and aiming devices, software upgrades to the Mortar Fire Control Application (MFCA) and hardware refresh/upgrades for the Lightweight Hand-held Mortar Ballistic Computer (LHMBC) capability.												
Family of Infantry Weapons Systems (FIWS) procures the infantry weapons systems required to equip the operational forces, and provides for continuous monitoring, assessment and implementation of Joint Service and Marine Corps unique system modifications for individual and crew-served weapons. This includes efforts such as: improving weapon capability, operation, maintainability, supportability, service life, ergonomics, and safety enhancements. FIWS also supports replacement of principal end items (PEI) due to combat losses and wash-outs, as well as continuing product improvement and modernization of various weapon systems and their system components.												
Family of Incident Response Systems (FIRS) supports Countering Weapons of Mass Destruction (CWMD) and Chemical, Biological, Radiological, and Nuclear (CBRN) mission areas by providing first response protection, detection, identification, and decontamination equipment to the Marine Air-Ground Task Force (MAGTF) and the Chemical Biological Incident Response Force (CBIRF).												
Family of Chemical, Biological, Radiological, and Nuclear Systems (FCBRNS) provides CBRN protection, detection, identification, hazard modeling and simulation, and decontamination equipment required by the general purpose force to train and operate in a CBRN environment or support CWMD to the MAGTF. FCBRNS allows the Marine Corps to survive, fight and sustain itself in contaminated environments, and gives pause to our enemies when planning the use of CBRN weapons.												
Gunners Protection Kit (GPK) supports the Tube-launched, Optically-tracked, Wire-guided (TOW) Objective Gunners Protection Kit Version 2.0 (TOGPK 2.0) and the Reducible Height Gunners Protection Kit (RHGPK). TOGPK 2.0 is the planned upgrade and replacement for the TOW Gunners Protection Kit (TGPK) currently in use with TOW High Mobility Multipurpose Wheeled Vehicle (HMMWV) variants. TOGPK 2.0 affords the TOW gunners protection from small arms fire and Improvised Explosive Device fragmentation. TOGPK 2.0 addresses user concerns regarding limited workspace and TOW slew as well as improved operator visibility. RHGPK enables Joint Light Tactical Vehicles (JLTV), Medium/Heavy Tactical Vehicle Replacement (MTVR) and Logistics Vehicle System Replacement (LVSR) to be transported in the lower vehicle stowage areas of Landing Platform/Dock (LPD 17) and Landing Helicopter Dock class ships.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons		P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206623M
Line Item MDAP/MAIS Code: N/A		
Beginning in FY 2023, Family of Expeditionary Firefighting and Rescue Equipment/Tool Sets (FEFRETS) provides for the development, procurement and sustainment of the Marines EFR and Aircraft Rescue Fire Fighting (ARFF) support equipment across the range of military operations by providing a day/night, scalable capability. EFR/ARFF rescue equipment and tool sets must meet National Fire Protection Agency (NFPA) standards. The Family of Expeditionary Firefighting and Rescue Equipment and Tool Sets program allows procurement, standardization, and sustainment for both Tactical (MWSS) and Garrison (Bases and Station) units.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons						P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Wpns & Cmbt Vehs under \$5 million	P-5a, P-21			- / 218.509	- / 38.306	- / 30.901	- / 11.118	- / -	- / 11.118
P-40	Total Gross/Weapon System Cost				- / 218.509	- / 38.306	- / 30.901	- / 11.118	- / 0.000	- / 11.118
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation: \$11.118M Company and Battalion Mortars - \$3.210M will procure the Lightweight Hand-held Mortar Ballistic Computer (LHMBCv2) hardware including the cost of Mortar Fire Control Application (MFCA) integration and fielding of this capability. The MFCA will allow users to perform aero-ballistic calculations for the Marine Corps inventory of 60mm and 81mm mortar systems. In addition, the program will invest in new Commercial Off the Shelf (COTS) technologies in order to modernize 60mm and 81mm Mortar System capabilities and increase their effectiveness. The decrease of \$0.318M from FY 2022 to FY 2023 is due to a reduction in procurement quantities for (LHMBCv2) hardware. Family of Infantry Weapons Systems (FIWS) - \$5.517M will begin the procurement of the M110 Semi Automatic Sniper System (SASS) Product Improvement Program (PIP) weapons and continue the procurement of the Advanced Sniper Rifle (ASR) with system components as well as continue to fund the Principal End Item (PEI) Re-procurement items. The SASS PIP will update the M110 with enhanced shooter ergonomics, increased ballistic potential, and increased operational availability time. The ASR is used to extend range, greater lethality and wider variety of special purpose ammunition, it will procure replacements for unserviceable M4 Carbines/M16A4 Rifles. PEI re-procurement will replace M16A4s that are not cost effective to repair in order to maintain current AAO levels, as well as to procure additional Approved Acquisition Objective (AAO) increases associated with Force Design. All of these programs are modernization efforts vital to maintaining parity with near peer competitors as well as equipping the Marine Corps to operate inside actively contested maritime spaces in support of fleet operations. Modernization and improved lethality is in alignment with the National Defense Strategy and the Commandant's Planning Guidance. This includes efforts such as: improve weapon capability, operation, maintainability, supportability, service life, ergonomics, and safety enhancements. The decrease of \$5.180M from FY 2022 to FY 2023 is due to the completion of M27 Infantry Automatic Rifle (IAR) and the reduction in the Advance Sniper Rifle (ASR) quantities. Family of Chemical, Biological, Radiological, and Nuclear Systems (FCBRNS)- \$1.340M will procure 240 units of configuration 1 Radiological Detection Systems (RDS) and commonly used spares/replacement parts. The decrease of \$0.035M from FY 2022 to FY 2023 is due to a reduction in projected spares/ replacement parts. Gunners Protection Kit (GPK) - \$0.946M will procure Reducible Height Gunners Protection Kits (RHGPK), SL-3, and Initial Issue Provisioning (IIP). In addition, it funds logistics, safety, and fielding travel support costs. RHGPK is reducible in height to enable Joint Light Tactical Vehicles (JLTV) to be transported in the lower vehicle stowage areas of Landing Platform/Dock (LPD 17) and Landing Helicopter Dock class ships and to enable Medium/Heavy Tactical Vehicle Replacement and Logistics Vehicle System Replacement to be transported in the main vehicle stowage decks of LPD 17 class ships. RHGPK provide enhanced survivability and ballistic protection to the gunner when compared to existing gunner protection kits. The decrease of \$14.355M from FY 2022 to FY 2023 is due to the completion of procurement objective. Family of Expeditionary Firefighting & Rescue Equipment/Tool Sets (FEFRETS)- \$0.105M will procure Rescue saws, to include small and large circular saws, chain saws, and reciprocating saws, along with associated SL-3. EFR Rescue Saws are utilized to rescue trapped personnel from aircraft, vehicles, and structural components. Additionally, the EFR Rescue Saws are utilized to conduct aircraft, vehicle and structural salvage operations. The increase of \$0.105M from FY 2022 to FY 2023 is due to PMC funding being provided in earlier years of the FYDP beginning in FY 2023. OCO: N/A										

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons		P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206623M
Line Item MDAP/MAIS Code: N/A		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2								P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million							Aggregated Items Title: Wpns & Cmbt Vehs under \$5 million					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Company and Battalion Mortars																				
1.1) Company and Battalion Mortars ⁽¹⁾	A		-	-	18.149	-	-	3.474	-	-	3.528	-	-	3.210	-	-	-	-	-	3.210
Subtotal: 1) Company and Battalion Mortars			-	-	18.149	-	-	3.474	-	-	3.528	-	-	3.210	-	-	-	-	-	3.210
2) Family of Infantry Weapons Systems																				
2.1) Production Support	A		-	-	7.883	-	-	0.838	-	-	0.770	-	-	0.811	-	-	-	-	-	0.811
2.2) M320A1 Grenade Launcher ^(†)	A		1,219.99	7,405	9.034	1,841.66	941	1.733	-	-	-	-	-	-	-	-	-	-	-	
2.3) Semi Auto Sniper System (SASS) PIP ^{(2)(†)}	A		-	-	-	-	-	-	-	-	-	7,735.50	157	1.214	-	-	-	7,735.50	157	1.214
2.4) Advanced Sniper Rifle - SOCOM ^(†)	A		-	-	-	9,506.76	148	1.407	-	-	-	-	-	-	-	-	-	-	-	
2.5) Advanced Sniper Rifle - Army ^{(3)(†)}	A		-	-	-	11,000.00	243	2.673	11,200.00	253	2.834	11,400.00	80	0.912	-	-	-	11,400.00	80	0.912
2.6) Advanced Sniper Rifle System Components ⁽⁴⁾	A		-	-	-	-	-	-	-	-	2.871	-	-	0.366	-	-	-	-	-	0.366
2.7) M2A1 Machine Gun ⁽⁵⁾	A		-	-	2.886	-	-	1.424	-	-	-	-	-	-	-	-	-	-	-	-
2.8) Small Arms Suppressor - DLA ^(†)	A		1,020.00	6,700	6.834	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.9) Small Arms Suppressor ^{(6)(†)}	A		951.00	7,021	6.677	950.00	10,526	10.000	1,020.00	1,031	1.052	1,124.01	641	0.720	-	-	-	1,124.01	641	0.720
2.10) M27 Infantry Automatic Rifle (IAR) ^{(7)(†)}	A		-	-	12.606	-	-	-	1,691.00	1,451	2.454	-	-	-	-	-	-	-	-	-
2.11) M27 IAR System Components ⁽⁸⁾	A		-	-	4.120	-	-	-	-	-	0.508	-	-	-	-	-	-	-	-	-
2.12) Principal End Item (PEI) Re-procurement ⁽⁹⁾	A		-	-	-	-	-	-	-	-	0.208	-	-	1.494	-	-	-	-	-	1.494
2.14) Recon Weapon System ^(†)	A		-	-	-	3,038.99	1,744	5.300	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) Family of Infantry Weapons Systems			-	-	50.040	-	-	23.375	-	-	10.697	-	-	5.517	-	-	-	-	-	5.517
3) Family of Incident Response Systems																				
3.1) Family of Incident Response Systems	A		-	-	2.036	-	-	0.556	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2						P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million									Aggregated Items Title: Wpns & Cmbt Vehs under \$5 million						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
Subtotal: 3) Family of Incident Response Systems			-	-	2.036	-	-	0.556	-	-	-	-	-	-	-	-	-	-	-	-	
4) Family of CBRN Systems																					
4.1) Family of CBRN Systems		A		-	-	-	-	-	0.813	-	-	1.375	-	-	1.340	-	-	-	-	-	1.340
Subtotal: 4) Family of CBRN Systems			-	-	0.000	-	-	0.813	-	-	1.375	-	-	1.340	-	-	-	-	-	1.340	
5) Gunners Protection Kit																					
5.1) TOGPK 2.0 Production Units ^(†)		A		38,297.10	138	5.285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.2) TOGPK 2.0 SL-3, Initial Issue Provisioning, and Production Support		A		-	-	1.381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.3) RHGPK Production Units ^{(10)(†)}		A		-	-	-	23,515.74	428	10.065	23,504.00	574	13.491	23,504.00	40	0.940	-	-	-	23,504.00	40	0.940
5.4) RHGPK SL-3, Initial Issue Provisioning, Production Spt, & Accesories ⁽¹¹⁾		A		-	-	-	-	-	0.023	-	-	1.810	-	-	0.006	-	-	-	-	-	0.006
Subtotal: 5) Gunners Protection Kit			-	-	6.666	-	-	10.088	-	-	15.301	-	-	0.946	-	-	-	-	-	0.946	
6) Fam of Expeditionary Firefighting & Rescue Equip/Tool Sets																					
6.1) Expeditionary Firefighting & Rescue Equip/Tool Sets (Various) ⁽¹²⁾		A		-	-	-	-	-	-	-	-	-	-	0.105	-	-	-	-	-	0.105	
Subtotal: 6) Fam of Expeditionary Firefighting & Rescue Equip/Tool Sets			-	-	0.000	-	-	-	-	-	-	-	-	0.105	-	-	-	-	-	0.105	
7) Prior Years Cumulative Funding																					
7.1) Prior Years Cumulative Funding		A		-	-	141.618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 7) Prior Years Cumulative Funding			-	-	141.618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	218.509	-	-	38.306	-	-	30.901	-	-	11.118	-	-	-	-	-	11.118	

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

^(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ Company and Battalion Mortars: Decrease of \$0.318M from FY 2022 to FY 2023 is primarily due to the realignment to RDTE line.

⁽²⁾ SASS PIP: FY 2023 reflects the initial procurement of the SASS PIP.

⁽³⁾ Advance Sniper Rifle: Decrease of \$1.922M from FY 2022 to FY 2023 is due to the completion of the Advanced Sniper Rifle procurement in FY 2023.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2	P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million	Aggregated Items Title: Wpns & Cmbt Vehs under \$5 million
(4) Advance Sniper Rifle Components: Decrease of \$2.505M from FY 2022 to FY 2023 is primarily due to fewer procurement quantities of the Advanced Sniper Rifle. (5) M2A1: Emergent requirement to rebuild deadlined guns into serviceable assets to maintain required operational capability. (6) Small Arms Suppressor: Decrease of \$0.332M from FY 2022 to FY 2023 is due to a decreased procurement of the Small Arms Suppressor. (7) M27: Decrease of \$2.454M from FY 2022 to FY 2023 is due to procurement completion in FY 2022. (8) M27 IAR Components include SL-3, ancillary equipment, and spare parts. (9) PEI Re-procurement: Increase of \$1.286M from FY 2022 to FY 2023 will replace unserviceable principal end items for the M16A4 in order to maintain current Approved Acquisition Objective (AAO). (10) RHGPK: Decrease of \$12.551M from FY 2022 to FY 2023 is due to the completion of procurement objective for the Reducible Height Gunners Protection Kits (RHGPK). (11) RHGPK SL3 accessories: Decrease of \$1.804M from FY 2022 to FY 2023 is due to the completion of procurement objective for the Reducible Height Gunners Protection Kits (RHGPK) SL-3 components and accessories. (12) FEFRETS Increase of \$0.105M from FY 2022 to FY 2023 is due to PMC funding being provided in earlier years of the FYDP beginning in FY 2023.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2				P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million					Aggregated Items: Wpns & Cmbt Vehs under \$5 million			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) Family of Infantry Weapons Systems												
2.2) M320A1 Grenade Launcher		2019	Capco LLC / Grand Junction, CO	C / IDIQ	Picatinny, NJ	Feb 2019	Sep 2019	4,753	992.00	Y		
2.2) M320A1 Grenade Launcher		2020	Capco LLC / Grand Junction, CO	C / IDIQ	Picatinny, NJ	Apr 2020	Sep 2020	2,652	1,628.58	Y		
2.2) M320A1 Grenade Launcher		2021	Capco LLC / Grand Junction, CO	C / IDIQ	Picatinny, NJ	Mar 2021	Aug 2021	941	1,841.66	Y		
2.3) Semi Auto Sniper System (SASS) PIP ⁽²⁾		2023	TBD / TBD	C / IDIQ	Picatinny, NJ	May 2023	Feb 2024	157	7,735.50	Y		
2.4) Advanced Sniper Rifle - SOCOM		2021	Barrett Firearms Mfg Inc / Christiana, TN	C / IDIQ	SOF, Tampa, FL FLSOF, Tampa, FL	Feb 2021	Jul 2021	148	9,506.76	Y		
2.5) Advanced Sniper Rifle - Army ⁽³⁾		2021	Barrett Firearms Mfg Inc / Christiana, TN	C / TBD	Picatinny, NJ	May 2021	May 2022	243	11,000.00	Y		
2.5) Advanced Sniper Rifle - Army ⁽³⁾		2022	Barrett Firearms Mfg Inc / Christiana, TN	C / TBD	Picatinny, NJ	May 2022	May 2022	253	11,200.00	Y		
2.5) Advanced Sniper Rifle - Army ⁽³⁾		2023	Barrett Firearms Mfg Inc / Christiana, TN	C / TBD	Picatinny, NJ	May 2023	Nov 2023	80	11,400.00	Y		
2.8) Small Arms Suppressor - DLA		2020	Knight's Armament / Titusville, FL	C / IDIQ	Philadelphia, PA	Mar 2020	Jun 2020	6,700	1,020.00	N		
2.9) Small Arms Suppressor ⁽⁶⁾		2020	Knight's Armament / Titusville, FL	C / IDIQ	Quantico, VA	Sep 2020	Apr 2021	7,021	951.00	Y		Aug 2020
2.9) Small Arms Suppressor ⁽⁶⁾		2021 ⁽¹³⁾	Knight's Armament / Titusville, FL	C / TBD	Quantico, VA	Feb 2021	Sep 2021	10,526	950.00	N		
2.9) Small Arms Suppressor ⁽⁶⁾		2022	Knight's Armament / Titusville, FL	C / IDIQ	Quantico, VA	Dec 2021	Jul 2022	1,031	1,020.00	Y		
2.10) M27 Infantry Automatic Rifle (IAR) ⁽⁷⁾		2022	Heckler & Koch / Ashburn, VA	SS / IDDQ	MARCORSYSCOM	Feb 2022	Nov 2022	1,451	1,691.00	Y		
2.14) Recon Weapon System		2021	Heckler & Koch / Ashburn, VA	SS / IDDQ	MARCORSYSCOM	Apr 2021	Dec 2021	1,744	3,038.99	Y		
5) Gunners Protection Kit												
5.1) TOGPK 2.0 Production Units		2020	CCDC ⁽¹⁴⁾ / Picatinny, NJ	C / FFP	Aberdeen, MD	Sep 2020	Dec 2020	138	38,300.00	Y		
5.3) RHGPK Production Units ^{(10)(†)}		2021	Wulco Inc. / Cincinnati, OH	C / FFP	Quantico, VA	Mar 2021	Oct 2021	428	23,515.74	N	Oct 2022	Oct 2020
5.3) RHGPK Production Units ^{(10)(†)}		2022	Wulco Inc. / Cincinnati, OH	C / FFP	Quantico, VA	Mar 2022	Jul 2022	574	23,504.00	N	Jul 2023	
5.3) RHGPK Production Units ^{(10)(†)}		2023	Wulco Inc. / Cincinnati, OH	C / FFP	Quantico, VA	Oct 2022	Feb 2023	40	23,504.00	N	Feb 2024	
^(†) indicates the presence of a P-21 Footnotes: ⁽¹³⁾ Award date based on availability of Congressional program increase funding ⁽¹⁴⁾ US Army Combat Development Command (CCDC)												

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million										Aggregated Items: Wpns & Cmbt Vehs under \$5 million													
Items <i>(Units in Each)</i>							Fiscal Year 2019										Fiscal Year 2020													B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019										Calendar Year 2020																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P		
5) Gunners Protection Kit																																	
5.3) RHGPK Production Units ⁽¹⁰⁾																																	
	5	2021	NAVY	428	0	428																											428
	5	2022	NAVY	574	0	574																											574
	5	2023	NAVY	40	0	40																											40
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million										Aggregated Items: Wpns & Cmbt Vehs under \$5 million																
Items <i>(Units in Each)</i>							Fiscal Year 2021										Fiscal Year 2022													BALANCE						
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022																			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP					
5) Gunners Protection Kit																																				
5.3) RHGPK Production Units ⁽¹⁰⁾																																				
	5	2021	NAVY	428	0	428							A	-	-	-	-	-	-	5	50	50	50	50	50	50	50	73				0				
	5	2022	NAVY	574	0	574														A				-	-	-	-	50	50	50				424		
	5	2023	NAVY	40	0	40																														40
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million										Aggregated Items: Wpns & Cmbt Vehs under \$5 million													
Items <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024													BALANCE			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT				Calendar Year 2023										Calendar Year 2024													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P		
5) Gunners Protection Kit																																	
5.3) RHGPK Production Units ⁽¹⁰⁾																																	
	5	2021	NAVY	428	428	0																										0	
	5	2022	NAVY	574	150	424	50	50	40	40	40	40	44	60	60																		0
	5	2023	NAVY	40	0	40	A -	-	-	-	40																					0	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2					P-1 Line Item Number / Title: 2220 / Wpns & Cmbt Vehs under \$5 million				Aggregated Items: Wpns & Cmbt Vehs under \$5 million			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Wulco Inc. - Cincinnati, OH	100	400	720	0	0	7	7	0	0	4	4

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							P-1 Line Item Number / Title: 2101 / Tomahawk					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	13	-	13	65	48	52	66	-	244
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	0.000	0.000	42.958	0.000	42.958	200.032	180.072	197.707	246.612	-	867.381
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	0.000	0.000	42.958	0.000	42.958	200.032	180.072	197.707	246.612	-	867.381
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	0.000	0.000	42.958	0.000	42.958	200.032	180.072	197.707	246.612	-	867.381
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	2,632K	-	2,632K	2,739K	3,380K	3,468K	3,401K	-	3,194K
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Block V Tactical Tomahawk (TACTOM RGM/UGM-109E) preserves Tomahawk's long-range precision-strike capability while significantly increasing responsiveness and flexibility. TACTOM is capable of in-flight retargeting, the ability to loiter over the battlefield, in-flight missile health and status monitoring, and battle damage indication. Other Tomahawk Weapon System functionality includes rapid mission planning and execution via Global Positioning System (GPS) onboard the launch platform and improved anti-jam GPS. This line item procures Tomahawk missiles for use with the Marine Corps Long Range Fires (LRF) program. The Marine Corps procures the same Tomahawk configuration used by US Navy Surface Combatants via the Navy Tomahawk Program Office on common contracts. Characteristics and dimensions (approximate): Weight (with booster and canister) (RGM-109): 4,300 pounds Length (with booster): 20.5 feet Wing Span: 8.6 feet Cruise Speed: High Subsonic												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 2101 / Tomahawk				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Tomahawk	P-5a, P-21			- / 0.000	- / 0.000	- / 0.000	13 / 42.958	- / 0.000	13 / 42.958
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	- / 0.000	13 / 42.958	- / 0.000	13 / 42.958
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

In FY 2022, 48 Block V TACTOMs were funded under PMC BLI 2212 to support the initial Long Range Fires (LRF) fielding to the Long Range Missile (LMSL) battery in FY 2024. In FY 2023, PMC BLI 2101 funds an additional 13 new Block V TACTOMs as a follow-on procurement for fielding in FY 2025. The 24 month lead time necessitates procurement in FY 2023. Additional quantities of Block V TACTOM, totaling to the MSR of 90 per year through the FYDP, are budgeted for procurement under separate budget lines for the Navy (WPN 2101) and Army (RDT&E,A PE# 0604644A, PU MR1).

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1							P-1 Line Item Number / Title: 2101 / Tomahawk						Item Number / Title [DODIC]: 1 / Tomahawk					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		13		-		13				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		0.000		0.000		42.958		0.000		42.958				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000		0.000		0.000		42.958		0.000		42.958				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				0.000		0.000		0.000		42.958		0.000		42.958				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		3,304K		-		3,304K				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway - TOTAL HARDWARE - MISSILE Cost																		
Non Recurring Cost																		
1.1.1) TACTICAL TOMAHAWK (VLS) ^(†) (1)	-	-	-	-	-	-	-	-	-	1,932K	13	25.116	-	-	-	1,932K	13	25.116
1.1.3) TACTICAL TOMAHAWK - CLASSIFIED ⁽²⁾	-	-	-	-	-	-	-	-	-	-	-	9.100	-	-	-	-	-	9.100
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	34.216	-	-	-	-	-	34.216
Subtotal: Flyaway - TOTAL HARDWARE - MISSILE Cost	-	-	-	-	-	-	-	-	-	-	-	34.216	-	-	-	-	-	34.216
Hardware - TOTAL HARDWARE - MISSILE - OTHER COSTS Cost																		
Non Recurring Cost																		
2.1.1) MK 14 CANISTERS ^(†) (3)	-	-	-	-	-	-	-	-	-	189,384.62	13	2.462	-	-	-	189,384.62	13	2.462
2.1.2) OBSOLESCENCE ⁽⁴⁾	-	-	-	-	-	-	-	-	-	-	-	0.251	-	-	-	-	-	0.251
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	2.713	-	-	-	-	-	2.713
Subtotal: Hardware - TOTAL HARDWARE - MISSILE - OTHER COSTS Cost	-	-	-	-	-	-	-	-	-	-	-	2.713	-	-	-	-	-	2.713
Support - TOTAL FLEET SUPPORT - MISSILE Cost																		

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 2101 / Tomahawk						Item Number / Title [DODIC]: 1 / Tomahawk						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.1) SUPPORT EQUIPMENT ⁽⁵⁾	-	-	-	-	-	-	-	-	-	-	-	5.401	-	-	-	-	-	5.401
Subtotal: Support - TOTAL FLEET SUPPORT - MISSILE Cost	-	-	-	-	-	-	-	-	-	-	-	5.401	-	-	-	-	-	5.401
Support - TOTAL PROCUREMENT SUPPORT - MISSILE Cost																		
4.1) SYSTEMS ENGINEERING ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-	-	0.282	-	-	-	-	-	0.282
4.2) PRODUCTION ENGINEERING SUPPORT ⁽⁷⁾	-	-	-	-	-	-	-	-	-	-	-	0.346	-	-	-	-	-	0.346
Subtotal: Support - TOTAL PROCUREMENT SUPPORT - MISSILE Cost	-	-	-	-	-	-	-	-	-	-	-	0.628	-	-	-	-	-	0.628
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	3,304K	13	42.958	-	-	0.000	3,304K	13	42.958
(†) indicates the presence of a P-5a																		
Footnotes:																		
⁽¹⁾ Cost Element TACTICAL TOMAHAWK (VLS) - Production of 13 Block V Tomahawk AURs for FY 2023 is required as Tomahawk is a key element of the long range fires capability. MSR is achieved through these NAVY procurements and missile procurements by Navy (WPN 2101) and Army (RDT&E,A PE# 0604644A, PU MR1). AUR costs are higher when compared to the Navy costs. This is due to the cost deltas from purchasing New Warheads and New MK10 canisters. Starting in FY24 AUR missile cost will align with Navy missile costs, as Navy GFM will no longer be available.																		
⁽²⁾ Cost Element TACTICAL TOMAHAWK - CLASSIFIED - details held at a higher classification.																		
⁽³⁾ Cost Element MK 14 CANISTERS - FY 2023 funds the procurement of 13 MK 14 Canisters required to enable production of 13 Block V Tomahawk AURs. Unit Cost assumes MSR (90 AURs) is achieved through USMC procurements and missile procurements by Navy (WPN, 2101) and Army (RDT&E,A PE#0604644A, PU MR1).																		
⁽⁴⁾ Cost Element OBSOLESCENCE - Funding reflects required Production obsolescence mitigation including avionics, electrical, and structures bill of material development, and obsolescence ECP forecasting in order to support the extended end of service date. Efforts include identification of alternate materials, replacing obsolete parts with current technology in systems, weapons replaceable assemblies, their sub-assemblies, components and sub-components, logistical analysis and support, engineering drawing updates, new manufacturing tooling and test equipment.																		
⁽⁵⁾ Cost Element SUPPORT EQUIPMENT - Funding for the procurement of Mid-Body Range Safety System (MRSS) kits required to conduct TACTOM flight testing, associated obsolescence and cyber security upgrades necessary for software development, and TACTOM BLK V missile conversion into a flight test missile.																		
⁽⁶⁾ Cost Element SYSTEMS ENGINEERING - System Engineering Support costs include warhead energetics, airframe engineering competencies, Production Acceptance Testing and integrated logistics support.																		
⁽⁷⁾ Cost Element PRODUCTION ENGINEERING SUPPORT - Production Engineering Support costs include warhead energetics, airframe engineering competencies, Production Acceptance Testing and integrated logistics support.																		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 2101 / Tomahawk				Item Number / Title [DODIC]: 1 / Tomahawk				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) TACTICAL TOMAHAWK (VLS) ^(†)		2023	Raytheon, Tuscon, AZ ⁽⁸⁾ / Tucson, AZ	SS / FPIF	NAVAIR	Dec 2022	Jan 2025	13	1,932K	Y		
2.1.1) MK 14 CANISTERS ^(†)		2023	BAE / MINNEAPOLIS, MN	C / FP	NAVSEA	Jan 2023	May 2024	13	189,384.62	N		

^(†) indicates the presence of a P-21

Footnotes:
⁽⁸⁾ MSR for TACTOM Production missiles is 90 when executing concurrently with the Navy Recertification Program. Max Rate is inclusive of quantities in PMC BLI 2101, WPN BLI 2101, and Army RDT&E,A (PE# 0604644A, PU MR1). Government Furnished Property limits max capacity to 450 per year; increases to 600 per year starting in FY 2024.

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 2101 / Tomahawk													Item Number / Title [DODIC]: 1 / Tomahawk								
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023												Fiscal Year 2024												BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023												Calendar Year 2024												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) TACTICAL TOMAHAWK (VLS) ⁽¹⁾																															
	1	2023	NAVY	13	0	13			A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
2.1.1) MK 14 CANISTERS ⁽³⁾																															
	2	2023	NAVY	13	0	13				A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	8
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 2101 / Tomahawk										Item Number / Title [DODIC]: 1 / Tomahawk												
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2025										Fiscal Year 2026													BALANCE		
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025										Calendar Year 2026															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	
1.1.1) TACTICAL TOMAHAWK (VLS) ⁽¹⁾																																
	1	2023	NAVY	13	0	13	-	-	-	1	1	1	2	2	2	2	2														0	
2.1.1) MK 14 CANISTERS ⁽³⁾																																
	2	2023	NAVY	13	5	8	1	1	1	1	1	1	2																			0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 2101 / Tomahawk				Item Number / Title [DODIC]: 1 / Tomahawk			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Raytheon, Tuscon, AZ ⁽⁸⁾ - Tucson, AZ	90	350	450	0	0	0	0	0	3	25	28
2	BAE - MINNEAPOLIS, MN	90	350	450	0	0	0	0	0	4	16	20

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽⁸⁾ MSR for TACTOM Production missiles is 90 when executing concurrently with the Navy Recertification Program. Max Rate is inclusive of quantities in PMC BLI 2101, WPN BLI 2101, and Army RDT&E,A (PE# 0604644A, PU MR1). Government Furnished Property limits max capacity to 450 per year; increases to 600 per year starting in FY 2024.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	115	-	115	104	106	66	105	-	496
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	0.000	0.000	174.369	0.000	174.369	157.690	160.722	100.073	159.206	-	752.060
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	0.000	0.000	174.369	0.000	174.369	157.690	160.722	100.073	159.206	-	752.060
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	0.000	0.000	174.369	0.000	174.369	157.690	160.722	100.073	159.206	-	752.060
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	1,516K	-	1,516K	1,516K	1,516K	1,516K	1,516K	-	1,516K
Description: The Naval Strike Missile (NSM) provides the Marine Corps' Navy/Marine Corps Expeditionary Ship Interdiction System (NMESIS) with a ground-based anti-ship capability. The Marine Corps will procure the same NSM configuration as the Navy. Missile components include a missile encased in a firing canister (encanistered missile). An encanistered missile consists of a flight vehicle that is mechanically and electrically connected within a weapon canister. The flight vehicle's major components are operationally joined, consisting of a warhead (explosive), propulsion system, guidance system, initiation system, and other components. The weapon canister is a mechanical structure with electrical interconnections that is used to support and restrain the flight vehicle during loading and unloading operations. The weapon canister allows the flight vehicle to mechanically and electrically connect to the Missile Launch System (MLS) or NMESIS without being exposed to the environment. Other Related Budgets: WPN 2292, PMC 2212												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Naval Strike Missile (NSM)	P-5a, P-21			- / 0.000	- / 0.000	- / 0.000	115 / 174.369	- / 0.000	115 / 174.369
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	- / 0.000	115 / 174.369	- / 0.000	115 / 174.369
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

PMC 2292 is a newly established LI. Prior to FY 2023, Marine Corps NSMs were previously procured in PMC 2212 Artillery Weapons Systems.

NMESIS will be employed by Medium Range Missile (MMSL) batteries. MMSL batteries will be the predominant ground fires units in the fully implemented Marine Corps artillery modernization plan. MMSL batteries will be assigned to each Marine Littoral Regiment (MLR) and will deploy with Marine Expeditionary Units.

FY 2023 will procure 115 NSM for load and re-load requirements in order to build initial capacity of one combat load for a single MLR MMSL battery and to begin building capacity for additional MMSL batteries activating in accordance with the artillery modernization plan. The 24-month lead time necessitates procurement in FY 2023 and is critical to delivering a minimal viable capability required to support an MLR in the Indo-Pacific region.

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022							
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)						Item Number / Title [DODIC]: 1 / Naval Strike Missile (NSM)							
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total					
Procurement Quantity <i>(Units in Each)</i>				-		-		-		115		-		115					
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		0.000		0.000		174.369		0.000		174.369					
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000		0.000		0.000		174.369		0.000		174.369					
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Total Obligation Authority <i>(\$ in Millions)</i>				0.000		0.000		0.000		174.369		0.000		174.369					
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																			
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		1,516K		-		1,516K					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																			
Cost Elements		Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
		Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																			
Recurring Cost																			
1.1.1) USMC NSM HARDWARE ^(†) ⁽¹⁾		-	-	-	-	-	-	-	-	1,516K	115	174.368	-	-	-	1,516K	115	174.368	
Subtotal: Recurring Cost		-	-	-	-	-	-	-	-	-	-	174.368	-	-	-	-	-	174.368	
Subtotal: Hardware Cost		-	-	-	-	-	-	-	-	-	-	174.368	-	-	-	-	-	174.368	
Gross/Weapon System Cost		-	-	0.000	-	-	0.000	-	-	0.000	1,516K	115	174.369	-	-	0.000	1,516K	115	174.369
^(†) indicates the presence of a P-5a																			
Footnotes:																			
⁽¹⁾ FY 2023 will procure 115 NSM for load and re-load requirements in order to build initial capacity of one combat load for a single MLR MMSL battery and to begin building capacity for additional MMSL batteries activating in accordance with the artillery modernization plan. The 24 month lead time necessitates procurement in FY23 and is critical to delivering a minimal viable capability required to support an MLR in the Indo-Pacific region. Marine Corps and Navy bundle NSM procurements in order to realize cost savings through stepladder pricing. Unit cost and quantity may fluctuate during the year of execution.																			

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)				Item Number / Title [DODIC]: 1 / Naval Strike Missile (NSM)				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) USMC NSM HARDWARE ^(†)		2023	Raytheon / Tucson, AZ	C / FFP	NAVSEA	Dec 2022	Dec 2024	115	1,516K	Y		Feb 2017

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)										Item Number / Title [DODIC]: 1 / Naval Strike Missile (NSM)											
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024														BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023										Calendar Year 2024														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) USMC NSM HARDWARE ⁽¹⁾																															
	1	2023	NAVY	115	0	115			A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1									P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)										Item Number / Title [DODIC]: 1 / Naval Strike Missile (NSM)												
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2025										Fiscal Year 2026														BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025										Calendar Year 2026														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) USMC NSM HARDWARE ⁽¹⁾																												0			
	1	2023	NAVY	115	0	115	-	-	24	19	12	12	12	12	12	12															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 2292 / Naval Strike Missile (NSM)				Item Number / Title [DODIC]: 1 / Naval Strike Missile (NSM)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Raytheon - Tucson, AZ			250	0	0	24	24	0	0	24	24

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0605520M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	288.183	17.686	9.349	173.801	0.000	173.801	196.319	193.781	263.738	393.270	-	1,536.127
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	288.183	17.686	9.349	173.801	0.000	173.801	196.319	193.781	263.738	393.270	-	1,536.127
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	288.183	17.686	9.349	173.801	0.000	173.801	196.319	193.781	263.738	393.270	-	1,536.127
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Ground Based Air Defense (GBAD) includes multiple Commandant of the Marine Corps (CMC) Force Design priority programs. GBAD continues to leverage existing efforts through the Army to minimize costs and maintain schedule. The MADIS FoS efforts align with the Joint C-sUAS Office (JCO). The Army is the Executive Agent. Marine Air Defense Integrated System Family of Systems (MADIS FoS): The MADIS FoS are CMC Force Design programs. MADIS FoS provides the Marine Littoral Regiment (MLR), Marine Expeditionary Unit (MEU) and other deployable Marine Air Ground Task Force (MAGTF) elements with an organic, mobile, 360 degree expeditionary, upgradable, and state of the art fully integrated Short Range Air Defense (SHORAD) capability. This capability will protect maneuver forces, installations and other designated critical assets from Fixed/Rotary Wing (FW/RW) aircraft and Group 1-3 Unmanned Aircraft Systems (UAS). The program's end state is to enhance the Fleet Marine Forces (FMF) ground based air defense capability to rapidly prosecute aerial threats and expand layered defense in depth to the FMF and supported Naval forces. The FoS includes the MADIS Increment 1; Light Marine Air Defense Integrated System (L-MADIS); and Installations Counter-small Unmanned Aircraft Systems (I-CsUAS). Advanced Man Portable Air Defense (A-MANPADS) provides close-in, low altitude, surface-to-air fires and command and control in defense of the MAGTF. The MADIS Increment 1 will modernize the existing GBAD system by mounting a mix of legacy and newly developed weapons capabilities onto the JLTV, mitigating the risk of attacks from UAS and FW/RW aircraft, while maintaining pace with maneuver forces. It consists of specific, integrated capabilities required to carry out active air defense missions against UAS and FW/RW aircraft and provide a Short Range Air Defense (SHORAD) capability. MADIS is the Air Defense capability fielded to the Littoral Anti-Air Battalion (LAAB) within each Marine Littoral Regiment. MADIS will contribute to Littoral Operations in a Contested Environment (LOCE) and Expeditionary Advanced Base Operations (EABO) by detect, track, ID and defeat of sUAS, FW/RW and other aerial threats. The MADIS Increment 1 (Inc 1) is accomplished with the procurement of Government Furnished C-UAS and air defense equipment and installation, by a government warfare center, onto a Joint Light Tactical Vehicle (JLTV). These efforts began in FY 2020. MADIS Increment 1 Block 2 will focus on kinetic and non-kinetic capability supporting increased lethality. Installations Counter-sUAS (I-CsUAS) will provide protection of USMC critical assets on installations from sUAS threats; primarily Group 1 and 2 commercial-off-the-shelf sUAS. This system will enhance force protection of critical defended assets on USMC installations and Forward Operating Bases (FOBs) in both CONUS and OCONUS locations. The system will detect, track, identify and defeat sUAS. I-CsUAS is currently operating under an Urgent Statement of Need (USON) and the capability is being provided as a service. This effort will inform a future Program of Record (PoR)												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles		P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0605520M
Line Item MDAP/MAIS Code: N/A		
The Light Marine Air Defense Integrated System (L-MADIS) is a subset of the MADIS FoS utilized to support deployed Marine Expeditionary Unit with non-kinetic Counter-UAS capabilities and a shoulder fired surface-to-air weapon. L-MADIS also shares the 2 vehicle approach. The L-MADIS Mk-1 provides the capability to transmit & receive data to/from external airborne and ground platforms and is integrated on an Ultra-Light Tactical Vehicle (ULTV). The Mk-2 variant provides target detection, tracking, and Mode 5 IFF, and provides non-kinetic C-UAS capability similarly integrated on a ULTV. The Medium Range Intercept Capability (MRIC) is a CMC Force Design program. MRIC will provide the Marine Corps Expeditionary Force Commander a capability to defend forward deployed forces primarily against threat subsonic/supersonic cruise missiles; secondarily against UAS and other aerial threats that enter into the MRIC's Weapons Engagement Zone (WEZ). MRIC is designed as a system-of-systems and will be integrated with Marine Corps organic Command and Control (C2) and Joint Integrated Air and Missile Defense (IAMD) architecture. The program will enhance the expeditionary force ground based air defense (GBAD) capability to rapidly prosecute aerial threats and expand layered defense of the Expeditionary and Naval Forces. The MRIC Prototype Development will be completed 4QFY22 and comprised of missile launchers, intercept missiles, and a C2 system that are able to utilize available AN/TPS-80 G/ATOR radar for surveillance and fire control. FY23 procures a production representative system to support deployment certification. This effort informs the investment to meet the Force Design requirements to field an MRIC Battery to each of the three LAAD Battalions in FY 2026, FY 2027 and FY 2028 to support operations including Expeditionary Advanced Based Operations (EABO).		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0605520M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Ground Based Air Defense (GBAD)	P-5a, P-21			- / 288.183	- / 17.686	- / 9.349	- / 173.801	- / 0.000	- / 173.801
P-40	Total Gross/Weapon System Cost				- / 288.183	- / 17.686	- / 9.349	- / 173.801	- / 0.000	- / 173.801
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Baseline Appropriation Request: \$173.801M Ground Based Air Defense-MADIS FoS The FY23 funding request is composed of the multiple requirements across different program efforts. The increase of \$164.452M from FY 2022 to FY 2023 accounts for a number of efforts outlined below. The major driver of the increase is due to full rate production ramp-up for seven MADIS Increment 1 systems starting in FY 2023 upon Milestone C in 2nd quarter FY 2023. The systems are comprised of Government Furnished Property (GFP) to include ancillary items, integration at government warfare centers, and required integration and technical support. The increase is also due to the initiation of the procurement of the L-MADIS systems required for MEU deployment, one additional I-CsUAS system required based on the Marine Corps priority site list, as well as the initiation of the MRIC missiles and components required for a deployed capability. MADIS INC I Program: \$79.741M - Will fund the procurement of seven MADIS Inc 1 systems. This system is required to defend against the risk of attacks from UAS and FW/RW aircraft, while maintaining pace with maneuver forces. \$7.762M - Will fund the procurement of Engineering Change Orders (ECOs) required to ensure increased lethality against evolving threats. \$2.678M - Will fund the procurement of MADIS Inc 1 training system required to train Marines on the inherent skill set required to operate the system. \$23.672M - Will fund the integration labor and technical support required to integrate 13 Low Rate Initial Production (LRIP) MADIS Inc 1 previously procured systems required for concurrent testing and Initial Operational Test & Evaluation. \$3.234M - Will fund New Equipment Training (NET) for the MADIS Inc 1 systems. I-CsUAS Program: \$7.516M - Will fund the procurement of two (2) I-CsUAS systems as a service. These systems are critical to provide protection of USMC critical assets and supports critical infrastructure on installations from sUAS threats. \$1.599M - Will fund required support to the I-CsUAS system. This includes required fielding support, integrated logistics, and site survey support. L-MADIS Program: \$22.749M - Will fund the procurement of five L-MADIS systems. These systems support deployed Marine Expeditionary Unit with non-kinetic Counter-UAS capabilities and a shoulder fired surface-to-air weapon. \$7.716M - Will fund the integration labor and logistics support required to integrate 5 L-MADIS. This is achieved by mounting a mix of mature components onto a ULTV. MRIC Program: \$14.573M - Will fund the procurement of components and missiles required to support MRIC. These components and missiles are required to defend against subsonic/supersonic cruise missiles as well as UAS and other aerial threats. \$2.561M - Will fund the logistics support required for shipping and storage of the MRIC missiles and launchers.										

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles		P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0605520M
Line Item MDAP/MAIS Code: N/A		
The FY 2023 funding request was adjusted by \$0.506M to account for the availability of prior year execution balances.		

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1							P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)						Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				288.183		17.686		9.349		173.801		0.000		173.801				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				288.183		17.686		9.349		173.801		0.000		173.801				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				288.183		17.686		9.349		173.801		0.000		173.801				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Marine Air Defense Integrated System (MADIS Inc 1) ⁽¹⁾	9,094K	13	118.223	-	-	-	-	-	-	11,392K	7	79.741	-	-	-	11,392K	7	79.741
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ⁽¹⁾ ⁽²⁾	3,458K	1	3.458	3,562K	2	7.123	3,690K	1	3.690	3,758K	2	7.516	-	-	-	3,758K	2	7.516
1.1.3) Lightweight Marine Air Defense Integrated System (L-MADIS) ⁽¹⁾ ⁽³⁾	-	-	-	-	-	-	-	-	-	4,550K	5	22.749	-	-	-	4,550K	5	22.749
1.1.4) Medium Range Intercept Capability ⁽⁴⁾	-	-	-	-	-	-	-	-	-	-	-	14.573	-	-	-	-	-	14.573
1.1.5) Advanced ManPads (A-MANPADS) Prior Years Cumulative Funding	-	-	60.854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.6) Stinger Service Life Extension Program (SLEP) Cumulative Funding	-	-	70.401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	252.936	-	-	7.123	-	-	3.690	-	-	124.579	-	-	-	-	-	124.579

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1							P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)						Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Non Recurring Cost																		
1.2.1) Stinger Training System (STS) Non-Recurring ^(†)	-	-	-	306,242.42	33	10.106	-	-	-	-	-	-	-	-	-	-	-	-
1.2.2) Improved Moving Target Simulator (IMTS) Non Recurring ⁽⁵⁾	-	-	-	-	-	-	-	-	4.484	-	-	-	-	-	-	-	-	-
1.2.3) MADIS ECO's/ Increased Lethality Components ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-	-	7.762	-	-	-	-	-	7.762
1.2.4) MADIS Increment 1 Training Systems ⁽⁷⁾	-	-	-	-	-	-	-	-	-	-	-	2.678	-	-	-	-	-	2.678
1.2.5) GBAD Prior Years Flyaway/Non Recurring Cumulative Funding	-	-	19.053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	19.053	-	-	10.106	-	-	4.484	-	-	10.440	-	-	-	-	-	10.440
Subtotal: Flyaway Cost	-	-	271.989	-	-	17.229	-	-	8.174	-	-	135.019	-	-	-	-	-	135.019
Support Cost																		
2.1) MADIS Inc 1 Integration & Technical Support ⁽⁸⁾	-	-	-	-	-	-	-	-	-	-	-	23.672	-	-	-	-	-	23.672
2.2) MADIS Inc 1 New Equipment Training ⁽⁹⁾	-	-	-	-	-	-	-	-	-	-	-	3.234	-	-	-	-	-	3.234
2.3) I-CsUAS Logistics Support ⁽¹⁰⁾	-	-	0.695	-	-	0.457	-	-	1.175	-	-	1.599	-	-	-	-	-	1.599
2.4) L-MADIS Integration Support ⁽¹¹⁾	-	-	-	-	-	-	-	-	-	-	-	4.837	-	-	-	-	-	4.837
2.6) L-MADIS Logistics Support ⁽¹²⁾	-	-	-	-	-	-	-	-	-	-	-	2.879	-	-	-	-	-	2.879
2.7) Medium Range Intercept Logistics Support ⁽¹³⁾	-	-	-	-	-	-	-	-	-	-	-	2.561	-	-	-	-	-	2.561
2.8) GBAD Prior Years Cumulative Support Funding	-	-	5.499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2023 Navy											Date: April 2022							
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)						Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
2.9) Below Threshold Reprogramming	-	-	10.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	16.194	-	-	0.457	-	-	1.175	-	-	38.782	-	-	-	-	-	38.782
Gross/Weapon System Cost	-	-	288.183	-	-	17.686	-	-	9.349	-	-	173.801	-	-	0.000	-	-	173.801

(†) indicates the presence of a P-5a

Footnotes:

(1) Marine Air Defense Integrated System Increment 1 (MADIS Inc 1) is the procurement and installation of Government Furnished Property (GFP) on a Joint Light Tactical Vehicle (JLTV) in order to mitigate the risk of attacks from UAS and FW/RW aircraft. GFP Components include Fire Control Optics, EO/IR Optics, remote weapon station (RWS), drone on drone defeat capability, Modi Mobile Vehicle Power Amplifier (MVPA), SkyView, C2 components, and a radar. These components will be integrated by Naval Information Warfare Center (NIWC) Atlantic and the funding associated with the assembly of this systems is found in CE 2.1 starting in FY24. Some components have a lead time of 12 months. Increase of \$79.741M from FY22 to FY23 is the Government Furnished Property (GFP) required for seven systems to support the full rate production decision.

(2) The Marine Corps will procure and install a C-UAS/GBAD capability at a Base, Post or Station every year across the FYDP in order to detect, track, and enable identification of sUAS operating above and in close proximity to an installation. The increase of \$3.826M between FY 2022 and FY 2023 is due to the additional required system based on the Marine Corps Installations Priority Site List.

(3) An L-MADIS system is comprised of two vehicles. The unit cost of the L-MADIS includes a radar, EO/IR optic, Skyview and Modi II (RF defeat capability), as well as a C-UAS navigation system, communications system, and two vehicles. The L-MADIS Mk-1 provides the capability to transmit & receive data to/from external airborne and ground platforms and is integrated on an Ultra-Light Tactical Vehicle (ULTV). The Mk-2 variant provides target detection, tracking, and Mode 5 IFF, and provides non-kinetic C-UAS capability as well as a shoulder fired surface-to-air weapon similarly integrated on a ULTV. The systems will be integrated via Naval Surface Warfare Center (NSWC) Crane beginning in FY23 and funded within cost element 2.4 The increase of \$22.749M from FY 2022 to FY 2023 is to procure 5 systems to meet Initial Operational Capability (IOC).

(4) Increase of \$14.573M from FY 2022 to FY 2023 is necessary to address emerging threats such as cruise missiles, mortars, and precision guided missiles in a Peer, Near Peer Competitor Environment. Funding supports the procurement of various system components such as the Mini Battle Management Center (Mini BMC), missiles, targets, launchers, cables, and bracketry required for integration of an MRIC capability.

(5) Upgrades current IMTS at both 2nd and 3rd LAAD Bns to include new Counter-UAS weapons.

(6) Increase of \$7.762M includes the procurement for retrofit of various components onto the Low Rate Initial Production (LRIP) systems procured in FY20. This includes identified technologies that can be integrated with the MADIS FoS and support increased lethality and adapt to the continually evolving threat and technologies. FY23 focuses on an improved intercom solution as well as air to air launcher components

(7) Increase of \$2.678M between FY 2022 and FY 2023 procures MADIS Inc 1 training systems required to train Marines on the inherent skill set required to operate the system. Training systems, to include hardware and software, support live training, including crew coordination, and emulation of the entire engagement sequence in an operational environment.

(8) Funding required for assembly and technical support performed by Naval Information & Surface Warfare Centers to integrate procured GFP onto the JLTV platform. Increase of \$23.672M from FY 2022 and FY 2023 is required to start the integration and technical support to integrate 13 Low Rate Initial Production (LRIP) MADIS Inc 1 previously procured systems. This includes safety, cyber security, software engineering and information assurance.

(9) Increase of \$3.234M from FY 2022 to FY 2023 funds the New Equipment Training to support the fielding of the MADIS Inc 1. NET is required in order to train Marines on the inherent skill set required to operate the system

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1	P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)	Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(10) Funds required support to the I-CsUAS system. This includes fielding support, integrated logistics, and site surveys. Increase of \$0.424M from FY 2022 to FY 2023 is due the fielding support required for one additional system based on the Marine Corps priority site list. (11) Increase of \$4.837M from FY 2022 to FY 2023 supports L-MADIS integration at Naval Surface Warfare Centers which includes the engineering, logistics, integration, cyber security, information assurance, and safety support required to integrate components procured via cost element 1.1.3 onto a ULTV platform. These integrated systems are required to meet Initial Operational Capability (IOC) (12) Increase of \$2.879M from FY 2022 to FY 2023 is due to the provisioning, shipping, and component ordering/tracking support required for the Low Rate Initial Production (LRIP) systems (13) Increase of \$2.561M from FY 2022 to FY 2023 includes the logistics support for the Medium Range Intercept in order to support validation of the technical data and manuals associated with the system.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)				Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Marine Air Defense Integrated System (MADIS Inc 1) ^(†)		2020	DLA ⁽¹⁴⁾ / DLA, Phil, PA	MIPR	Philadelphia, PA	Dec 2020	Dec 2022	13	9,094K	Y		
1.1.1) Marine Air Defense Integrated System (MADIS Inc 1) ^(†)		2023	DLA ⁽¹⁴⁾ / DLA, Phil, PA	MIPR	Philadelphia, PA	Dec 2022	Dec 2023	7	11,392K	Y		
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ^(†)		2020	Anduril ⁽¹⁵⁾ / Orange Co, CA	C / FFP	DIU, Mountain View, CA	Jul 2021	Jul 2021	1	3,458K	Y		Oct 2019
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ^(†)		2021 ⁽¹⁶⁾	Anduril ⁽¹⁵⁾ / Orange Co, CA	C / FFP	DIU, Mountain View, CA	Jul 2021	Jul 2021	2	3,562K	Y		
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ^(†)		2022	Anduril ⁽¹⁵⁾ / Orange Co, CA	C / FFP	DIU, Mountain View, CA	Mar 2022	Jul 2022	1	3,690K	Y		
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ^(†)		2023	Anduril ⁽¹⁵⁾ / Orange Co, CA	C / FFP	DIU, Mountain View, CA	Mar 2023	Jul 2023	2	3,758K	Y		
1.1.3) Lightweight Marine Air Defense Integrated System (L-MADIS) ^(†)		2023	DLA ⁽¹⁷⁾ / Philadelphia, PA	MIPR	Philadelphia, PA	Dec 2022	Jun 2023	5	4,550K	N	Oct 2022	Dec 2022
1.2.1) Stinger Training System (STS) Non-Recurring		2021	Blue Halo / Huntsville, AL	C / IDIQ	MCSC	Jun 2021	Oct 2021	33	306,242.42	Y		Mar 2021

^(†) indicates the presence of a P-21

Footnotes:

⁽¹⁴⁾ MADIS Increment 1 components are procured via DLA and various contracts. Systems are integrated at NIWC, Charleston, SC

⁽¹⁵⁾ Lead times vary based on site specific configurations

⁽¹⁶⁾ Date of first delivery refers to delivery of components required for integration

⁽¹⁷⁾ Components are procured via DLA and integrated via NSWC Crane

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)													Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021												Fiscal Year 2022												BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021												Calendar Year 2022																	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1.1.1) Marine Air Defense Integrated System (MADIS Inc 1) ⁽¹⁾																																				
	1	2020	NAVY	13 ⁽¹⁸⁾	0	13			A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13					
	1	2023	NAVY	7 ⁽¹⁹⁾	0	7																														7
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ⁽²⁾																																				
	2	2020	NAVY	1	0	1									A1																		0			
	2	2021	NAVY	2	0	2									A1	-	-	1																	0	
	2	2022	NAVY	1	0	1																		A -	-	-	-	1						0		
	2	2023	NAVY	2	0	2																														2
1.1.3) Lightweight Marine Air Defense Integrated System (L-MADIS) ⁽³⁾																																				
	3	2023	NAVY	5	0	5																											5			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)										Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024													BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023										Calendar Year 2024																		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP				
1.1.1) Marine Air Defense Integrated System (MADIS Inc 1) ⁽¹⁾																																			
	1	2020	NAVY	13 ⁽¹⁸⁾	0	13	-	-	1	2	2	2	2	2	2																	0			
	1	2023	NAVY	7 ⁽¹⁹⁾	0	7			A -	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2								0			
1.1.2) Installations-Counter small Unmanned Aircraft Systems (I-CsUAS) ⁽²⁾																																			
	2	2020	NAVY	1	1	0																											0		
	2	2021	NAVY	2	2	0																											0		
	2	2022	NAVY	1	1	0																											0		
	2	2023	NAVY	2	0	2						A -	-	-	-	1	-	-	1											0					
1.1.3) Lightweight Marine Air Defense Integrated System (L-MADIS) ⁽³⁾																																			
	3	2023	NAVY	5	0	5								A -	-	-	-	-	-	1	1	1	1	1											0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy							Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 3006 / Ground Based Air Defense (GBAD)			Item Number / Title [DODIC]: 1 / Ground Based Air Defense (GBAD)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	DLA ⁽¹⁴⁾ - DLA, Phil, PA	18	36	48	0	0	24	24	0	0	12	12
2	Anduril ⁽¹⁵⁾ - Orange Co, CA			TBD	0	0	0	0	0	0	4	4
3	DLA ⁽¹⁷⁾ - Philadelphia, PA		3	32	0	6	6	12	0	6	6	12

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽¹⁴⁾ MADIS Increment 1 components are procured via DLA and various contracts. Systems are integrated at NIWC, Charleston, SC

⁽¹⁵⁾ Lead times vary based on site specific configurations

⁽¹⁷⁾ Components are procured via DLA and integrated via NSW Crane

⁽¹⁸⁾ 1 system = 2 vehicles

⁽¹⁹⁾ 1 system = 2 vehicles

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022	
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin					

ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: N/A			

Line Item MDAP/MAIS Code: N/A											

Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	2,129	98	1	4	-	4	4	4	5	5	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	348.726	19.888	0.937	18.495	0.000	18.495	2.533	2.591	2.636	2.681	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	348.726	19.888	0.937	18.495	0.000	18.495	2.533	2.591	2.636	2.681	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	348.726	19.888	0.937	18.495	0.000	18.495	2.533	2.591	2.636	2.681	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	163.798	202.939	937.000	4,623.750	-	4,623.750	633.250	647.750	527.200	536.200	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	163.798	202.939	937.000	4,623.750	-	4,623.750	633.250	647.750	527.200	536.200	Continuing	Continuing

Description:

In support of Force Design and Marine Corps readiness to address Littoral Operations in Contested Environments and Indo-Pacific, Javelin provides the United States Army and the United States Marine Corps (USMC) with a man-portable fire-and-forget medium-range anti-armor missile with enhanced situational awareness and direct-fire effects that are able to defeat armored vehicles, fortifications, and soft targets in full spectrum operations. Javelin has a high kill rate against a variety of targets at extended ranges under adverse environments caused by day/night, weather, battlefield obscurants, and multiple counter-measure conditions. The system's soft launch feature permits firing from a fighting position or from an enclosure, and the modular design allows for the evolution of both software and hardware upgrades to meet changing threats and requirements. The system consists of a reusable Command Launch Unit (CLU) with a built-in-test along with a modular missile encased in a disposable launch tube assembly, and includes training devices for tactical and classroom exercises. Javelin's fire-and-forget technology allows the gunner to fire without the need to track targets while providing enhanced lethality through the use of a tandem warhead that is able to defeat all current armor threats. This system is effective against both stationary and moving targets and provides defensive capability against attacking/hovering helicopters. The performance improvements in the current production of Javelin Block I CLUs include an increased target identification range, increased surveillance time, and an external interface for video output. The performance improvements in the current production of Javelin Block I missiles include an increased probability of hit/kill at 2500m, improved warhead lethality, and reduced time of flight. The CLU is being used as a stand-alone surveillance and target acquisition asset. The Army is the lead for this joint program with the USMC.

Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	98	1	4	-	4	4	4	5	5
	Total Obligation Authority	19.703	0.798	18.316	-	18.316	2.348	2.400	2.441	2.482
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.185	0.139	0.179	-	0.179	0.185	0.191	0.195	0.199
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	19.888	0.937	18.495	-	18.495	2.533	2.591	2.636	2.681

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / JAVELIN	P-5a, P-21			2,129 / 348.726	98 / 19.888	1 / 0.937	4 / 18.495	- / 0.000	4 / 18.495
P-40	Total Gross/Weapon System Cost				2,129 / 348.726	98 / 19.888	1 / 0.937	4 / 18.495	- / 0.000	4 / 18.495
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:
 FY 2023 Base Appropriation Request: \$18.495M (Active \$18.316M, Reserve \$0.179M)
 Funding will support the procurement of seventy-nine (79) Javelin missiles to replenish inventory due to end of life service conditions. Funding will also provide for engineering and logistics support of the Javelin system, updating of reserve equipment, and program management support.

The funding increase of \$17.558M from FY 2022 to FY 2023 reflects the quantity increase from one to seventy-nine missiles. The quantity of four is incorrect and should reflect a quantity of seventy-nine as corrected.

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin						Item Number / Title [DODIC]: 1 / JAVELIN						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				2,129		98		1		4		-		4				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				348.726		19.888		0.937		18.495		0.000		18.495				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				348.726		19.888		0.937		18.495		0.000		18.495				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				348.726		19.888		0.937		18.495		0.000		18.495				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Thousands)</i>				163.798		202.939		937.000		4,623.750		-		4,623.750				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Guided Missiles ^(†) ⁽¹⁾	151.342	2,174	329.017	174.620	98	17.113	190.438	1	0.190	198.000	79	15.642	-	-	-	198.000	79	15.642
1.1.2) Recurring Missile Surcharge ⁽²⁾	-	-	4.169	-	-	0.860	-	-	0.009	-	-	0.987	-	-	-	-	-	0.987
1.1.3) Missile Engineering Support ⁽³⁾	-	-	10.026	-	-	0.870	-	-	0.357	-	-	0.897	-	-	-	-	-	0.897
1.1.4) Missile Program Support ⁽⁴⁾	-	-	4.922	-	-	0.860	-	-	0.241	-	-	0.799	-	-	-	-	-	0.799
1.1.5) Reserves-Training Equipment	-	-	0.592	-	-	0.185	-	-	0.140	-	-	0.170	-	-	-	-	-	0.170
Subtotal: Recurring Cost	-	-	348.726	-	-	19.888	-	-	0.937	-	-	18.495	-	-	-	-	-	18.495
Subtotal: Flyaway Cost	-	-	348.726	-	-	19.888	-	-	0.937	-	-	18.495	-	-	-	-	-	18.495
Gross/Weapon System Cost	163.798	2,129	348.726	202.939	98	19.888	937.000	1	0.937	4,623.750	4	18.495	-	-	0.000	4,623.750	4	18.495
^(†) indicates the presence of a P-5a																		
Footnotes:																		
⁽¹⁾ The missile unit cost increased by \$0.008M from FY 2022 to FY 2023 - The unit cost per missile is determined by the combined procurement quantities of 850 missiles per year ordered by multiple services including the Army, USMC, and Foreign Military Sales. The unit cost per missile through FY 2023 is based on the current Government Estimate for the procurement of the Javelin Spiral II F-Model missile variant.																		

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1	P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin	Item Number / Title [DODIC]: 1 / JAVELIN
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
The funding increase of \$15.452M from FY 2022 to FY 2023 reflects the quantity increase from one to seventy-nine missiles support the procurement to replenish inventory due to end of life service conditions. Quantity of four is incorrect and should reflect seventy-nine as corrected quantity. ⁽²⁾ \$0.978M increase to recurring missile surcharge from FY 2022 to FY 2023 is because the Marine Corps is buying seventy-nine missiles in FY 2023 compared to one missile in FY 2022. The recurring missile surcharge is calculated based on the total cost of missiles procured. ⁽³⁾ The \$0.540M increase from FY 2022 to FY 2023 is due to increased requirement for Missile Engineering Support of the seventy-nine missiles being procured in FY 2023 as compared to one missile in FY 2022. ⁽⁴⁾ The \$0.558M increase from FY 2022 to FY 2023 is due to increased requirement for Missile Program Support of seventy-nine missiles being procured in FY 2023 as compared to one missile in FY 2022.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin				Item Number / Title [DODIC]: 1 / JAVELIN				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Guided Missiles ^(†)		2020	JJV All Up Round ⁽⁵⁾ / Tucson AZ, Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Jun 2020	May 2022	100	177.565	Y		
1.1.1) Guided Missiles ^(†)		2021	JJV All Up Round ⁽⁵⁾ / Tucson AZ, Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Jun 2021	May 2023	98	174.620	Y		
1.1.1) Guided Missiles ^(†)		2022	JJV All Up Round ⁽⁵⁾ / Tucson AZ, Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Jun 2022	May 2024	1	190.438	Y		
1.1.1) Guided Missiles ^(†)		2023	JJV All Up Round ⁽⁵⁾ / Tucson AZ, Orlando FL	SS / FFP	AMCOM, Redstone Arsenal, AL	Jun 2023	May 2025	79	198.000	Y		

^(†) indicates the presence of a P-21

Footnotes:

⁽⁵⁾ Contract currently caps production at 2,100 missiles annually. Javelin Joint Venture (JJV) includes Raytheon in Tucson, Arizona and Lockheed Martin in Orlando, Florida. Procuring Contracting Office (PCO) location is the Aviation and Missile Command (AMCOM) Redstone Arsenal, Alabama. Funded Sole Source (SS) / Firm Fixed Price (FFP).

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin										Item Number / Title [DODIC]: 1 / JAVELIN															
Cost Elements (Units in Each)							Fiscal Year 2020										Fiscal Year 2021														BALANCE				
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT				Calendar Year 2020										Calendar Year 2021															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
1.1.1) Guided Missiles ⁽¹⁾																																			
Prior Years Deliveries: 2074																																			
	1	2020	NAVY	100	0	100											A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
	1	2021	NAVY	98	0	98																							A	-	-	-	-	98	
	1	2022	NAVY	1	0	1																											1		
	1	2023	NAVY	79	0	79																											79		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin										Item Number / Title [DODIC]: 1 / JAVELIN													
Cost Elements (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												BALANCE		
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.1) Guided Missiles ⁽¹⁾																																	
Prior Years Deliveries: 2074																																	
	1	2020	NAVY	100	0	100	-	-	-	-	-	-	-	38	59	3																	0
	1	2021	NAVY	98	0	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	60					0	
	1	2022	NAVY	1	0	1									A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	1	2023	NAVY	79	0	79																					A	-	-	-	-	79	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin										Item Number / Title [DODIC]: 1 / JAVELIN													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2024										Fiscal Year 2025										BALANCE						
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024										Calendar Year 2025																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP		
1.1.1) Guided Missiles ⁽¹⁾																																	
Prior Years Deliveries: 2074																																	
	1	2020	NAVY	100	100	0																											0
	1	2021	NAVY	98	98	0																											0
	1	2022	NAVY	1	0	1																											0
	1	2023	NAVY	79	0	79	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	79					0	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 3011 / Anti-Armor Missile-Javelin				Item Number / Title [DODIC]: 1 / JAVELIN			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	JJV All Up Round ⁽⁵⁾ - Tucson AZ, Orlando FL	850	3,960	6,480	11	3	23	26	6	3	29	32
"A" in the Delivery Schedule indicates the Contract Award Date. Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million). Footnotes: ⁽⁵⁾ Contract currently caps production at 2,100 missiles annually. Javelin Joint Venture (JJV) includes Raytheon in Tucson, Arizona and Lockheed Martin in Orlando, Florida. Procuring Contracting Office (PCO) location is the Aviation and Missile Command (AMCOM) Redstone Arsenal, Alabama. Funded Sole Source (SS) / Firm Fixed Price (FFP).												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0603635M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	143.077	21.891	20.481	21.419	0.000	21.419	22.201	8.363	0.000	0.000	-	237.432
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	143.077	21.891	20.481	21.419	0.000	21.419	22.201	8.363	0.000	0.000	-	237.432
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	143.077	21.891	20.481	21.419	0.000	21.419	22.201	8.363	0.000	0.000	-	237.432
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Family of Anti-Armor Weapon Systems (FOAAWS) The solution to the Shoulder-launched Multipurpose Assault Weapon (SMAW) follow on capability requirement is a Family of Marine-portable Rocket Systems. The Family of Systems include the SMAW MK-153 Mod 0, SMAW MK-153 Mod 2, and the Multi-purpose Anti-Armor Weapon System (MAAWS) M3A1. The MAAWS M3A1 is a multipurpose, man-portable, line-of-sight, reloadable, recoilless, anti-armor and anti-personnel weapon system. This system will enable the Marine Infantry and Combat Engineer Squads to engage in offensive and defensive operations with anti-armor, anti-personnel, anti-material, and assault capabilities. The MAAWS consists of the M3A1 Carl Gustaf Recoilless Rifle, Fire Control System and red dot back up sight. Munitions include two Sub-caliber Adapter Training Devices and a suite of 84mm ammunition with greater capabilities than the SMAW Mod 2 system. The suite of 84mm ammunition provides obscuration, illumination, anti-personnel, armored penetration, bunker and hardened facility penetration, and soft target destruction capabilities to meet various mission requirements.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0603635M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Follow on To Smaw - Active	P-5a, P-21			- / 143.077	- / 21.891	- / 20.481	- / 21.419	- / 0.000	- / 21.419
P-40	Total Gross/Weapon System Cost				- / 143.077	- / 21.891	- / 20.481	- / 21.419	- / 0.000	- / 21.419
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$21.419M

The FY 2023 request will fund the procurement 277 of Multi-purpose Anti-Armor Weapon Systems (MAAWS) containing the M3A1 launcher and fire control system as a follow on capability to Shoulder-launched Multipurpose Assault Weapon (SMAW MOD 2) per Joint Force 2025 and close combat lethality. The MAAWS system enables Marine infantry and combat engineer squads to engage in offensive and defensive operations with anti-armor, anti-personnel, anti-material, and assault capabilities. Additionally, funding will procure Stock Level (SL)-3 components and Sub-Caliber Adapters for the M3A1 MAAWS System.

The increase of \$0.938M from FY 2022 to FY 2023 is due to an increased unit cost for Marine Corps procurement of M3A1 systems, a direct result of the Army's reduction in procurement quantities and a loss of the stepladder price break and the initial procurement of the 20MM Sub-Caliber Adapter.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1							P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)						Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				143.077		21.891		20.481		21.419		0.000		21.419				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				143.077		21.891		20.481		21.419		0.000		21.419				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				143.077		21.891		20.481		21.419		0.000		21.419				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) M3A1 ^(†) (1)	48,997.02	336	16.463	33,257.00	288	9.578	31,926.00	298	9.514	37,707.00	277	10.445	-	-	-	37,707.00	277	10.445
1.1.2) Fire Control ^(†) (2)	49,380.12	342	16.888	28,632.00	302	8.647	29,491.00	298	8.788	30,375.00	277	8.414	-	-	-	30,375.00	277	8.414
1.1.3) SI-3 and IIP ⁽³⁾	-	-	1.000	-	-	0.779	-	-	0.320	-	-	0.200	-	-	-	-	-	0.200
1.1.4) Sub-Cal Adapter: 7.62MM	-	-	0.736	-	-	2.647	-	-	1.704	-	-	0.629	-	-	-	-	-	0.629
1.1.5) Sub-Cal Adapter: 20MM	-	-	-	-	-	-	-	-	-	-	-	1.568	-	-	-	-	-	1.568
1.1.6) Prior Years Cumulative Funding	-	-	102.465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	137.552	-	-	21.651	-	-	20.326	-	-	21.256	-	-	-	-	-	21.256
Subtotal: Flyaway Cost	-	-	137.552	-	-	21.651	-	-	20.326	-	-	21.256	-	-	-	-	-	21.256
Support Cost																		
2.1) Contractor Logistics Support (CLS)	-	-	-	-	-	0.240	-	-	0.155	-	-	0.163	-	-	-	-	-	0.163
2.2) Technical, Engineering and Program Management Services	-	-	5.525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	5.525	-	-	0.240	-	-	0.155	-	-	0.163	-	-	-	-	-	0.163
Gross/Weapon System Cost	-	-	143.077	-	-	21.891	-	-	20.481	-	-	21.419	-	-	0.000	-	-	21.419

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1	P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)	Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(†) indicates the presence of a P-5a Footnotes: (1) Beginning in FY 2022, the cost element structure has been changed to align to the Army budget exhibits with separate cost elements for the M3A1 launcher and Fire Control. The FY 2023 increased unit cost is a direct result of the Army's reduction in procurement quantities and a loss of the stepladder price break. (2) Beginning in FY 2022, the cost element structure has been changed to align to the Army budget exhibits with separate cost elements for the M3A1 launcher and Fire Control. The unit prices reflect Army unit prices which varies from year-to-year based on overall Army and Marine Corps order quantities. (3) Includes Stock Level-Item 3 (SL-3), Initial Item Provisioning (IIP) including Spare Kits/Accessories funding which includes procuring one Fire Control System (FCS) Spare Kit per M3A1 MAAWS System from FY 2021 - FY 2025. Includes spare lenses, batteries, and eye piece.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1			P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)						Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) M3A1 ^(†)		2020	Saab Dynamics AB ⁽⁴⁾ / Sweden	SS / IDDQ	ACC-NJ, Picatinny Arsenal, NJ	Dec 2019	Dec 2020	336	29,877.00	N		
1.1.1) M3A1 ^(†)		2021	Saab Dynamics AB ⁽⁴⁾ / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Nov 2020	Nov 2021	288	33,257.00	N		
1.1.1) M3A1 ^(†)		2022	Saab Dynamics AB ⁽⁴⁾ / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Nov 2021	Nov 2022	298	31,926.00	N		
1.1.1) M3A1 ^(†)		2023	Saab Dynamics AB ⁽⁴⁾ / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Nov 2022	Nov 2023	277	37,707.00	N		
1.1.2) Fire Control ^(†)		2020	Aimpoint / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Dec 2019	Jun 2020	342	30,320.00	N		
1.1.2) Fire Control ^(†)		2021	Aimpoint / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Dec 2020	Jun 2021	302	28,632.00	N		
1.1.2) Fire Control ^(†)		2022	Aimpoint / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Dec 2021	Jun 2022	298	29,491.00	N		
1.1.2) Fire Control		2023	Aimpoint / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Dec 2022	Jun 2023	277	30,375.00	N		

^(†) indicates the presence of a P-21

Footnotes:

⁽⁴⁾ This manufacturer is producing for both USMC and the Army. The delivery schedule reflects the Marine Corps planned deliveries in support of Marine Corps fielding plans.

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)										Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2020										Fiscal Year 2021													BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020										Calendar Year 2021																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP		
1.1.1) M3A1 ⁽¹⁾																																	
	1	2020	NAVY	336	0	336			A -	-	-	-	-	-	-	-	-	-	-	-	28	28	28	28	28	28	28	28	28	28	28	56	
	1	2021	NAVY	288	0	288													A -	-	-	-	-	-	-	-	-	-	-	-	288		
	1	2022	NAVY	298	0	298																									298		
	1	2023	NAVY	277	0	277																									277		
1.1.2) Fire Control ⁽²⁾																																	
	2	2020	NAVY	342	0	342			A -	-	-	-	-	-	-	28	28	28	28	28	28	29	29	29	29	29	29				0		
	2	2021	NAVY	302	0	302														A -	-	-	-	-	-	-	25	25	25	25	202		
	2	2022	NAVY	298	0	298																									298		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)										Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active																
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2022										Fiscal Year 2023													BALANCE						
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT				Calendar Year 2022										Calendar Year 2023																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP					
1.1.1) M3A1 ⁽¹⁾																																				
	1	2020	NAVY	336	280	56	28	28																									0			
	1	2021	NAVY	288	0	288	-	24	24	24	24	24	24	24	24	24	24	24															0			
	1	2022	NAVY	298	0	298		A -	-	-	-	-	-	-	-	-	-	-	24	24	25	25	25	25	25	25	25	25	25	25	25					
	1	2023	NAVY	277	0	277																	A -	-	-	-	-	-	-	-	-	-	-	-	-	277
1.1.2) Fire Control ⁽²⁾																																				
	2	2020	NAVY	342	342	0																										0				
	2	2021	NAVY	302	100	202	25	25	25	25	25	26	26	25																		0				
	2	2022	NAVY	298	0	298				A -	-	-	-	-	-	24	24	25	25	25	25	25	25	25	25	25								0		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)										Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active														
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2024										Fiscal Year 2025													BALANCE				
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT				Calendar Year 2024										Calendar Year 2025														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP			
1.1.1) M3A1 ⁽¹⁾																																		
	1	2020	NAVY	336	336	0																											0	
	1	2021	NAVY	288	288	0																											0	
	1	2022	NAVY	298	273	25	25																											0
	1	2023	NAVY	277	0	277	-	23	23	23	23	23	23	23	23	23	23	23	24														0	
1.1.2) Fire Control ⁽²⁾																																		
	2	2020	NAVY	342	342	0																											0	
	2	2021	NAVY	302	302	0																											0	
	2	2022	NAVY	298	298	0																											0	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 3016 / Family Anti-Armor Weapon Systems (FOAAWS)				Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active		

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Saab Dynamics AB ⁽⁴⁾ - Sweden	300	1,000	2,000	0	0	12	12	0	0	12	12
2	Aimpoint - Sweden	300	1,000	2,000	0	0	6	6	0	0	6	6

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽⁴⁾ This manufacturer is producing for both USMC and the Army. The delivery schedule reflects the Marine Corps planned deliveries in support of Marine Corps fielding plans.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							P-1 Line Item Number / Title: 3017 / Anti-Armor Missile-TOW					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A				Other Related Program Elements: 0603635M					
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	314.868	33.640	9.793	0.663	0.000	0.663	20.174	28.437	19.461	20.475	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	314.868	33.640	9.793	0.663	0.000	0.663	20.174	28.437	19.461	20.475	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	314.868	33.640	9.793	0.663	0.000	0.663	20.174	28.437	19.461	20.475	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: In support of Force Design and Marine Corps readiness to address Littoral Operations in Contested Environments and Indo-Pacific, the M41A7 Saber weapon system is a combat proven system that provides long-range, lethal anti-armor precision assault capability for the United States Marine Corps Infantry, and Light Armored Reconnaissance Battalions across modern operational environments. The M41A7 is the replacement for the M220 Tube-launched, Optically-tracked, Wire/Wireless-guided (TOW) 2 weapon system. Global Positioning System based location detection and an altitude determination subsystem generate a 10-digit grid coordinate of a target's position, and superior surveillance capability enables the warfighter to identify targets at long range and engage with TOW missiles or other weapon systems. TOW missiles (BGM-71 Series) are the munition for the M41A7 system. The TOW missile is a highly lethal, cost effective, interoperable, multi-purpose anti-armor round that is used in either direct-fire or "fly-over, shoot down" mode against field fortifications and structures. In its current configuration, the combination of the M41A7 and the TOW missile provides the capability to defeat armored vehicles, bunkers, and buildings at extended ranges in all battlefield conditions. The M41A7 is mounted on a variety of combat vehicle systems including the Joint Lightweight Tactical Vehicle (JLTV), High Mobility Multipurpose Wheeled Vehicle (HMMWV), Mine Resistant Ambush Protected Vehicle (MRAP), and Light Armored Vehicle - Anti-Tank (LAV-AT), as well as having the capability for ground mounted operations. Marine Corps Forces Special Operations Command identified the Spike Non Line of Sight (NLOS) as the preferred weapon system to satisfy a MARSOC Urgent Universal Needs Statement. Organic Precision Strike (Medium) will meet the Marine Corps Forces Special Operations Command (MARSOC) requirement for a lethal precision capability by procuring the Spike NLOS system to support current combat operations. Spike NLOS is a multi-purpose, electro-optical (EO), Man-in-the-loop (MITL) missile system with a real-time wireless data link for ranges between 1km and 32 km. The Spike NLOS system is in operational use by the United States Special Operations Command (USSOCOM), Spain, the United Kingdom, South Korea, and Columbia, and is a possible replacement for aging Saber/TOW systems and offers to modernize the infantry to meet the requirements identified in the Marine Corps Operating Concept. The Spike NLOS launcher and High Explosive Anti-Tank (HEAT) and Penetrator Blast Fragmentation (PBF) missiles match or exceed the capabilities of the Saber/TOW systems in range and effects, which would enable small units to achieve a greater tactical edge to counter threats in complex and compartmentalized terrain.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles					P-1 Line Item Number / Title: 3017 / Anti-Armor Missile-TOW					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A				Other Related Program Elements: 0603635M			
Line Item MDAP/MAIS Code: N/A										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
NR	Total Obligation Authority	33.447	9.603	0.460	-	0.460	19.970	28.230	19.247	20.257
	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.193	0.190	0.203	-	0.203	0.204	0.207	0.214	0.218
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	33.640	9.793	0.663	-	0.663	20.174	28.437	19.461	20.475

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3017 / Anti-Armor Missile-TOW				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0603635M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / ANTI ARMOR WEAPNS SYSTEM-HEAVY (AAWS-H)	P-5a			- / 314.868	- / 33.640	- / 9.793	- / 0.663	- / 0.000	- / 0.663
P-40	Total Gross/Weapon System Cost				- / 314.868	- / 33.640	- / 9.793	- / 0.663	- / 0.000	- / 0.663
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$0.663M (\$0.460M Active; \$0.203M Reserve) Funding will support training requirements, engineering, logistics, and program management efforts associated with the refurbishing and retrofitting of missiles in order to extend their service life; for reserve equipment support; and for product improvement upgrades for the Saber System. The \$9.130 decrease from FY 2022 to FY 2023 reflects the procurement quantity decrease from 109 missiles to zero.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022							
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 3017 / Anti-Armor Missile-TOW						Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM- HEAVY (AAWS-H)							
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total					
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-					
Gross/Weapon System Cost <i>(\$ in Millions)</i>				314.868		33.640		9.793		0.663		0.000		0.663					
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Net Procurement (P-1) <i>(\$ in Millions)</i>				314.868		33.640		9.793		0.663		0.000		0.663					
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Total Obligation Authority <i>(\$ in Millions)</i>				314.868		33.640		9.793		0.663		0.000		0.663					
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																			
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-					
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-					
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																			
Cost Elements		Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
		Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway - Prior Years Cumulative Funding Cost																			
Recurring Cost																			
1.1.1) Guided Missiles ⁽¹⁾ (1)	71,440.30	3,032	216.607	57,456.00	491	28.211	75,412.00	109	8.220	-	-	-	-	-	-	-	-	-	
1.1.2) Recurring Missile Surcharge ⁽²⁾	-	-	4.738	-	-	1.488	-	-	0.419	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	221.345	-	-	29.699	-	-	8.639	-	-	-	-	-	-	-	-	-	
Non Recurring Cost																			
1.2.1) Spike NLOS	7,317K	3	21.950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Non Recurring Cost	-	-	21.950	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Flyaway - Prior Years Cumulative Funding Cost	-	-	243.295	-	-	29.699	-	-	8.639	-	-	-	-	-	-	-	-	-	
Support Cost																			
2.1) Missile Engineering Support	-	-	8.993	-	-	1.998	-	-	0.544	-	-	0.380	-	-	-	-	-	0.380	
2.2) Missile Program Support	-	-	7.647	-	-	1.750	-	-	0.420	-	-	0.283	-	-	-	-	-	0.283	
2.3) Saber Launcher Support	-	-	53.874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.4) Reserves-Training Equipment	-	-	1.059	-	-	0.193	-	-	0.190	-	-	-	-	-	-	-	-	-	

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Exhibit P-5, Cost Analysis: PB 2023 Navy										Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 3017 / Anti-Armor Missile-TOW					Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM-HEAVY (AAWS-H)									
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:									

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Support Cost</i>	-	-	71.573	-	-	3.941	-	-	1.154	-	-	0.663	-	-	-	-	-	0.663
Gross/Weapon System Cost	-	-	314.868	-	-	33.640	-	-	9.793	-	-	0.663	-	-	0.000	-	-	0.663

(†) indicates the presence of a P-5a

Footnotes:

- (1) A \$8.220M decrease from FY 2022 to FY 2023 is due to the missile procurement decrease from 109 to 0 missiles.
- (2) A \$0.419M total cost decrease from FY 2022 to FY 2023 is due to not buying missiles in FY23; therefore, not requiring the surcharge.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1			P-1 Line Item Number / Title: 3017 / Anti-Armor Missile-TOW						Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM- HEAVY (AAWS-H)			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Guided Missiles		2020 ⁽³⁾	Raytheon, Tucson AZ ⁽⁴⁾ / AMCOM, Redstone Arsenal, AL	SS / FPIF	AMCOM, Redstone Arsenal, AL	Apr 2020	Apr 2022	565	54,429.00	Y		
1.1.1) Guided Missiles		2021 ⁽⁵⁾	Raytheon, Tucson AZ ⁽⁴⁾ / AMCOM, Redstone Arsenal, AL	SS / FPIF	AMCOM, Redstone Arsenal, AL	Apr 2021	Apr 2023	491	57,456.00	Y		
1.1.1) Guided Missiles		2022	Raytheon, Tucson AZ ⁽⁴⁾ / AMCOM, Redstone Arsenal, AL	SS / FFP	AMCOM, Redstone Arsenal, AL	May 2022	Sep 2023	109	75,412.00	Y		

Footnotes:

⁽³⁾ FY 2020 Base procurement dollars support the fourth year of a five-year (FY17-21) multi-year contract. 10 U.S. Code #2431 and DoD FM Reg. Vol 2B, Ch 4 mandate Production Rates be defined in terms of budget year.

⁽⁴⁾ Raytheon in Tucson, Arizona is currently the only industry source that is both equipped and qualified to produce TOW missiles. Procuring Contracting Office (PCO) location is the Aviation and Missile Command (AMCOM) Redstone Arsenal, Alabama. Funded Sole Source (SS) / Fixed Price Incentive Fee (FPIF). Multi-year contracts do not follow the Administrative Lead Time (ALT) shown for annual year contracts.

⁽⁵⁾ FY 2021 Base procurement dollars support the fifth year of a five-year (FY17-21) multi-year contract. 10 U.S. Code #2431 and DoD FM Reg. Vol 2B, Ch 4 mandate Production Rates be defined in terms of budget year.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)						
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: 260												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	312	1,022	536	44	-	44	6	6	6	6	-	1,938
Gross/Weapon System Cost (<i>\$ in Millions</i>)	44.765	151.145	76.368	7.605	0.000	7.605	1.779	1.575	1.800	1.836	-	286.873
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	44.765	151.145	76.368	7.605	0.000	7.605	1.779	1.575	1.800	1.836	-	286.873
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	44.765	151.145	76.368	7.605	0.000	7.605	1.779	1.575	1.800	1.836	-	286.873
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	142,012.82	147,356.16	141,460.82	163,545.45	-	163,545.45	223,000.00	202,500.00	212,833.33	217,000.00	-	146,056.24
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	143,477.56	147,891.39	142,477.61	172,840.91	-	172,840.91	296,500.00	262,500.00	300,000.00	306,000.00	-	148,025.28
Description: Guided Multiple Launch Rocket System (GMLRS) rockets are surface-to-surface artillery rockets fired from the High Mobility Artillery Rocket System (HIMARS) launchers. GMLRS rockets provide 24/7, all-weather precision fires to engage both area and point targets at short, medium, and long ranges. In order to align with the National Defense Strategy and continuously deliver performance with affordability and speed, the Marine Corps procures its GMLRS rockets in concert with Army. The GMLRS program is critical to sustaining a Joint Force military advantage and maintaining a favorable regional balance of power in the theaters in which HIMARS deploys. The GMLRS Program currently consists of the procurement of two variants: Unitary (U); Alternative Warhead (AW). GMLRS-U utilizes a 200-pound high explosive warhead to engage point targets with limited collateral damage. GMLRS Alternative Warhead (AW) was developed as a non-cluster munition to engage the same target sets as DPICM. The GMLRS-AW rocket is 90% common with the Unitary variant. GMLRS-U and GMLRS-AW are currently in full rate production.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	1,000	515	44	-	44	6	6	6	6		
	Total Obligation Authority	147.951	73.178	7.605	-	7.605	1.779	1.575	1.800	1.836		
NR	Quantity	22	21	-	-	-	-	-	-	-		
	Total Obligation Authority	3.194	3.190	-	-	-	-	-	-	-		
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	151.145	76.368	7.605	-	7.605	1.779	1.575	1.800	1.836		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: 260										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Guided MLRS Rocket (GMLRS)	P-5a, P-21			312 / 44.765	1,022 / 151.145	536 / 76.368	44 / 7.605	- / 0.000	44 / 7.605
P-40	Total Gross/Weapon System Cost				312 / 44.765	1,022 / 151.145	536 / 76.368	44 / 7.605	- / 0.000	44 / 7.605
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Baseline Appropriation Request: \$7.605M (\$7.605M Active; Reserves \$0.000M) Funds procure GMLRS rockets, intra-production services: download/demate and cybersecurity, PoP boxes and safety support. GMLRS unit costs are driven by total U.S. Army, Marine Corps, and Foreign Military Sales (FMS) procurements and are subject to the mix between AW and Unitary warheads. FY 2022 to FY 2023 decrease of \$68.763M reflects a reduction in quantity of GMLRS rockets. The increased unit cost accounts for the production of new pods for the GMLRS program rather than refurbishment of old pods and more expensive Alternative Warhead variants to support leading to an overall unit cost growth. OCO: N/A										

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Exhibit P-5, Cost Analysis: PB 2023 Navy

Date: April 2022

Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)						Item Number / Title [DODIC]: 1 / Guided MLRS Rocket (GMLRS)						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity (Units in Each)				312		1,022		536		44		-		44				
Gross/Weapon System Cost (\$ in Millions)				44.765		151.145		76.368		7.605		0.000		7.605				
Less PY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Net Procurement (P-1) (\$ in Millions)				44.765		151.145		76.368		7.605		0.000		7.605				
Plus CY Advance Procurement (\$ in Millions)				-		-		-		-		-		-				
Total Obligation Authority (\$ in Millions)				44.765		151.145		76.368		7.605		0.000		7.605				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares (\$ in Millions)				-		-		-		-		-		-				
Gross/Weapon System Unit Cost (\$ in Dollars)				143,477.56		147,891.39		142,477.61		172,840.91		-		172,840.91				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Tactical GMLRS Hardware ^(†) (1)	139,724.49	294	41.079	126,492.75	1,152	145.720	139,913.00	514	71.915	152,447.00	44	6.708	-	-	-	152,447.00	44	6.708
1.1.2) Tactical GMLRS Hardware (Reserves) ^(†) (2)	139,722.22	18	2.515	133,083.33	24	3.194	139,913.00	22	3.078	-	-	-	-	-	-	-	-	-
1.1.3) First Destination Transport ⁽³⁾	-	-	0.277	-	-	0.603	-	-	0.221	-	-	0.040	-	-	-	-	-	0.040
1.1.4) Production Engineering Support ⁽⁴⁾	-	-	0.437	-	-	1.081	-	-	0.609	-	-	0.448	-	-	-	-	-	0.448
Subtotal: Recurring Cost	-	-	44.308	-	-	150.598	-	-	75.823	-	-	7.196	-	-	-	-	-	7.196
Subtotal: Flyaway Cost	-	-	44.308	-	-	150.598	-	-	75.823	-	-	7.196	-	-	-	-	-	7.196
Support Cost																		
2.1) Government Management ⁽⁵⁾	-	-	0.457	-	-	0.547	-	-	0.545	-	-	0.409	-	-	-	-	-	0.409
Subtotal: Support Cost	-	-	0.457	-	-	0.547	-	-	0.545	-	-	0.409	-	-	-	-	-	0.409
Gross/Weapon System Cost	143,477.56	312	44.765	147,891.39	1,022	151.145	142,477.61	536	76.368	172,840.91	44	7.605	-	-	0.000	172,840.91	44	7.605

(†) indicates the presence of a P-5a

Footnotes:

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1	P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)	Item Number / Title [DODIC]: 1 / Guided MLRS Rocket (GMLRS)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(1) GMLRS Hardware unit cost includes rocket unit cost, download services, integrated product support, and cybersecurity. The FY 2022 to FY 2023 decrease of \$65.207M in baseline is due to the procurement of 470 less rockets. The increased unit cost accounts for the production of new pods for the GMLRS program rather than refurbishment of old pods and more expensive Alternative Warhead variants to support leading to an overall unit cost growth. The unit cost and quantity for FY 2023 is an estimate from the Army based on GMLRS variant type, quantity, and total dollars identified from all services procuring GMLRS. This includes the Marine Corps, Army and five FMS countries. The actual unit cost will be determined upon contract award. These quantities are in alignment with the Commandant's Planning Guidance and the National Defense Strategy. (2) GMLRS Hardware unit cost includes rocket unit cost, download services, integrated product support, and cybersecurity. FY 2021 actual unit costs for baseline and reserve differ due to a different mix of variants and level of support included in each unit cost. The FY 2022 to FY 2023 decrease to zero is due to the USMC realignment of funds to a higher priority need. (3) FY 2022 to FY 2023 funding decrease in the amount of \$0.181M for base and \$0.0M for OCO correlates to a smaller quantity of GMLRS being procured. (4) FY 2022 to FY 2023 funding decrease in the amount of \$0.161M base correlates to a smaller quantity of GMLRS being procured. (5) FY 2022 to FY 2023 funding decrease of \$0.136M correlates to a smaller quantity of GMLRS being procured.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1			P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)					Item Number / Title [DODIC]: 1 / Guided MLRS Rocket (GMLRS)				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Tactical GMLRS Hardware ^(†)		2020	Lockheed Martin / Dallas, TX	SS / FPIF	Aviationand Missile Command	Feb 2020	Aug 2022	174	139,725.00	N	Feb 2021	Feb 2017
1.1.1) Tactical GMLRS Hardware ^(†)	✓	2020	Lockheed Martin / Dallas, TX	SS / FPIF	Aviationand Missile Command	Feb 2020	Aug 2022	120	139,725.00	N	Feb 2021	Feb 2017
1.1.1) Tactical GMLRS Hardware ^(†)		2021 ⁽⁶⁾	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Mar 2021	Jan 2023	1,014	126,492.75	N	Feb 2022	May 2019
1.1.1) Tactical GMLRS Hardware ^(†)	✓	2021	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Mar 2021	Apr 2023	138	126,492.75	N	Feb 2022	May 2019
1.1.1) Tactical GMLRS Hardware ^(†)		2022 ⁽⁷⁾	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Mar 2022	Aug 2023	514	139,913.00	N	Feb 2023	May 2019
1.1.1) Tactical GMLRS Hardware ^(†)		2023	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Mar 2023	Aug 2024	44	152,447.00	N	Feb 2024	May 2019
1.1.2) Tactical GMLRS Hardware (Reserves) ^(†)		2020	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Feb 2020	Aug 2022	18	139,725.00	N	Feb 2021	Feb 2017
1.1.2) Tactical GMLRS Hardware (Reserves) ^(†)		2021	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Mar 2021	Jan 2023	24	133,083.33	N	Feb 2022	May 2019
1.1.2) Tactical GMLRS Hardware (Reserves) ^(†)		2022	Lockheed Martin / Dallas, TX	SS / FPIF	Aviation and Missile Cmd	Mar 2022	Aug 2023	22	139,913.00	Y	Feb 2023	May 2019
^(†) indicates the presence of a P-21												
Footnotes: ⁽⁶⁾ Lockheed Martin is currently the industry source that is both facilitized and qualified to produce GMLRS rocket. FY21 annual production is planned to be an Indefinite Delivery Indefinite Quantity: FPIF contract type. *Sole Source/Fixed Price Incentive Firm ⁽⁷⁾ FY22 annual production is planned to be a lot buy against the FY21 contract.												

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)													Item Number / Title [DODIC]: 1 / Guided MLRS Rocket (GMLRS)									
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2020												Fiscal Year 2021													BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020												Calendar Year 2021													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1.1.1) Tactical GMLRS Hardware ⁽¹⁾																																
	1	2020	NAVY	174 ⁽⁸⁾	0	174						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	174	
✓	1	2020	NAVY	120	0	120						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	
	1	2021	NAVY	1,014	0	1,014																		A -	-	-	-	-	-	-	-	1,014
✓	1	2021	NAVY	138	0	138																		A -	-	-	-	-	-	-	-	138
	1	2022	NAVY	514	0	514																									514	
	1	2023	NAVY	44	0	44																									44	
1.1.2) Tactical GMLRS Hardware (Reserves) ⁽²⁾																																
	2	2020	NAVY	18	0	18						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	
	2	2021	NAVY	24	0	24																		A -	-	-	-	-	-	-	-	24
	2	2022	NAVY	22	0	22																									22	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)													Item Number / Title [DODIC]: 1 / Guided MLRS Rocket (GMLRS)												
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2022												Fiscal Year 2023													BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
1.1.1) Tactical GMLRS Hardware ⁽¹⁾																																			
	1	2020	NAVY	174 ⁽⁸⁾	0	174	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16	16	16	16	16	15	15				0				
✓	1	2020	NAVY	120	0	120	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11	11	10				0				
	1	2021	NAVY	1,014	0	1,014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	402	-	-	240	-	-	186	-	-		186				
✓	1	2021	NAVY	138	0	138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	138						0					
	1	2022	NAVY	514	0	514						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	302	-	212				
	1	2023	NAVY	44	0	44																A -	-	-	-	-	-	-	-	-	-	-	-		44
1.1.2) Tactical GMLRS Hardware (Reserves) ⁽²⁾																																			
	2	2020	NAVY	18	0	18	-	-	-	-	-	-	-	-	-	18																	0		
	2	2021	NAVY	24	0	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24											0			
	2	2022	NAVY	22	0	22						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22			0				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 3025 / Guided MLRS Rocket (GMLRS)				Item Number / Title [DODIC]: 1 / Guided MLRS Rocket (GMLRS)			

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Lockheed Martin - Dallas, TX	2,160	10,002	10,002	0	2	16	18	0	5	15	20
2	Lockheed Martin - Dallas, TX			600	0	0	0	0	0	0	0	0

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽⁸⁾ Bgining in FY 2020, GMLRS moved to its own production line and will be delivered on a monthly schedule with no gaps.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 4: Command and Control Systems							P-1 Line Item Number / Title: 4644 / Common Aviation Command and Control System (CAC2S)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0206335M				
Line Item MDAP/MAIS Code: N36												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	193.065	35.057	18.247	30.292	0.000	30.292	34.627	11.391	5.998	6.064	-	334.741
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	193.065	35.057	18.247	30.292	0.000	30.292	34.627	11.391	5.998	6.064	-	334.741
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	193.065	35.057	18.247	30.292	0.000	30.292	34.627	11.391	5.998	6.064	-	334.741
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Common Aviation Command and Control System (CAC2S) is a Commandant of the Marine Corps (CMC) Force Design (FD) program which provides the Aviation Combat Element (ACE) with the necessary hardware, software, equipment, and facilities to effectively command, control, and coordinate aviation operations. CAC2S accomplishes the missions with a family of systems to support the Marine Air Ground Task Force (MAGTF), Naval forces, Joint Services, and Coalition Forces. CAC2S integrates the functions of aviation command and control (C2) into an interoperable system that supports the core competencies of all Marine Corps warfighting concepts. CAC2S, in conjunction with the Marine Air Command and Control System (MACCS) organic sensors, AN/TPS-80 Ground/Air Task Oriented Radar (G/ATOR), and the weapon system Composite Tracking Network (CTN) provides enhanced air control, improved situational awareness, sensor integration, full Tactical Data Link integration, airspace and battle planning and command functionality, as well as sensor netting integration (CTN). CAC2S, with these organic MACCS programs, support the tenets of Expeditionary Maneuver Warfare and foster joint interoperability. CAC2S Increment I replaced legacy aviation command and control systems in the following Marine aviation agencies: Direct Air Support Center (DASC), Tactical Air Command Center (TACC), and Tactical Air Operations Center (TAOC). CAC2S employs an evolutionary acquisition strategy utilizing an incremental and phased approach for development and fielding of the CAC2S. The Capability Production Document (CPD) identifies two increments to achieve the full requirements of CAC2S. The current acquisition strategy addresses Increment I of the CAC2S acquisition process and focuses on the requirements that will modernize the assault and air support, air defense and control, and Aviation Combat Element (ACE) battle management capabilities of the Marine Air Command and Control System (MACCS). Increment I of the CAC2S has been accomplished through a two phased approach: Phase 1 addressed the requirements to establish the baseline CAC2S capabilities for the MACCS and improved Air Command and Control (AC2) performance and effectiveness; Phase 2 addresses the requirements for remaining ACE Battle Management Command & Control (BMC2) requirements. CAC2S has successfully completed the fielding of its AN/TSQ-197 Air Command and Control System (AC2S) full rate production Full Deployment Units (FDUs) in FY 2020.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 4: Command and Control Systems						P-1 Line Item Number / Title: 4644 / Common Aviation Command and Control System (CAC2S)				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0206335M				
Line Item MDAP/MAIS Code: N36										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Common Aviation Command and Control System (CAC2S)				- / 193.065	- / 35.057	- / 18.247	- / 30.292	- / 0.000	- / 30.292
P-40	Total Gross/Weapon System Cost				- / 193.065	- / 35.057	- / 18.247	- / 30.292	- / 0.000	- / 30.292
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation (\$30.292M): Funds will begin the production of six (6) CAC2S Small Form Factor variant systems which is a forward deployed small, scalable, survivable aviation C2 nodes capable of performing control of aircraft and missiles necessary for integration and defeat of dynamic targets performed by the Marine Air-Ground Task Force (MAGTF), naval, joint, and national technical enabling capabilities. This variant is required to meet the needs of Expeditionary Advance Base Operations and Force Design. Funding will also complete the procurement of hardware and software for the technology refresh of the AN/TSQ-297 Air Command & Control Systems. This technical refresh is required to replace all obsolete hardware and software with new military-grade commercial-off-the-shelf (COTS) information technology (IT) configuration items every 5 years to maintain operational performance of the product baseline and remain aligned with industry standard and service enterprise computing environment directives. FY 2023 funding will support the procurement and integration of Multifunctional Information Distribution System Joint Tactical Radio Systems (MIDS JTRS) to support the modernization of Link 16. This provides upgrades to Link-16 tactical communications terminals for to enable the exchange their tactical picture in near-real time. Link 16 is the Joint Force's primary Tactical Data Link providing secure situational awareness, integrated fire control and C2 capability to platforms. Lastly in FY 2023 CAC2S will utilize the funding to acquire an Automatic Dependent Surveillance - Broadcast (ADS-B) system (ADS-B) receiver and related peripheral equipment to integrate ADS-B data into CAC2S. CAC2S will be able to leverage information provided by the ADS-B to produce a complete air picture to support commanders in the decision making process. ADS-B ground stations are small and adaptable and will allow CAC2S to reach farther than conventional radar to gather information needed to maintain situational awareness on the battle field. With the Marine Corps transitioning to Expeditionary Advanced Base Operations (EABO) the ability to utilize ADS-B will also help enhance system survivability by utilizing a passive capability, vice active radar, to provide vital aircraft information and quickly conduct combat identification. The \$12.045M increase from FY 2022 to FY 2023 is due to the ramp up of the production of the CAC2S Small Form Factor which is a forward deployed small, scalable, survivable variant of the AN/TSQ-297; to begin the procurement of MID JTRS for Link 16 modernization; and to procure and integrate the ADS-B system.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 4							P-1 Line Item Number / Title: 4644 / Common Aviation Command and Control System (CAC2S)						Item Number / Title [DODIC]: 1 / Common Aviation Command and Control System (CAC2S)								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity (Units in Each)				-			-			-			-			-			-		
Gross/Weapon System Cost (\$ in Millions)				193.065			35.057			18.247			30.292			0.000			30.292		
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Net Procurement (P-1) (\$ in Millions)				193.065			35.057			18.247			30.292			0.000			30.292		
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Total Obligation Authority (\$ in Millions)				193.065			35.057			18.247			30.292			0.000			30.292		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares (\$ in Millions)				-			-			-			-			-			-		
Gross/Weapon System Unit Cost (\$ in Dollars)				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total				
		Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)		
Flyaway Cost																					
Recurring Cost																					
1.1.1) AN/TSQ-297 Small Form Factor ⁽¹⁾		-	-	-	-	-	-	-	-	-	-	-	12.700	-	-	-	-	-	12.700		
Subtotal: Recurring Cost		-	-	-	-	-	-	-	-	-	-	-	12.700	-	-	-	-	-	12.700		
Non Recurring Cost																					
1.2.1) AN/MRQ-13 Communications Subsystem Upgrade		-	-	44.297	-	-	35.057	-	-	-	-	-	-	-	-	-	-	-	-		
1.2.2) AN/TSQ-297 Tech Refresh ⁽²⁾		-	-	-	-	-	-	-	-	18.247	-	-	9.033	-	-	-	-	-	9.033		
Subtotal: Non Recurring Cost		-	-	44.297	-	-	35.057	-	-	18.247	-	-	9.033	-	-	-	-	-	9.033		
Subtotal: Flyaway Cost		-	-	44.297	-	-	35.057	-	-	18.247	-	-	21.733	-	-	-	-	-	21.733		
Hardware Cost																					
Recurring Cost																					
2.1.1) Link 16 Modernization ⁽³⁾		-	-	-	-	-	-	-	-	-	-	-	5.329	-	-	-	-	-	5.329		
2.1.2) Automatic Dependent Surveillance - Broadcast System procurement ⁽⁴⁾		-	-	-	-	-	-	-	-	-	-	-	2.235	-	-	-	-	-	2.235		

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Exhibit P-5, Cost Analysis: PB 2023 Navy										Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 4					P-1 Line Item Number / Title: 4644 / Common Aviation Command and Control System (CAC2S)					Item Number / Title [DODIC]: 1 / Common Aviation Command and Control System (CAC2S)			

ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:			

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	7.564	-	-	-	-	-	7.564
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	-	-	-	-	-	-	7.564	-	-	-	-	-	7.564
Support Cost																		
3.1) Engineering/Fielding Support ⁽⁵⁾	-	-	14.177	-	-	-	-	-	-	-	-	0.995	-	-	-	-	-	0.995
3.2) New Equipment Training (NET)	-	-	14.559	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3) PRIOR YEARS CUMULATIVE FUNDING	-	-	120.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support Cost</i>	-	-	148.768	-	-	-	-	-	-	-	-	0.995	-	-	-	-	-	0.995
Gross/Weapon System Cost	-	-	193.065	-	-	35.057	-	-	18.247	-	-	30.292	-	-	0.000	-	-	30.292

Footnotes:

(1) The CAC2S SFF is a variant required to meet the needs of Expeditionary Advance Base Operations and Force Design. The SFF variant will possess the same Tactical System, Data Link, and interface capabilities as the CAC2S Increment 1 system with the added benefits of being rapidly deployable, emitting at a lower signature, and reduced size and weight. SFF's versatility will be a key enabling capability to support the task organization of the Marine Littoral Regiment. The CAC2S SFF variant is a forward deployed small, scalable, survivable aviation C2 nodes capable of performing control of aircraft and missiles necessary for integration and defeat of dynamic targets performed by the Marine Air-Ground Task Force (MAGTF), naval, joint, and national technical enabling capabilities. The procurement of a CAC2S Small Form Factor Variant is in response to a D-UNS for the development of a viable capability to close significant C2 gaps associated with the Expeditionary Advance Base Operations (EABO) concept and National Defense Strategy-aligned future technology investments. SFF consists of commercial-off-the-shelf (COTS) hardware components which will be assembled and delivered by the Naval Surface Warfare Center - Crane Division (NSWC-Crane). The \$12.700M increase from FY 2022 to FY 2023 is due to the ramp up of the production of the CAC2S Small Form Factor.

(2) The CAC2S AN/TSQ-297 Air Command & Control System (AC2S) computer / IT equipment is primarily comprised of commercial laptops, servers, routers and switches that are repaired through extended, five year commercial warranties. The computing equipment and associated software requires refresh every five years to maintain operational performance, warrantee service, alignment with commercial IT standards and cybersecurity policies. The tech refresh will procure computing hardware and software components to address the program's 50 AC2S Approved Acquisition Objective (AAO) systems, spares and supporting laboratories. Procurement will be executed over a two year period. Existing, enterprise level, joint and/or service IT contracts will allow ordering of tech refresh components as needed to meet annual needs. The funding decrease of \$9.214M from FY 2022 to FY 2023 is due to the ramp down and completion of the procurement of of commercial laptops, servers, routers, switches and misc. computing hardware and software components required for the AC2S technical refresh.

(3) This is a Joint services and Force Design modernization effort to procure and integrate Multifunctional Information Distribution System Joint Tactical Radio Systems (MIDS JTRS). Link 16 is the Joint Force's primary Tactical Data Link providing secure situational awareness, integrated fire control and C2 capability to platforms. This effort provides advanced capability of concurrent multi-netting enhanced throughput. The MIDS JTRS is a four-channel radio. It runs the Link 16 waveform and up to three additional communication protocols, including the Airborne Networking Waveform (ANW). The system enhances operational effectiveness without consuming more space, weight or power. The \$5.329M increase from FY 2022 to FY 2023 is to support modernization of the Link 16 tactical data link with the procurement and integration of MIDS JTRS.

(4) The \$2.235 increase from FY 2022 to FY 2023 acquires an ADS-B receiver and related peripheral equipment to integrate ADS-B data into CAC2S. The FAA published Federal Regulation 14 CFR 91.225 and 14 CFR 91.227 in May 2010. The final rule dictates that effective January 1, 2020, aircraft operating in airspace defined in 91.225 are required to have an Automatic Dependent Surveillance - Broadcast (ADS-B) system that includes a certified position source capable of meeting requirements defined in 91.227. ADS-B transmitters broadcast information about an aircraft's GPS location, altitude, ground speed and other data to ground stations once per second. Ground stations with ADS-B In can immediately receive this information. This offers more precise tracking of aircraft compared to radar technology, which sweeps for

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 4	P-1 Line Item Number / Title: 4644 / Common Aviation Command and Control System (CAC2S)	Item Number / Title [DODIC]: 1 / Common Aviation Command and Control System (CAC2S)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
position information every 5 to 12 seconds. In alignment with the Marine Corps Expeditionary Advanced Base Operations (EABO) and Force Design, ADS-B will also help enhance system survivability by utilizing a passive capability, vice active radar, to provide vital aircraft information and quickly conduct combat identification. ⁽⁵⁾ The funding increase of \$0.995M from FY 2022 to FY 2023 is due to the engineering and fielding support for operations and sustainment efforts to include the AC2S tech refresh and the procurement of MID JTRS for Link 16 modernization.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 7: Repair and Test Equipment							P-1 Line Item Number / Title: 4181 / Repair and Test Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0206624M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	388.061	24.405	33.554	58.024	0.000	58.024	44.876	65.688	70.623	71.969	-	757.200
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	388.061	24.405	33.554	58.024	0.000	58.024	44.876	65.688	70.623	71.969	-	757.200
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	388.061	24.405	33.554	58.024	0.000	58.024	44.876	65.688	70.623	71.969	-	757.200
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	0.180	0.182	0.192	-	0.192	0.198	0.202	0.206	0.210	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Repair and Test Equipment Budget Line Item provides repair and test equipment consisting of more than 200 different items required to support the operation and maintenance of USMC ground based weapon systems and major end items, including Marine Air-Ground Task Force (MAGTF) Logistics Support Systems (MLS2), a key CMC Force Design 2030 program enabling readiness while conducting Littoral Operations in Contested Environments (LOCE). These capabilities will enable ground, ordinance, and communication maintainers to perform organic maintenance activities on various Marine Corps platforms across widely dispersed locations that will increase the ability to sustain operational readiness levels. This portfolio also includes repair and test equipment supporting air defense systems, C2 in a degraded environment systems, close combat lethality systems, and information warfare. It includes items such as tool kits, shop sets, manual and automatic test equipment, and meteorology and calibration equipment. The following acquisition programs fall under the repair and test equipment budget line: General Purpose Tools and Test Systems (GPT&TS); Automatic Test Systems (ATS), Calibration and Maintenance Program (CAMP), and MLS2.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 7: Repair and Test Equipment					P-1 Line Item Number / Title: 4181 / Repair and Test Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0206624M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Repair and Test Equipment	P-5a, P-21			- / 388.061	- / 24.405	- / 33.554	- / 58.024	- / -	- / 58.024
P-40	Total Gross/Weapon System Cost				- / 388.061	- / 24.405	- / 33.554	- / 58.024	- / 0.000	- / 58.024
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Baseline Appropriation Request: \$58.024M

MAGTF Logistics Support Systems (MLS2) \$12.434M: This is a CMC Force Design program. The \$0.057M increase from FY 2022 to FY 2023 will support procurement of Application Program Sets. MLS2 enables increased maintenance readiness across a distributed Fleet Marine Force in order to increase operational readiness. Funding will continue to procure Electronic Maintenance Support Systems (EMSS) to meet the program AAO as well as to procure items such as Commercial Off-The-Shelf (COTS) equipment, operating software that comprises the EMSS, and Application Program Sets to support EMSS modification of systems. Funding also supports the transition of the Vehicle Automated Diagnostics System capabilities as a part of the EMSS baseline to enhance diagnostic test capabilities for ground, engineer and ordnance platforms. EMSS will emulate and/or interface with test equipment and enables capabilities such as storing and viewing Interactive Electronic Technical Manuals (IETMs), Computer Based Training (CBT), and other maintenance applications. EMSS also has the capability to connect to the Marine Corps Enterprise Network (MCEN) and access defense business systems such as Global Combat Support System - Marine Corps (GCSS-MC) in order to facilitate and process maintenance and supply transactions thereby improving operational readiness.

General Purpose Tools and Test Systems (GPT&TS) \$27.864M: The \$14.214M increase from FY 2022 to FY 2023 supports test equipment procurements to meet the DoD mandated switch to performing Condition Based Maintenance (CBM+) of weapon systems. CBM+ is a predictive maintenance capability that supports Force Design 2030 by providing a capability that compliments widely distributed forces at the tactical level. The increase also supports additional procurements of the Microwave Radio Test Set (MRTS), which has been identified as a critical enabler of maintenance for the latest SATCOM systems being fielded. Funding will support procurement of X-FAB Additive Manufacturing (3D printing) Shop Sets, TAC-FAB 3D printer kits, Microwave Radio Test Sets, Tier I and II Expeditionary Fluid Analysis Test Sets, and the engineering, logistics, system software support, and cyber security efforts required to field and support the entire portfolio of GPT&TS equipment. Funding will also support the development and hardware and software procurement of several Test Program Sets used to test new fuel pumps, alternators, engines, transmissions, etc. The GPT&TS budget procures a wide variety of tool kits (portable, vehicle and trailer mounted, and shelterized), handheld electronic test equipment, mechanical test equipment (handheld to building mounted), and Additive Manufacturing (3D printers including hardened tactical sets to 20' containerized shop sets). All of these items are commercial off the shelf or modified commercial off the shelf type equipment that are required to support the field maintenance effort of USMC ground equipment and weapon systems located within USMC expeditionary battalions and squadrons.

Automatic Test Systems (ATS) \$17.597M: The \$12.953M increase from FY 2022 to FY 2023 supports the procurement of Software Defined and Crypto Compliant Hand Held Radio Test Sets (HHRTS), General Purpose Automatic Test Systems (GPATS), Circuit Card Assembly Test Station, and Tactical Radio Intermediate Test Set (TRITS) to support Force Design 2030. Funding will support ATS modernization efforts associated with the procurement of automatic test equipment for five distinct programs within the ATS portfolio. ATS consists of both hardware and software components that provides mobile and automatic testing on Principle End Items (PEI), Line Replaceable Units (LRU), and Shop Repairable Units (SRU) in order to improve weapon system readiness, provide an organic maintenance solution, and decrease life cycle costs of supported weapon systems. ATS efforts include programs such as: The General Purpose Automatic Test System capability enhancements to test electro-optics platforms and the Hand-Held Radio Test Set (HHRTS) that provides a portable radio tester for organizational maintenance to test existing and future software defined ground tactical radio systems. All modernizations will be documented through the Engineer Change Proposal (ECP) process which will enhance organic maintenance capabilities and mitigate against obsolescence.

Calibration and Maintenance Program (CAMP) \$0.129M: The \$2.754M decrease from FY 2022 to FY 2023 is due to the completion of Shop Equipment Calibration (SEC) production and fielding. Funding will procure various calibration equipment (standards) which must be replaced/upgraded over time in order to support and calibrate all the new test equipment used by various maintenance personnel working on USMC ground military equipment.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 7: Repair and Test Equipment		P-1 Line Item Number / Title: 4181 / Repair and Test Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0206624M
Line Item MDAP/MAIS Code: N/A		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7									P-1 Line Item Number / Title: 4181 / Repair and Test Equipment							Aggregated Items Title: Repair and Test Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
1) MAGTF Logistics Support Systems (MLS2)																					
1.1) EMD Hardware CF20 ^{(1)(†)}	A		3,611.50	3,861	13.944	3,611.00	1,386	5.005	3,611.00	1,926	6.955	3,683.00	1,980	7.292	-	-	-	3,683.00	1,980	7.292	
1.2) Application Program Sets ⁽²⁾	A		-	-	-	-	-	-	-	-	1.844	-	-	2.244	-	-	-	-	-	2.244	
1.3) Technical Support ⁽³⁾	A		-	-	15.404	-	-	7.328	-	-	3.578	-	-	2.898	-	-	-	-	-	2.898	
Subtotal: 1) MAGTF Logistics Support Systems (MLS2)			-	-	29.348	-	-	12.333	-	-	12.377	-	-	12.434	-	-	-	-	-	12.434	
2) General Purpose Tools and Test Systems (GPT&TS)																					
2.1) X-FAB Additive Manufacturing Shop (3D Printers) ^{(4)(†)}	A		1,686K	7	11.802	1,350K	1	1.350	1,350K	2	2.700	1,350K	3	4.050	-	-	-	1,350K	3	4.050	
2.3) Radio Test Set (3 GHz-Handheld) ^(†)	A		14,550.00	100	1.455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.4) Microwave Comm and Radar Test Set (Handheld) ^{(5)(†)}	A		78,800.00	65	5.122	-	-	-	77,581.00	15	1.164	77,581.00	28	2.172	-	-	-	77,581.00	28	2.172	
2.5) Fire Bottle Refill Shop ^(†)	A		425,000.00	3	1.275	425,000.00	1	0.425	-	-	-	-	-	-	-	-	-	-	-	-	
2.6) Fuel Test Stand, Test Program Sets	A		-	-	3.523	-	-	0.050	-	-	0.250	-	-	-	-	-	-	-	-	-	
2.7) Dynamometer Test Stand - Test Program Sets	A		-	-	0.987	-	-	0.160	-	-	0.480	-	-	-	-	-	-	-	-	-	
2.8) Fluid Analysis Test Set-Tier I (previously Oper Fluid Analy Test Set) ^{(6)(†)}	A		65,487.80	41	2.685	60,000.00	1	0.060	60,000.00	4	0.240	60,000.00	46	2.760	-	-	-	60,000.00	46	2.760	
2.9) Fluid Analysis Test Set-Tier II (previously Tech Fluid Analy Test Set) ^{(7)(†)}	A		152,777.78	9	1.375	128,000.00	2	0.256	128,000.00	4	0.512	128,000.00	1	0.128	-	-	-	128,000.00	1	0.128	
2.10) Microwave Signal Generator ^(†)	A		17,400.00	40	0.696	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.11) Data Network Tester ^(†)	A		18,750.00	20	0.375	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.12) Expeditionary Fuel Test Shop ^(†)	A		1,340K	1	1.340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.13) Dynamometer Sets (Engine & Transmission) ^(†)	A		713,000.00	1	0.713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7							P-1 Line Item Number / Title: 4181 / Repair and Test Equipment								Aggregated Items Title: Repair and Test Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
2.14) TACFAB 3D Printer Kit (previously known as TacMan 3D Printer) ^{(8)(t)}	A		171,000.00	5	0.855	102,180.00	3	0.307	102,180.00	52	5.313	102,180.00	20	2.044	-	-	-	102,180.00	20	2.044
2.16) GSM TMDE Systems Fielding, Training & Calibration Support - CCT ⁽⁹⁾	A		-	-	1.992	-	-	0.370	-	-	0.365	-	-	0.280	-	-	-	-	-	0.280
2.17) GSM HW-SW Support ⁽¹⁰⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.696	-	-	-	-	-	0.696
2.21) General Purpose Test Equipment	A		-	-	0.703	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.26) CBM+ Test Systems ⁽¹¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	13.361	-	-	-	-	-	13.361
2.27) GPT&TS Eng/Soft/ Log Support ⁽¹²⁾	A		-	-	16.750	-	-	1.631	-	-	2.626	-	-	2.373	-	-	-	-	-	2.373
Subtotal: 2) General Purpose Tools and Test Systems (GPT&TS)			-	-	51.648	-	-	4.609	-	-	13.650	-	-	27.864	-	-	-	-	-	27.864
3) Automatic Test Systems																				
3.1) Application Program Sets/Test Program Sets ⁽¹³⁾	A		-	-	17.365	-	-	1.700	-	-	1.803	-	-	3.401	-	-	-	-	-	3.401
3.2) Automatic Test Equipment ⁽¹⁴⁾	A		-	-	42.650	-	-	1.784	-	-	1.755	-	-	12.883	-	-	-	-	-	12.883
3.3) ATS Engineering Support			-	-	9.187	-	-	0.451	-	-	0.426	-	-	0.462	-	-	-	-	-	0.462
3.4) ATS Software Support			-	-	7.306	-	-	0.449	-	-	0.439	-	-	0.701	-	-	-	-	-	0.701
3.5) ATS Logistic Support			-	-	2.479	-	-	0.218	-	-	0.221	-	-	0.150	-	-	-	-	-	0.150
Subtotal: 3) Automatic Test Systems			-	-	78.987	-	-	4.602	-	-	4.644	-	-	17.597	-	-	-	-	-	17.597
4) Calibration & Maintenance Program (CAMP)																				
4.1) Various Calibration Equipment ⁽¹⁵⁾	A		-	-	1.733	-	-	2.861	-	-	2.883	-	-	0.129	-	-	-	-	-	0.129
4.2) Shop Equipment, Calibration ^(t)	A		5,500K	4	22.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Calibration & Maintenance Program (CAMP)			-	-	23.733	-	-	2.861	-	-	2.883	-	-	0.129	-	-	-	-	-	0.129
5) Prior Year Cum Funding																				
5.1) Prior Year Cum Funding	A		-	-	204.345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy										Date: April 2022	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7					P-1 Line Item Number / Title: 4181 / Repair and Test Equipment					Aggregated Items Title: Repair and Test Equipment	

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 5) Prior Year Cum Funding			-	-	204.345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	388.061	-	-	24.405	-	-	33.554	-	-	58.024	-	-	-	-	58.024	

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

- (1) The FY22 to FY23 increase of \$0.337 supports the procurement refresh of EMD hardware.
- (2) The FY22 to FY23 increase of \$0.400M will procure Application Program Sets to support EMSS modification of systems.
- (3) The FY22 to FY23 decrease of \$0.680 is due to reduction in EMDs to support procurement of Application Program Set (WATS) and Artificial Intelligence SW.
- (4) The FY22 to FY23 increase of \$1.350M is due to increased quantity buy in FY23.
- (5) The FY22 to FY23 increase of \$1.008M supports the procurement of Microwave Radio Test Set (MRTS), which has been identified as a critical capability needed to support new SATCOM systems being fielded.
- (6) The FY22 to FY23 increase of \$2.520M is due to increased quantity buy in FY23.
- (7) The FY22 to FY23 decrease of \$0.384M is due to decreased quantity buy in FY23.
- (8) The FY22 to FY23 decrease of \$3.269M is due to decreased quantity buy in FY23.
- (9) The FY22 to FY23 decrease of \$0.085M is due to decreased fielding of GSM assets in FY23.
- (10) The FY22 to FY23 increase of \$0.696M is due to increase of Hardware/Software procurements associated with new Test Program Sets in FY23.
- (11) The FY22 to FY23 increase of \$13.361M supports test equipment procurements to meet the DoD Mandated switch to performing Condition Based Maintenance (CBM+) of weapon systems.
- (12) The FY22 to FY23 decrease of \$0.253M is due to funding efforts being funded through individual programs.
- (13) The FY22 to FY23 increase of \$1.598M supports procurement of General Purpose Automatic Test Systems to support Force Design enhancements.
- (14) The FY22 to FY23 increase of \$11.128M supports the procurement of Initial Operational Capability quantities of Software Defined and Crypto Compliant Hand Held Radio Test Sets to satisfy DoD Mandates to meet crypto compliance by 2024 and to provide Marine/Combat Littoral Regiments with organic test & diagnostics capabilities to support EABO/LOCE constructs directly aligned to FD2030 initiatives.
- (15) The FY22 to FY23 decrease of \$2.754M is due to the completion of Shop Equipment Calibration (SEC) production and fielding.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7			P-1 Line Item Number / Title: 4181 / Repair and Test Equipment						Aggregated Items: Repair and Test Equipment			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) MAGTF Logistics Support Systems (MLS2)												
1.1) EMD Hardware CF20 ^{(1)(f)}		2019	CDW Government LLC / Vernon Hills, IL	C / FFP	Quantico, VA	Jul 2019	Dec 2019	1,890	3,611.00	Y		May 2019
1.1) EMD Hardware CF20 ^{(1)(f)}		2020	CDW Government LLC / Vernon Hills, IL	C / FFP	Quantico, VA	Dec 2019	May 2020	1,971	3,611.00	Y		
1.1) EMD Hardware CF20 ^{(1)(f)}		2021	CDW Government LLC / Vernon Hills, IL	C / FFP	Quantico, VA	Feb 2021	Jul 2021	1,386	3,611.00	Y		
1.1) EMD Hardware CF20 ^{(1)(f)}		2022	CDW Government LLC / Vernon Hills, IL	C / FFP	Quantico, VA	Feb 2022	Jul 2022	1,926	3,611.00	Y		
1.1) EMD Hardware CF20 ^{(1)(f)}		2023	TBD / TBD	C / FP	Quantico, Va	Feb 2023	Jul 2023	1,980	3,683.00	Y		
2) General Purpose Tools and Test Systems (GPT&TS)												
2.1) X-FAB Additive Manufacturing Shop (3D Printers) ⁽⁴⁾		2019	SAIC / Bedford, IN	C / FFP	Quantico, VA	Aug 2019	Aug 2020	1	2,700K	Y		Jan 2019
2.1) X-FAB Additive Manufacturing Shop (3D Printers) ⁽⁴⁾		2020	SAIC / Bedford, IN	C / FFP	Quantico, VA	Mar 2020	Dec 2020	6	1,517K	Y		
2.1) X-FAB Additive Manufacturing Shop (3D Printers) ⁽⁴⁾		2021	SAIC / Bedford, IN	C / FFP	Quantico, VA	Mar 2021	Dec 2021	1	1,350K	Y		
2.1) X-FAB Additive Manufacturing Shop (3D Printers) ⁽⁴⁾		2022	SAIC / Bedford, IN	C / FFP	Quantico, VA	Mar 2022	Dec 2022	2	1,350K	Y		
2.3) Radio Test Set (3 GHz-Handheld)		2019	Keysight / Santa Rosa, CA	C / FFP	Mechanicsburg, PA	Oct 2018	Oct 2018	100	14,550.00	N		
2.4) Microwave Comm and Radar Test Set (Handheld) ⁽⁵⁾		2019	Keysight / Santa Rosa, CA	C / FFP	Mechanicsburg, PA	Oct 2018	Jan 2019	51	79,319.00	Y		
2.4) Microwave Comm and Radar Test Set (Handheld) ⁽⁵⁾		2020	Keysight / Santa Rosa, CA	C / FFP	Mechanicsburg, PA	Oct 2019	Jan 2020	14	76,929.00	Y		
2.4) Microwave Comm and Radar Test Set (Handheld) ⁽⁵⁾		2022	Keysight / Santa Rosa, CA	C / FFP	Mechanicsburg, PA	Oct 2021	Jan 2022	15	77,581.00	Y		
2.5) Fire Bottle Refill Shop		2020	JMTC / Rock Island IL	C / TBD	TACOM, Warren, MI	Sep 2020	Jun 2021	3	425,000.00	Y		
2.5) Fire Bottle Refill Shop		2021	JMTC / Rock Island IL	C / TBD	TACOM, Detroit, MI	Sep 2021	Jun 2022	1	425,000.00	Y		
2.8) Fluid Analysis Test Set-Tier I (previously Oper Fluid Analy Test Set) ⁽⁶⁾		2020	Spectro Scientific / Chelmsford, MA	C / FFP	Quantico, VA	Jul 2020	Jul 2021	41	65,484.00	Y		
2.8) Fluid Analysis Test Set-Tier I (previously Oper Fluid Analy Test Set) ⁽⁶⁾		2021	Spectro Scientific / Chelmsford, MA	C / FFP	Quantico, VA	Jan 2021	Jan 2022	1	60,000.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7			P-1 Line Item Number / Title: 4181 / Repair and Test Equipment					Aggregated Items: Repair and Test Equipment				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.8) Fluid Analysis Test Set-Tier I (previously Oper Fluid Analy Test Set) ⁽⁶⁾		2022	Spectro Scientific / Chelmsford, MA	C / FFP	Quantico, VA	Jan 2022	Jan 2023	4	60,000.00	Y		
2.9) Fluid Analysis Test Set-Tier II (previously Tech Fluid Analy Test Set) ⁽⁷⁾		2020	Spectro Scientific / Chelmsford, MA	C / FFP	Quantico, VA	Jul 2020	Jul 2021	9	152,772.00	Y		
2.9) Fluid Analysis Test Set-Tier II (previously Tech Fluid Analy Test Set) ⁽⁷⁾		2021	Spectro Scientific / Chelmsford, MA	C / FFP	Quantico, VA	Jan 2021	Jan 2022	2	128,000.00	Y		
2.9) Fluid Analysis Test Set-Tier II (previously Tech Fluid Analy Test Set) ⁽⁷⁾		2022	Spectro Scientific / Chelmsford, MA	C / FFP	Quantico, VA	Jan 2022	Jan 2023	4	128,000.00	Y		
2.10) Microwave Signal Generator		2019	Keysight / Santa Rosa, CA	C / FFP	NAVSUP Mechanicsburg, PA	Apr 2019	Aug 2019	30	17,394.00	Y		
2.10) Microwave Signal Generator		2020	Keysight / Santa Rosa, CA	C / FFP	NAVSUP Mechanicsburg, PA	Jan 2020	May 2020	10	17,394.00	Y		
2.11) Data Network Tester		2019	Viavi / Germantown, MD	C / FFP	NAVSUP Mechanicsburg, PA	Apr 2019	Aug 2019	20	18,760.00	Y		
2.12) Expeditionary Fuel Test Shop		2018	SAIC / Bedford, IN	C / FFP	NSWC, CRANE, IN	May 2018	May 2019	1	890,000.00	Y		
2.13) Dynamometer Sets (Engine & Transmission)		2020	TBD / TBD	C / CPIF	DLA Philadelphia, PA	Apr 2020	Jul 2020	1	713,000.00	Y		
2.14) TACFAB 3D Printer Kit (previously known as TacMan 3D Printer) ⁽⁸⁾		2020	NSWC Carderock Division / Carderock MD	C / FFP	NSWC Carderock MD	Dec 2020	Jun 2021	5	171,000.00	Y		
2.14) TACFAB 3D Printer Kit (previously known as TacMan 3D Printer) ⁽⁸⁾		2021	NSWC Carderock Division / Carderock MD	C / FFP	NSWC Carderock MD	Oct 2020	Oct 2020	3	102,180.00	Y		
2.14) TACFAB 3D Printer Kit (previously known as TacMan 3D Printer) ⁽⁸⁾		2022	NSWC Carderock Division / Carderock MD	C / FFP	NSWC Carderock MD	Oct 2021	Oct 2021	52	102,180.00	Y		
4) Calibration & Maintenance Program (CAMP)												
4.2) Shop Equipment, Calibration		2019	CERDEC / Aberdeen, MD	MIPR	Aberdeen, MD	Jan 2019	Sep 2021	2	5,500K	Y		
4.2) Shop Equipment, Calibration		2020	CERDEC / Aberdeen, MD	MIPR	Aberdeen, MD	Jan 2020	Jan 2022	2	5,500K	Y		
(†) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7										P-1 Line Item Number / Title: 4181 / Repair and Test Equipment										Aggregated Items: Repair and Test Equipment														
Items <i>(Units in Each)</i>							Fiscal Year 2018										Fiscal Year 2019										B A L A N C E							
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018										Calendar Year 2019																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P			
1) MAGTF Logistics Support Systems (MLS2)																																		
1.1) EMD Hardware CF20 ⁽¹⁾																																		
	6	2019	NAVY	1,890	0	1,890																									A -	-	-	1,890
	6	2020	NAVY	1,971	0	1,971																												1,971
	6	2021	NAVY	1,386	0	1,386																												1,386
	6	2022	NAVY	1,926	0	1,926																												1,926
	7	2023	NAVY	1,980	0	1,980																												1,980
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7										P-1 Line Item Number / Title: 4181 / Repair and Test Equipment										Aggregated Items: Repair and Test Equipment													
Items <i>(Units in Each)</i>							Fiscal Year 2020										Fiscal Year 2021														B A L A N C E		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020										Calendar Year 2021																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
1) MAGTF Logistics Support Systems (MLS2)																																	
1.1) EMD Hardware CF20 ⁽¹⁾																																	
	6	2019	NAVY	1,890	0	1,890	-	-	250	250	250	250	250	250	250	140															0		
	6	2020	NAVY	1,971	0	1,971	A -		-	-	-	-	-	250	250	250	250	250	250	250	221											0	
	6	2021	NAVY	1,386	0	1,386																	A -	-	-	-	-	250	250	250	636		
	6	2022	NAVY	1,926	0	1,926																											1,926
	7	2023	NAVY	1,980	0	1,980																											1,980
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7										P-1 Line Item Number / Title: 4181 / Repair and Test Equipment										Aggregated Items: Repair and Test Equipment																				
Items <i>(Units in Each)</i>							Fiscal Year 2022										Fiscal Year 2023													BALANCE										
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT				Calendar Year 2022										Calendar Year 2023																				
							OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP									
1) MAGTF Logistics Support Systems (MLS2)																																								
1.1) EMD Hardware CF20 ⁽¹⁾																																								
	6	2019	NAVY	1,890	1,890	0																													0					
	6	2020	NAVY	1,971	1,971	0																													0					
	6	2021	NAVY	1,386	750	636	250	250	136																											0				
	6	2022	NAVY	1,926	0	1,926				A	-	-	-	-	-	250	250	250	250	250	250	250	176											0						
	7	2023	NAVY	1,980	0	1,980																A -										-	-	-	-	-	250	250	250	1,230
							OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7										P-1 Line Item Number / Title: 4181 / Repair and Test Equipment										Aggregated Items: Repair and Test Equipment													
Items <i>(Units in Each)</i>							Fiscal Year 2024										Fiscal Year 2025										BALANCE						
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024										Calendar Year 2025																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP		
1) MAGTF Logistics Support Systems (MLS2)																																	
1.1) EMD Hardware CF20 ⁽¹⁾																																	
	6	2019	NAVY	1,890	1,890	0																											0
	6	2020	NAVY	1,971	1,971	0																											0
	6	2021	NAVY	1,386	1,386	0																											0
	6	2022	NAVY	1,926	1,926	0																											0
	7	2023	NAVY	1,980	750	1,230	250	250	250	250	230																						0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 7					P-1 Line Item Number / Title: 4181 / Repair and Test Equipment				Aggregated Items: Repair and Test Equipment			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	CDW Government LLC - Vernon Hills, IL	1,000	2,000	3,000	0	0	5	5	0	0	5	5
2	TBD - TBD	1,000	2,000	3,000	0	0	5	5	0	0	5	5

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 9: Other Support (Tel)							P-1 Line Item Number / Title: 4652 / Modification Kits					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	25.861	5.206	0.167	0.293	0.000	0.293	0.571	0.872	0.888	0.905	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	25.861	5.206	0.167	0.293	0.000	0.293	0.571	0.872	0.888	0.905	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	25.861	5.206	0.167	0.293	0.000	0.293	0.571	0.872	0.888	0.905	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Identity Dominance System - Marine Corps (IDS-MC) is a multi-modal (fingerprint, iris, and face) biometric collection system that provides the USMC a reliable and effective capability to collect, share, match, access, verify and store identity information. IDS-MC will enable the Marine to collect appropriate biometric, biographical and reference information on an individual and match this locally developed information with pre-existing information available to the expeditionary force. The system will display match results with linkage to the respective individual's biographical and reference information as well as help analyze the response, update records as appropriate, create reports and disseminate updated information. The primary mission of IDS-MC is to provide the Marine Corps with the means to identify persons encountered in the battle space. While IDS-MC is not an intelligence analysis system, it does provide identification information in support of military intelligence by providing positive identification of persons of interest. IDS-MC is an enabler in the areas of detainee management and questioning, base access, counterintelligence screening, border control, displaced persons' management and aiding in humanitarian assistance missions. IDS-MC supports the tactical application of identity dominance and fully supports a forward presence, crisis response and contingency response capability. Forensics Dominance System - Marine Corps (FDS-MC) is a multi-modal (fingerprint, DNA, document, cellular, media, chemical, and fire arm) forensic collection system that provides the United States Marine Corps (USMC) a reliable and effective capability to recognize, protect, collect, analyze, store and share forensic information. This organic Marine Corps forensic capability supports deployed Marine Forces with agile, ruggedized, and scalable expeditionary forensics that are compatible and fully integrated with joint, other service, and interagency laboratories, yet also tailored to the unique operating requirements of the maritime domain. Maritime applications include the ability to support Marine Expeditionary Units with an at sea forensic exploitation capability to conduct vessel boarding and ship search operations. FDS_MC supports the Information Environment through sensitive forensic testing and analysis that positively identifies personnel and trace chemicals/elements; forensically exploits document and media; and scientifically links identities and networks to places, events, and activities. FDS-MC will provide a transformative capability that integrates Artificial Intelligence and Machine Learning to enable intelligence operations, force protection, intelligence, and targeting. This program was formerly Expeditionary Forensic Exploitation Capability (EFEC).												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 9: Other Support (Tel)						P-1 Line Item Number / Title: 4652 / Modification Kits				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Modification Kits				- / 25.861	- / 5.206	- / 0.167	- / 0.293	- / 0.000	- / 0.293
P-40	Total Gross/Weapon System Cost				- / 25.861	- / 5.206	- / 0.167	- / 0.293	- / 0.000	- / 0.293
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request \$0.293M

Identity Dominance System - Marine Corps (IDS-MC): \$0.293M will procure hardware as well as software licenses. The increase of \$0.126M from FY 2022 to FY 2023 funds the procurement of software which supports emerging biometric collection and processing capabilities.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 9							P-1 Line Item Number / Title: 4652 / Modification Kits						Item Number / Title [DODIC]: 1 / Modification Kits								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				25.861			5.206			0.167			0.293			0.000			0.293		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				25.861			5.206			0.167			0.293			0.000			0.293		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				25.861			5.206			0.167			0.293			0.000			0.293		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Flyaway Cost																					
Recurring Cost																					
1.1.1) Prior Year Cumulative Funding	-	-	19.945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Recurring Cost	-	-	19.945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Flyaway Cost	-	-	19.945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Hardware Cost																					
Recurring Cost																					
2.1.1) IDS MC Hardware ⁽¹⁾	-	-	1.450	-	-	0.275	-	-	-	-	-	0.029	-	-	-	-	-	0.029			
2.1.2) FDS-MC Hardware (formerly EFEC)	-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Recurring Cost	-	-	1.450	-	-	3.275	-	-	-	-	-	0.029	-	-	-	-	-	0.029			
Subtotal: Hardware Cost	-	-	1.450	-	-	3.275	-	-	-	-	-	0.029	-	-	-	-	-	0.029			
Software Cost																					
Recurring Cost																					
3.1.1) IDS MC Software ⁽²⁾	-	-	4.466	-	-	0.731	-	-	0.167	-	-	0.264	-	-	-	-	-	0.264			
3.1.2) FDS-MC Software (formerly EFEC)	-	-	-	-	-	1.200	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Recurring Cost	-	-	4.466	-	-	1.931	-	-	0.167	-	-	0.264	-	-	-	-	-	0.264			
Subtotal: Software Cost	-	-	4.466	-	-	1.931	-	-	0.167	-	-	0.264	-	-	-	-	-	0.264			

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 9						P-1 Line Item Number / Title: 4652 / Modification Kits						Item Number / Title [DODIC]: 1 / Modification Kits						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	25.861	-	-	5.206	-	-	0.167	-	-	0.293	-	-	0.000	-	-	0.293
Remarks: [L2:SW]																		
Footnotes: ⁽¹⁾ Increase of \$0.029M from FY 2022 to FY 2023 supports procurement of IDS hardware. ⁽²⁾ Increase of \$0.097M from FY 2022 to FY 2023 provides additional software to support emerging biometric collection and processing capabilities.																		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)							P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0502514M, 0708542M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	261.003	69.725	103.158	83.345	0.000	83.345	103.870	206.696	200.897	152.370	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	261.003	69.725	103.158	83.345	0.000	83.345	103.870	206.696	200.897	152.370	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	261.003	69.725	103.158	83.345	0.000	83.345	103.870	206.696	200.897	152.370	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Funding supports the procurement of communication and electrical items such as cameras, reproduction equipment, laptops, software, satellite dishes, and items/upgrades with a unit cost under \$5M in support of the Marine Corps. Combat Camera Systems (CCS) - Provides imagery acquisition and visual information production capabilities to the Communication Strategy and Operations (COMMSTRAT) Fleet Marine Force (FMF) units, supporting establishments and training commands. Equipment fielded is used to acquire still and video visual information, produce and disseminate communication products to support the MAGTF, Department of Defense (DoD), and Joint Forces. Procurements are centrally managed and are non-developmental, Commercial/Government Off-the-Shelf (COTS/GOTS) equipment. Combat Camera System (CCS) will transition to the Digital Media Systems (DMS) program beginning FY 2023. DMS will continue with already established sustainment efforts to support currently fielded equipment through its lifecycle as research, procurement, testing and integration of future equipment sets are being solidified and fielded. DMS will provide a capability to acquire and produce still/video visual information products, research and plan communication initiatives, produce and disseminate communication products, and assess the effects of communication initiatives within the information environment in various formats. In FY22 this program was consolidated to a single program of record in Digital Media Systems (DMS). Digital Media Systems (DMS) - The Digital Media Systems (DMS) Program is the result of the Combat Camera and Public Affairs Occupational Fields (OccField) transitioning into the COMMSTRAT OccField in 2018, with Combat Camera System (CCS) budget transitioning to the DMS program beginning FY 2023. DMS provides the Marine Corps and the Joint Force with deployable systems to support Operations in the Information Environment (OIE), non-lethal fires, and the battle of narrative efforts. DMS supports the Fleet Marine Force (FMF) to be more lethal, survivable, and sustainable when conducting emerging maritime and warfighting concepts against competitor threats. DMS will continue with already established sustainment efforts to support currently fielded equipment through its lifecycle as research, procurement, testing and integration of future equipment sets are being solidified. DMS will acquire, process, edit, develop, disseminate, transmit in near-real time, archive visual information (VI) products, and provide reprographics print speeds in support of Marine Corps missions across the competition continuum and within the supporting establishment (SE). DMS provides the Marine Corps a dedicated capability supporting all aspects of the information environment (IE) as it relates to product development, narrative development, and analytical research supporting OIE. DMS will deliver a mobile expeditionary production shelter to the FMF through a cooperative effort with the Joint Light Tactical Vehicle and Mobile Command Vehicle programs. DMS also affords the Marine Corps a means of storing VI products and supporting data in a globally accessible repository allowing for controlled access to and use of information products as expediently as possible. DMS also provides a means of researching and analyzing the IE for planning and analysis of effects. DMS allows Communication Strategy and Operations (COMMSTRAT) Marines and civilians the ability to execute the commander's communication strategy, providing releasable information and operational imagery.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0502514M, 0708542M
Line Item MDAP/MAIS Code: N/A		
Marine Civil Information Management System (MARCIMS) - MARCIMS is a system of systems comprised of people, process and technology that operates in the full Joint, Interagency, Intergovernmental, and Multinational (JIIM) environment. It is a force multiplier which allows the Commander to leverage the process of planning, collection, consolidation, analysis, production, and sharing of civil information to support the visualization and understanding of the civil environment to the military Commander's decision making process. Enterprise Logistics Support Systems (ELS2) - This is a CMC Force Design program. Radio Frequency Identification (RFID) devices provide a variety of read and write data storage technologies capabilities that are used to improve accuracy, timeliness, and handling. These technologies provide near-real time In-Transit Visibility and Total Asset Visibility data for US Transportation Command (USTRANSCOM) Defense Transportation System (DTS). This is critical to influence decisions by Operational Commanders and enhances our force in readiness by coordinating, synchronizing and automatically transferring data by means of Active Radio Frequency Identification (aRFID), as well as the software required to create and manage the devices, collect the information and integrate that information with other logistics data. These devices can be interrogated using a variety of means, including fixed infrastructures and portable systems. The information obtained from those interrogations is provided electronically to various Automated Information Systems (AIS) in accordance with US Transportation Command's (USTRANSCOM) Defense Transportation Regulation (DTR). The RFID project is fielded and provides procurement and life cycle management of the current RFID Infrastructures, and provides RFID Hardware and Software under the Joint Army Product Lead Automated Movement and Identification Solutions (PL AMIS) Procurement Office. Prior to FY 2018, RFID was funded within the MLS2 portfolio. Combat Optics - This program encompasses all optical systems providing handheld, helmet, and weapon-mounted optic systems such as various thermal, low light image intensifier (I2) - to include night vision goggles (NVGs), magnified optical, laser range-finding, illuminating, short wave infrared (SWIR), and pointer functionalities. Thermal imagers can be used not only for target detection and engagement with Marine Corps individual and crew-served weapons, they can be used for all-weather surveillance as well. Combat Optics allow the dismounted Marine the ability to acquire, locate, identify, and engage targets during daylight and limited visibility conditions, and perform navigation and manual tasks during limited visibility conditions utilizing ambient or covert illumination. The Squad Binocular Night Vision Goggle (SBNVG) is a capability that will be provided to each Marine and will enable the ability to detect, recognize, and engage targets during limited visibility, thereby increasing lethality and the probability of mission success particularly in extremely low light levels, weather, and obscurants. SBNVG also enhances maneuverability, situational awareness, and the ability for unit leaders to command and control during periods of darkness. The program coordinates with United States Uniformed Services on optic, thermal, and night vision technologies. Test, Evaluation, & Engineering Environment (TEEE) - Marine Corps Tactical Systems Support Activity (MCTSSA) provides the only Marine Corps operationally relevant, Marine Air-Ground Task Force (MAGTF) Command, Control, Communications, Computers, and Intelligence (C4I) architecture environment for enterprise-level testing, engineering, analysis, troubleshooting, and solutions. This environment is designated as a Special Purpose Processing Node (SPPN)/Data Center, and includes an environment for Link-16 Tactical Data Link Networks for air-to-air, ship and shore targeting and messaging before Marine/Navy use in theater. Funding procures all necessary new equipment and end of service, end of life equipment required to recapitalize the environment at a level that supports acquisition program testing and engineering needs. Annual procurement cost of the environment is >\$250K. Operations & Maintenance (O&M) funding is used to maintain purchased equipment, as well as fund necessary engineering support in the environment. Equipment procured includes items such as Communications Backbone, Network Backbone, Tactical Cloud Integration Backbone, Test and Engineer Tool/Data Collection, Hardware, and software with initial warranty, and necessary supplies/computers. Procured equipment allows for an environment that supports programs' testing needs during all phases of the acquisition lifecycle. The environment is essential to operating forces support for fielded C4I systems, as well as evaluating USMC and Joint C4I systems in a controlled, repeatable, and re-configurable manner that reduces program risk and identifies significant deficiencies prior to fielding to the operating forces. Over forty Marine Corps C4I programs and systems rely on the environment. Military Information Support Operations (MISO) Family of Systems (FOS) - Consists of the Fly-Away Broadcast System (FABS) variants are heavy, medium and light, Next-Generation Loud Speaker (NGLS), Radio-In-A-Box (RIAB), and Marine Corps SOF Integration Node (MSIN), provides the Marine Air Ground Task Force (MAGTF) Commander the ability to plan, develop, deliver and assess messages and actions to influence select foreign groups and promote themes to change those groups' attitudes and reduce civilian interference, minimize collateral damage, and increase the population's support for MAGTF operations. The MISO was established in response to multiple Marine Requirements Oversight Council Memorandums, and the approval of a MISO Organizational and Operational (O&O) Concept, 16 June 2015. MISO capabilities are critical to the success of the MAGTF mission, enabling commanders to shape the information environment, counter enemy propaganda, misinformation, disinformation, and adversarial narratives. Marine Corps Information Operations Program (MCIOP) - Provides MAGTF commanders and the Marine Corps responsive and effective, full-spectrum Operations in the Information Environment (OIE) Information Operations (IO) to include planning and psychological operations delivery capability by means of deployable support teams and comprehensive general support IO reach-back capability in order to integrate OIE across the range of military operations within the physical, informational, and cognitive dimensions of the information environment in a Service, Joint, or Coalition setting.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)						P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0502514M, 0708542M				
Line Item MDAP/MAIS Code: N/A										
Signature Management (SIGMAN) - This is a CMC Force Design program. SIGMAN Increment I is the SIGMAN Visualization and Planning Tool (SVPT) that will provide commanders a display of their own forces electrometric signatures and the ability to implement measures to limit those signatures when possible. SIGMAN Increment II is the Radio Frequency (RF) Generator-Light and SIGMAN Increment III is the RF Generator- Heavy. The SIGMAN Increment II and Increment III systems will provide commanders the ability to develop and project electromagnetic signature countermeasures to mask their own blue-force signature. Prior to FY 2021, SIGMAN was funded within the Military Information Support Operations (MISO) Family of Systems (FOS) portfolio. MAGTF Logistics Support Systems (MLS2) - Transportation Systems Portfolio (TSP) are the current and future LOG IT capabilities used primarily to provide logistics support to the Marine Air Ground Task Force (MAGTF) from garrison, operating bases, the sea base, and during expeditionary operations ashore. TSP enables tactical and operational level Life Cycle Management (LCM) and Command and Control (C2). MLS2s provides the MAGTF the capability to capitalize on Naval Logistics Integration and interoperate with joint and coalition logistics partners and providers. MLS2 provides the Information Technology (IT) systems essential for transportation and distribution operations in accordance with US Transportation Command's (USTRANSCOM) Defense Transportation Regulation (DTR). The systems identified provide the data and interfaces required to provide end-to-end (E2E) integration of distribution support to expedite the flow of equipment and supplies for the Operating Forces. Includes: (1) synchronizing storage activities, distribution nodes, and transportation modes in the logistics chain, (2) integrating organic Service, DoD and commercial providers and transportation systems, (3) maximizing in-transit visibility capabilities to track, trace, and expedite equipment and supplies, and (4) placing advocates to support force deployment, sustainment, and retrograde operations.										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	69.690	103.125	83.311	-	83.311	103.834	206.659	200.860	152.332
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.035	0.033	0.034	-	0.034	0.036	0.037	0.037	0.038
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	69.725	103.158	83.345	-	83.345	103.870	206.696	200.897	152.370

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)					P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0502514M, 0708542M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Items under \$5 million (Comm & Elec)	P-5a, P-21			- / 261.003	- / 69.725	- / 103.158	- / 83.345	- / -	- / 83.345
P-40	Total Gross/Weapon System Cost				- / 261.003	- / 69.725	- / 103.158	- / 83.345	- / 0.000	- / 83.345
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$83.345M (\$83.311M Active, \$0.034M Reserve) Digital Media Systems (DMS) - \$2.653M (\$2.619M Active, \$0.034M Reserve)- Increase of \$1.960M from FY 2022 to FY 2023 supports continued integration of the Mobile Command Vehicle (MCV) and Joint Light Tactical Vehicle (JLTV) TIPS V3.0 and reflects the planned Combat Camera (CCS) consolidation into Digital Media Systems (DMS). The increase of \$0.474M is due to the Marine Corps consolidation and transfer of program funding within this line item from Combat Camera Systems (CCS) to Digital Media Systems (DMS) as part of CCS's transition to a single program of record. Increase of \$1.486M is due to the procurement of the Mobile Command Vehicle (MCV) Joint Light Tactical Vehicle (JLTV) TIPS V3.0 mobile platform vehicle as well as the procurement and integration of the of the Tactical Imagery Production System Next Generation (TIPS NG) production and transmission equipment. This will procure the first production units in FY 2023 comprised of the MCV shelter integrated onto the JLTV. TIPS NG will provide a vehicle borne, mobile production, dissemination/transmission, local and cloud-based archival capabilities for use in austere and distributed maritime environments. Marine Civil Information Management System (MARCIMS) - \$0.307M; \$0.307M increase from FY 2022 to FY 2023 will enable and provide for the planned two-year hardware refresh and the procurement of end user devices in support of the Acquisition Objective (AAO). Combat Optics - \$70.573M; Funding will be used for the continued procurement of the Squad Binocular Night Vision Goggle (SBNVG). The SBNVG is a helmet-mounted or handheld, battery-operated Night Vision Goggle (NVG) that combines the capabilities of Image-Intensification (I2) and Thermal Imaging. The SBNVG is a capability that will be provided to each Marine and will enable the ability to detect, recognize, and engage targets during limited visibility, thereby increasing lethality and the probability of mission success particularly in extremely low light levels, weather, and obscurants. SBNVG also enhances maneuverability, situational awareness, and the ability for unit leaders to command and control during periods of darkness. SBNVGs are critical for Marine survivability and lethality in ground combat element missions. The decrease of \$20.627M from FY 2022 to FY 2023 is due to the procurement of SBNVG for an additional three company battalions as needed to support the AAO. Test, Evaluation, & Engineering Environment (TEEE) - \$0.954M; \$0.015M increase from FY 2022 to FY 2023 will assist the TEEE infrastructure to expand backbone support and hardware to include testing and engineering of the implementation of the Marine Littoral Regiment (MLR). Funds procure the necessary annual equipment (both new and recapitalized/replacements) necessary for the environment to remain viable. This includes items such as Communications Backbone, Network Backbone, Tactical Cloud Integration Backbone, Test and Engineer Tool/Data Collection, hardware, and software with initial warranty. Procured equipment allows for an environment that supports programs' testing needs during all phases of the acquisition lifecycle. Military Information Support Operations (MISO) Family of Systems (FOS) - \$3.838M; Decrease of \$0.183M from FY 2022 to FY 2023 resulting from the gradual fielding of the FABS AAO acquisition approach for the Medium and Light variants procurement of MISO equipment such as Next-Generation Loud Speaker (NGLS), Radio-In-A-Box (RIAB), and Marine Corps SOF Integration Node (MSIN) and initial support, which provides the MAGTF Commander the capability to conduct planned operations to convey selected information and indicators to target audiences to influence their emotions, motives, objective reasoning, providing an operational advantage. Marine Corps Information Operations Program (MCIOP) - \$0.397M; The increase of \$0.014M from FY 2022 to FY 2023 continues to fund efforts related to the Marine Corps Information Operations Center (MCIOC) Information Warfighting Exercise (IWX). The IWX is currently certified as the sole Joint Operating in the Information Environment (OIE) exercise in the Department of Defense. The funds will be used to										

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0502514M, 0708542M
Line Item MDAP/MAIS Code: N/A		
continue refreshing laptops and remote IT equipment to support the IWX and real-time Operating in the Information Environment (OIE). The MCIOC is responsible for the procurement of its own computer assets and equipment for the OSIS network. This funding line is allocated towards replacement systems as existing systems reach the end of their service life. Signature Management (SIGMAN) - \$4.393M; The decrease of \$1.323M from FY 2022 to FY 2023 reflects the completion of Increment I blue-force electromagnetic signature capability procurement. SIGMAN will be utilized by the Marine Corps Information Operations Center (MCIOC) SIGMAN platoon to provide commanders with the ability to understand their own forces' electromagnetic signatures and the ability to disrupt or deceive adversary units. SIGMAN supports the goals of the 38th Commandant's Planning Guidance and Force Design (FD) FY 2023 Initial Operational Capability (IOC) by providing tools that enables a force to conduct distributed operations (DO) and mass effects while minimizing electromagnetic signatures that put forces at risk for detection and targeting. Fluctuations within the funding profile due to different components being procured each year. Prior to FY 2021, SIGMAN was funded within the Military Information Support Operations (MISO) Family of Systems (FOS) portfolio. MAGTF Logistics Support Systems (MLS2) Transportation Systems Portfolio (TSP) - \$0.174M; The increase of \$0.022M from FY 2022 to FY 2023 is for hardware technology refresh of Handheld terminal and Portable Deployment Kits required to maintain in-transit visibility throughout the Defense Transportation System (DTS) distribution pipeline. This provides commanders and units with near real-time visibility of Marine Corps assets moving through the DTS.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14									P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)							Aggregated Items Title: Items under \$5 million (Comm & Elec)					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
1) Prior Year Cumulative Funding																					
1.1) Prior Year Cumulative Funding		A		-	-	160.599	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) Prior Year Cumulative Funding			-	-	160.599	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2) Combat Camera Sytems																					
2.1) Combat Camera System equipment		A		-	-	2.080	-	-	0.282	-	-	-	-	-	-	-	-	-	-	-	
2.2) Non-recurring Items		A		-	-	1.099	-	-	0.147	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) Combat Camera Sytems			-	-	3.179	-	-	0.429	-	-	-	-	-	-	-	-	-	-	-	-	
3) Digital Media Systems (Formerly Public Affairs Systems)																					
3.1) Digital Media Systems - Equipment (1)		A		-	-	5.406	-	-	0.659	-	-	0.660	-	-	-	-	-	-	-	-	
3.2) Digital Media Systems Equipment - Reserve (2)		A		-	-	-	-	-	0.035	-	-	0.033	-	-	0.034	-	-	-	-	0.034	
3.3) TIPS NG Production Support (3)		A		-	-	-	-	-	-	-	-	-	-	0.990	-	-	-	-	-	0.990	
3.4) TIPS NG JLTV/ MCV Integration (4)		A		-	-	-	-	-	-	-	-	-	-	0.758	-	-	-	-	-	0.758	
3.5) TIPS NG COMMS/Network Integration (5)		A		-	-	-	-	-	-	-	-	-	-	0.471	-	-	-	-	-	0.471	
3.6) TIPS NG VI Production Capabilities (6)		A		-	-	-	-	-	-	-	-	-	-	0.400	-	-	-	-	-	0.400	
Subtotal: 3) Digital Media Systems (Formerly Public Affairs Systems)			-	-	5.406	-	-	0.694	-	-	0.693	-	-	2.653	-	-	-	-	-	2.653	
4) Marine Civil Information Management System (MARCIMS)																					
4.1) MARCIMS Technical Refresh (7)		A		-	-	3.121	-	-	0.302	-	-	-	-	-	0.307	-	-	-	-	0.307	
Subtotal: 4) Marine Civil Information Management System (MARCIMS)			-	-	3.121	-	-	0.302	-	-	-	-	-	0.307	-	-	-	-	-	0.307	
5) ENTERPRISE LOGISTICS SUPPORT SYSTEMS (ELS2)																					
5.1) RFID Legacy Migration		A		-	-	1.040	-	-	0.755	-	-	0.054	-	-	0.056	-	-	-	-	0.056	
Subtotal: 5) ENTERPRISE LOGISTICS SUPPORT SYSTEMS (ELS2)			-	-	1.040	-	-	0.755	-	-	0.054	-	-	0.056	-	-	-	-	-	0.056	
6) COMBAT OPTICS																					

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14									P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)						Aggregated Items Title: Items under \$5 million (Comm & Elec)					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6.1) Production Support	A		-	-	5.428	-	-	0.810	-	-	0.468	-	-	0.439	-	-	-	-	-	0.439
6.2) Squad Common Optic ^(†)	A		1,250.03	17,778	22.223	1,450.00	3,715	5.387	-	-	-	-	-	-	-	-	-	-	-	
6.3) SBNVG ^{(8)(†)}	A		13,969.89	3,786	52.890	13,970.00	2,924	40.848	13,970.00	6,489	90.651	13,970.00	5,016	70.074	-	-	-	13,970.00	5,016	70.074
6.4) SBNVG Hardware	A		-	-	0.248	-	-	0.098	-	-	0.081	-	-	0.060	-	-	-	-	-	0.060
6.5) SBNVG Automatic Test Systems (ATS)	A		-	-	-	-	-	3.349	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 6) COMBAT OPTICS			-	-	80.789	-	-	50.492	-	-	91.200	-	-	70.573	-	-	-	-	-	70.573
7) Test, Evaluation & Engineer Environment																				
7.1) Test Engineering Labs Infrastructure	A		-	-	1.651	-	-	5.972	-	-	0.939	-	-	0.954	-	-	-	-	-	0.954
Subtotal: 7) Test, Evaluation & Engineer Environment			-	-	1.651	-	-	5.972	-	-	0.939	-	-	0.954	-	-	-	-	-	0.954
8) Military Information Support Operations (MISO) Family of Systems																				
8.1) Fly-Away Broadcast System (FABS) ⁽⁹⁾	A		-	-	1.919	-	-	4.124	-	-	3.111	-	-	3.125	-	-	-	-	-	3.125
8.2) MISO Equipment ⁽¹⁰⁾	A		-	-	2.546	-	-	0.863	-	-	0.910	-	-	0.713	-	-	-	-	-	0.713
Subtotal: 8) Military Information Support Operations (MISO) Family of Systems			-	-	4.465	-	-	4.987	-	-	4.021	-	-	3.838	-	-	-	-	-	3.838
9) Marine Corps Information Operations Program (MCIOP)																				
9.1) VARIOUS HARDWARE ⁽¹¹⁾	A		-	-	0.753	-	-	0.378	-	-	0.383	-	-	0.397	-	-	-	-	-	0.397
Subtotal: 9) Marine Corps Information Operations Program (MCIOP)			-	-	0.753	-	-	0.378	-	-	0.383	-	-	0.397	-	-	-	-	-	0.397
10) Signature Management (SIGMAN)																				
10.1) SIGMAN: Equipment ⁽¹²⁾	A		-	-	-	-	-	5.466	-	-	5.483	-	-	4.135	-	-	-	-	-	4.135
10.2) SIGMAN: Support	A		-	-	-	-	-	0.250	-	-	0.233	-	-	0.258	-	-	-	-	-	0.258
Subtotal: 10) Signature Management (SIGMAN)			-	-	0.000	-	-	5.716	-	-	5.716	-	-	4.393	-	-	-	-	-	4.393
11) MAGTF Logistics Support Systems (MLS2)																				
11.1) Hardware Technical Refresh	A		-	-	-	-	-	-	-	-	0.152	-	-	0.174	-	-	-	-	-	0.174

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy														Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14							P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)							Aggregated Items Title: Items under \$5 million (Comm & Elec)						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 11) MAGTF Logistics Support Systems (MLS2)			-	-	0.000	-	-	-	-	-	0.152	-	-	0.174	-	-	-	-	-	0.174
Total			-	-	261.003	-	-	69.725	-	-	103.158	-	-	83.345	-	-	-	-	-	83.345
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding. (†) indicates the presence of a P-5a																				
Footnotes: (1) Digital Media Systems - Equipment: Beginning in FY 2023 funding and justification is provided for in Cost Elements 3.3) TIPS NG Production Support, 3.4) TIPS NG JLTVM/CMV Integration, 3.5) TIPS NG COMMS/Network Integration, and 3.6) TIPS NG VI Production Capabilities. (2) Digital Media Systems Equipment - Reserves funding supports the Marine Corps Reserve mission. The funding is for VIAS FoS kits that will outfit the reserve structure will be consistent with active duty personnel. All hardware, software, and logistic support will remain common across all DMS VIAS FoS kits. (3) DMS TIPS NG Production Support increase from FY 2022 to FY 2023 of \$0.990M provides first article production and integration of the TIPS NG capability in FY 2023. TIPS NG will provide FMF COMMSTRAT forces with a vehicle borne, mobile VI & classified print production, dissemination/transmission, local and cloud-based archival capabilities for use in austere and distributed maritime environments. This funding was formerly in 3.1) Digital Media Systems - Equipment and transitioned Cost Elements in FY 2023 for enhanced budget and program transparency. (4) DMS TIPS NG JLTVM/CMV Integration increase from FY 2022 to FY 2023 of \$0.758M funds a Mobile Command Vehicle (MCV) integration of TIPS-NG capabilities in the MCV. This funding was formerly in 3.1) Digital Media Systems - Equipment and transitioned Cost Elements in FY 2023 for enhanced budget and program transparency. (5) DMS TIPS NG COMMS/Network Integration increase from FY 2022 to FY 2023 of \$0.471M will provide for TIPS NG integration connections to NIPR, SIPR, and commercial networks which will enable COMMSTRAT users the ability to transmit Visual Information over multiple domains. This funding was formerly in 3.1) Digital Media Systems - Equipment and transitioned Cost Elements in FY 2023 for enhanced budget and program transparency. (6) DMS TIPS NG VI Production Capabilities increase from FY 2022 to FY 2023 of \$0.400M will provide funding for the integration of TIPS-NG Visual Information (VI) Production capabilities in the Mobile Command Vehicle (MCV). This funding was formerly in 3.1) Digital Media Systems - Equipment and transitioned Cost Elements in FY 2023 for enhanced budget and program transparency. (7) MARCIMS Technical Refresh: The increase of \$0.307M from FY 2022 to FY 2023 supports the planned two-year cyclic hardware refresh and the procurement of End User Devices. (8) Combat Optics: Decrease of \$20.577M from FY 2022 to FY 2023 due to reduced quantity in FY 2023. (9) MISO FABS provides the ability to plan, develop, deliver and assess messages and actions to influence select foreign groups and promote themes to change those groups' attitudes and reduce civilian interference, minimize collateral damage, and increase the population's support for MAGTF operations. (10) MISO Equipment: Decrease of \$0.197M from FY 2022 to FY 2023 is due to changes in the MISO Fly Away Broadcast System Medium and Light variant procurement schedule. (11) MCIOP: The increase of \$0.014M from FY 2022 to FY 2023 reflects support for a variety of efforts related to the Marine Corps Information Operations Program (MCIOP) Information Warfighting Exercise (IWX). Funding will be used to refresh laptops and remote IT equipment to support the IWX and real-time Operations in the Information Environment (OIE) (12) The decrease of \$1.348M from FY 2022 to FY 2023 reflects completion of Increment I procurement.																				

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14			P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)						Aggregated Items: Items under \$5 million (Comm & Elec)			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
6) COMBAT OPTICS												
6.2) Squad Common Optic		2020	Trijicon / Wixom, MI	C / FFP	Quantico, VA	Feb 2020	Oct 2020	17,778	1,250.00	Y		Nov 2019
6.2) Squad Common Optic		2021	Trijicon / Wixom, MI	C / FFP	Quantico, VA	Jan 2021	Sep 2021	3,715	1,450.00	Y		
6.3) SBNVG ^{(8)(f)}		2019	Elbit Systems of America / Roanoke, VA	C / FFP	MCSC	Sep 2019	Mar 2020	1,700	13,970.00	Y		May 2019
6.3) SBNVG ^{(8)(f)}		2020	Elbit Systems of America / Roanoke, VA	C / FFP	MCSC	Nov 2019	Jul 2020	2,086	13,970.00	Y		
6.3) SBNVG ^{(8)(f)}		2021	Elbit Systems of America / Roanoke, VA	C / FFP	MCSC	Jan 2021	Sep 2021	2,924	13,970.00	Y		
6.3) SBNVG ^{(8)(f)}		2022	Elbit Systems of America / Roanoke, VA	C / FFP	MCSC	Nov 2021	Jul 2022	6,489	13,970.00	Y		
6.3) SBNVG ^{(8)(f)}		2023	Elbit Systems of America / Roanoke, VA	C / FFP	MCSC	Nov 2022	Jul 2023	5,016	13,970.00	Y		

^(f) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14										P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)													Aggregated Items: Items under \$5 million (Comm & Elec)															
Items <i>(Units in Each)</i>							Fiscal Year 2019												Fiscal Year 2020												BALANCE							
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019												Calendar Year 2020																			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								
6) COMBAT OPTICS																																						
6.3) SBNVG ⁽⁸⁾																																						
	8	2019	NAVY		1,700	0	1,700													A -	-	-	-	-	-	-	670	300	300	224	206				0			
	8	2020	NAVY		2,086	0	2,086																	A -	-	-	-	-	-	-	-	-	94	182	181	1,629		
	8	2021	NAVY		2,924	0	2,924																															2,924
	8	2022	NAVY		6,489	0	6,489																															6,489
	8	2023	NAVY		5,016	0	5,016																															5,016
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14										P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)										Aggregated Items: Items under \$5 million (Comm & Elec)													
Items <i>(Units in Each)</i>							Fiscal Year 2021										Fiscal Year 2022													BALANCE			
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP		
6) COMBAT OPTICS																																	
6.3) SBNVG ⁽⁸⁾																																	
	8	2019	NAVY		1,700	1,700	0																										0
	8	2020	NAVY		2,086	457	1,629	181	181	181	181	181	181	181	181																		0
	8	2021	NAVY		2,924	0	2,924				A -	-	-	-	-	-	-	244	244	244	244	244	244	244	244	244	244	240		0			
	8	2022	NAVY		6,489	0	6,489														A -	-	-	-	-	-	-	-	-	56	500	533	5,400
	8	2023	NAVY		5,016	0	5,016																										5,016
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14										P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)													Aggregated Items: Items under \$5 million (Comm & Elec)											
Items <i>(Units in Each)</i>							Fiscal Year 2023												Fiscal Year 2024												BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT				Calendar Year 2023												Calendar Year 2024												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
6) COMBAT OPTICS																																		
6.3) SBNVG ⁽⁸⁾																																		
	8	2019	NAVY		1,700	1,700	0																										0	
	8	2020	NAVY		2,086	2,086	0																										0	
	8	2021	NAVY		2,924	2,924	0																										0	
	8	2022	NAVY		6,489	1,089	5,400	600	600	600	600	600	600	600	600																0			
	8	2023	NAVY		5,016	0	5,016		A -	-	-	-	-	-	-	-	418	418	418	418	418	418	418	418	418	418	418				0			
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14					P-1 Line Item Number / Title: 4620 / Items under \$5 million (Comm & Elec)				Aggregated Items: Items under \$5 million (Comm & Elec)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Elbit Systems of America - Roanoke, VA	200	3,800	6,900	0	0	6	6	0	0	8	8

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)							P-1 Line Item Number / Title: 4640 / Air Operations C2 Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0206335M				
Line Item MDAP/MAIS Code: N36												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	363.243	9.577	1.291	11.048	0.000	11.048	8.125	16.173	6.676	5.632	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	363.243	9.577	1.291	11.048	0.000	11.048	8.125	16.173	6.676	5.632	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	363.243	9.577	1.291	11.048	0.000	11.048	8.125	16.173	6.676	5.632	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Remote Video Viewing Terminal (RVVT) - RVVT provides the MAGTF the ability to receive, transmit, view, and manipulate full motion video and the associated metadata. RVVT also supports the ability to establish mesh and other advanced communications networks. The RVVT consists of Commercial Off-The-Shelf (COTS) Video Down-Link (VDL) products such as the VideoScout Mobile Configuration 2 (VS-MC/2), VideoScout Mobile Configuration 3 (VS-MC/3), and Man Portable Video Down-Link (MPVDL) that allow for the viewing and exploitation of Full Motion Video (FMV) from ISR assets. VDL systems are mission critical for coordination of direct and indirect fires, situational awareness and the prevention of fratricide. These systems provide the operational forces with critical video and metadata from all USMC manned and unmanned aircraft to include, but not limited to Raven B, Puma, Micro-UAS, Shadow, Predator, Fire Scout, and Litening Pod on P-3, AV8-B, F/A-18, and F35. These products ensure critical data is displayed to Forward Air Controllers (FACs), Forward Observers (FOs), Fire Support Teams (FSTs), Firepower Control Teams (FCTs), Tactical Air Control Parties (TACPs) and Reconnaissance Teams. Composite Tracking Network (CTN) - The Composite Tracking Network (CTN) is a Commandant of the Marine Corps (CMC) Force Design (FD) program which distributes composite tracking data to Command and Control (C2) and weapon systems participating in the US Navy's Cooperative Engagement Capability (CEC) network, which is a sensor network with integrated fire control capability that improves battle force air and missile defense capabilities by combining data from multiple battle force air search sensors on CEC-equipped units into a single, real-time, composite track picture. CTN greatly enhances fleet air defense working in concert with CEC by significantly contributing to real-time situational awareness. The program received ACAT III designation in Nov 2001 and is an instantiation of the USN CEC Program. The program is USMC led with US Navy and US Army cooperation. The 12 April 1995 Mission Need Statement (MNS) No. AAS 48 for the Common Aviation Command and Control System (CAC2S) established the Marine Corps' need to upgrade its existing air defense architecture with capabilities to support improved situational awareness (SA) and advanced engagement concepts. The Composite Tracking Network (CTN) program was initiated to address this capability gap. The CTN system (AN/MSQ-143A(V)1) is an integration effort consisting of an AN/USG-4B (the USMC CEC CTN platform) and other US Marine-unique components. The CTN system interfaces with the AN/TPS-80 Ground/Air Task Oriented Radar (G/ATOR) and the Common Aviation Command and Control System (CAC2S) to provide the Marine Air-Ground Task Force (MAGTF) and Joint Task Force Commanders a real-time, line of sight, high data-rate sensor and engagement data distribution network that combines all distributed sensor data, including G/ATOR measurements, into a fire control quality track picture which is the same for all CEC network nodes. CEC data combined with G/ATOR contributions, will effectively increase Situational Awareness by providing accurate, composite, and real-time surveillance tracks, reduce ground-to-air and air-to-air fratricide, enable air and surface Naval Integrated Fire Control-Counter Air (NIFC-CA), and extend the air defensive capability of forces in the littorals. Through integration & fielding of CEC Increment II capabilities, CTN will integrate new sensor types and track data sources into the network, such as surface search radars and passive detection sensors, as well as relevant data from other networks. CTN will accommodate more Cooperating Units (CUs) and provide a more complete, robust, and resilient situational awareness picture, composite identification, and Integrated Fire Control (IFC), with assured communications for Integrated Air and Missile Defense (IAMD), surface warfare, and electronic mission warfare domains. Air Battle Management (ABM) - ABM is a Commandant of the Marine Corps (CMC) Force Design (FD) program which contains the Theater Battle Management Core Systems - Marine Corps (TBMCS-MC). TBMCS-MC is the joint mandated air war planning tool for generation, dissemination, and execution of Air Tasking Orders (ATO) and Aerospace Control Orders (ACO). TBMCS-MC is a core C2 system in the												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		P-1 Line Item Number / Title: 4640 / Air Operations C2 Systems
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0206335M
Line Item MDAP/MAIS Code: N36		
Marine aviation combat element for the tools required to conduct Situational Awareness and Assessment, Airspace De-confliction, Mission Planning/Execution/Re-planning, and Assault Support Processing. The Marine Corps derives, develops, and sustains the core TBMCS software suite in cooperation with the Air Force and maintains its configuration of TBMCS-MC while continually improving its cybersecurity posture in accordance with relevant DoD and Marine Corps requirements and timelines. The Marine Corps maintains the responsibility to ensure the system meets Marine air C2 requirements and its operational relevant employment in a joint theater of operations while maintain interoperability with numerous Joint, Marine Corps, Navy and Air Force command and control systems. The Marine Corps prevents TBMCS-MC obsolescence through cyclic and as-needed technical refreshment of information technology hardware when applicable. As the USAF leads the development of its replacement for their TBMCS-Force Level capability through middle tier acquisition (Section 804 of the FY 2016 NDAA) of the Air Operations Center Weapons System Block 20 upgrade (AOC WS), the Marine Corps is aligning its investments toward the ability to host the new capability in the Marine Corps operating environment. The upcoming USAF Air Battle Plan (ABP) system replacement will incorporate core Marine air C2 operational requirements that are interoperable in a joint theater and maintain its ability to plan and manage Marine Air-Ground Task Force (MAGTF) air operations.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)						P-1 Line Item Number / Title: 4640 / Air Operations C2 Systems				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0206335M				
Line Item MDAP/MAIS Code: N36										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Air Operations C2 Systems				- / 363.243	- / 9.577	- / 1.291	- / 11.048	- / -	- / 11.048
P-40	Total Gross/Weapon System Cost				- / 363.243	- / 9.577	- / 1.291	- / 11.048	- / 0.000	- / 11.048
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation (\$11.048M): Remote Video Viewing Terminal (RVVT) - \$0.123M - Continues the refresh of the Full Motion Video (FMV) capability. This new capability will provide critical data to operational forces requiring access to airborne Intelligence Surveillance and Reconnaissance (ISR) for situational awareness and targeting. The increase of \$0.031M from FY 2022 to FY 2023 is due to the continued procurement of hardware to conduct the full motion video refresh. Composite Tracking Network (CTN) \$7.642M: The \$7.642M increase from FY 2022 to FY 2023 Funding will initiate the procurement of software and hardware to produce eight (8) CTN systems in support of Force Design; and to produce and integrate ECPs to sustain and upgrade system capabilities and maintain CEC interoperability to remain aligned with the US Navy in CEC Block 2 integration. Air Battle Management (ABM) \$3.283M - Funding for continued efforts such as on-site fielding representatives to support updated software and hardware fielding, and the continued procurement of new hardware for TBMCS-MC to maintain cybersecurity accreditation along with associated New Equipment Training (NET) in support of SW Maintenance Release upgrades and fielding of HW. The increase of \$2.084M from FY 2022 to FY 2023 is for the procurement of software and hardware for the sustainment of the Theater Battle Management Core System Marines Corps (TBMCS-MC) and for an increase in support required for New Equipment Training (NET). The FY 2023 funding request was adjusted by \$0.073M to account for the availability of prior year execution balances.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14							P-1 Line Item Number / Title: 4640 / Air Operations C2 Systems								Aggregated Items Title: Air Operations C2 Systems					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Remote Video Viewing Terminal (RVVT)																				
1.1) PRIOR YEARS CUMULATIVE FUNDING (RVVT)	A		-	-	13.389	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) FMV Components ⁽¹⁾	A		-	-	29.587	-	-	0.020	-	-	0.092	-	-	0.123	-	-	-	-	-	0.123
1.3) Hardware Refresh	A		-	-	4.669	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Remote Video Viewing Terminal (RVVT)			-	-	47.645	-	-	0.020	-	-	0.092	-	-	0.123	-	-	-	-	-	0.123
2) Composite Tracking Network (CTN)																				
2.1) CTN System Production ⁽²⁾	A		-	-	-	-	-	-	-	-	-	-	-	5.442	-	-	-	-	-	5.442
2.2) CTN Technology Refresh	A		-	-	3.935	-	-	4.434	-	-	-	-	-	-	-	-	-	-	-	-
2.3) Engineering Change Proposals (ECPs) ⁽³⁾			-	-	26.159	-	-	1.543	-	-	-	-	-	2.200	-	-	-	-	-	2.200
2.4) Fielding and NET training	A		-	-	3.309	-	-	0.954	-	-	-	-	-	-	-	-	-	-	-	-
2.5) PRIOR YEARS CUMULATIVE FUNDING (CTN)			-	-	33.607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) Composite Tracking Network (CTN)			-	-	67.010	-	-	6.931	-	-	-	-	-	7.642	-	-	-	-	-	7.642
3) Common Aviation Command and Control System (CAC2S)																				
3.1) PRIOR YEARS CUMULATIVE FUNDING (CAC2S)			-	-	63.214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Common Aviation Command and Control System (CAC2S)			-	-	63.214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) Air Battle Management (ABM)																				
4.1) Hardware & Software Procurement/ Integration Support ⁽⁴⁾	A		-	-	31.732	-	-	1.452	-	-	0.122	-	-	2.172	-	-	-	-	-	2.172
4.2) New Equipment Training (NET) ⁽⁵⁾			-	-	29.826	-	-	0.723	-	-	0.599	-	-	0.626	-	-	-	-	-	0.626
4.3) OnSite Fielding Reps ⁽⁶⁾			-	-	9.677	-	-	0.451	-	-	0.478	-	-	0.485	-	-	-	-	-	0.485
4.4) PRIOR YEARS CUMULATIVE FUNDING (TBMCS)			-	-	10.107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 14						P-1 Line Item Number / Title: 4640 / Air Operations C2 Systems						Aggregated Items Title: Air Operations C2 Systems								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 4) Air Battle Management (ABM)			-	-	81.342	-	-	2.626	-	-	1.199	-	-	3.283	-	-	-	-	-	3.283
5) Marine Air Command and Control System (MACCS) Service																				
5.1) PRIOR YEARS CUMULATIVE FUNDING (MACCS)			-	-	104.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) Marine Air Command and Control System (MACCS) Service			-	-	104.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	363.243	-	-	9.577	-	-	1.291	-	-	11.048	-	-	-	-	-	11.048
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
Footnotes:																				
(1) Remote Video Viewing Terminal (RVVT) - \$0.123M - Procures cables and power management components.																				
(2) The USMC Air Combat Element (ACE) Operational Planning Team (OPT) has directed an increase to the CTN Approved Acquisition Objective (AAO) in support of Force Design 2030. Funding supports the procurement, fielding, and increased sustainment of eight (8) additional CTN systems in support of Force Design. The \$5.442M increase from FY 2022 to FY 2023 is to begin the procurement of software and hardware to produce eight (8) CTN systems in support of Force Design.																				
(3) CTN is to produce and integrate ECPs to sustain and upgrade system capabilities and maintain CEC interoperability and remain aligned with the US Navy in CEC Block 2 integration. The \$2.200M increase from FY 2022 to FY 2023 is for the procurement of software and hardware for AN/USG-4B First Article Production and Compact Solid State Antenna (CSSA) ECP upgrade integration.																				
(4) ABM supports the USMC Warfighting Capability (i.e. Command and Control, Naval Operations, Expeditionary Advanced Base Operations (EABO), Composite Warfare) and joint integration with the US Navy and US Air Force in creating air battle plans. Funding supports the procurement of software and hardware and its integration, to ensure capability key performance parameters are met, cybersecurity compliance is sustained, and delivered to the Force Marine Forces. The \$2.050M increase from FY 2022 to FY 2023 is for the procurement of software and hardware to sustain the Theater Battle Management Core System Marine Corps (TBMCS-MC).																				
(5) The \$0.027M increase from FY 2022 to FY 2023 is to account for decrease in support required for NET for the upgraded TBMCS-MC hardware and software.																				
(6) The \$0.007M increase from FY 2022 to FY 2023 is to support the continued procurement and fielding of new hardware for TBMCS-MC.																				

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)							P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: 0204460M, 0506313M				Other Related Program Elements: 0206313M				
Line Item MDAP/MAIS Code: 386												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	25	8	8	-	-	-	-	-	-	-	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	967.295	276.673	339.369	61.943	0.000	61.943	65.339	72.141	55.026	56.529	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	967.295	276.673	339.369	61.943	0.000	61.943	65.339	72.141	55.026	56.529	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	967.295	276.673	339.369	61.943	0.000	61.943	65.339	72.141	55.026	56.529	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	13.506	13.609	14.422	-	14.422	14.802	15.118	15.387	15.665	Continuing	Continuing
Flyaway Unit Cost (<i>\$ in Millions</i>)	35.004	30.586	32.031	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	38.692	34.584	42.421	-	-	-	-	-	-	-	Continuing	Continuing
Description: The Ground/Air Task Oriented Radar (G/ATOR) is a critical CMC Force Design program. G/ATOR is a multi-role, ground-based, expeditionary 3D radar system employed by both the Air Combat Element (ACE) and Ground Combat Element (GCE) within the Marine Air Ground Task Force. It satisfies the Marine Air Command and Control System and the Ground Counter Fire/Counter Battery capabilities. G/ATOR provides mobile, multi-functional, three-dimensional surveillance of air breathing targets, detection of cruise missiles, Unmanned Aerial Systems (UAS), Rockets, Artillery and Mortars, and the cueing of air defense weapons. G/ATOR contributes to Littoral Operations in a Contested Environment (LOCE) and Expeditionary Advanced Base Operations (EABO) by surveillance and detection of enemy air threats not seen by Navy sensors in the littorals and participating in a cooperative engagement network of sensors and shooters. G/ATOR enables integrated fire control (IFC) and continues to assess and identify system changes necessary to support an engage/fire on remote capability. G/ATOR surveillance coverage with IFC will provide unprecedented reach, volume, and precision in the execution of Operational Maneuver From The Sea allowing Naval forces to project and sustain power deep inland. G/ATOR is the primary Ground-Based sensor for the United States Marine Corps, and is the only Air Defense/Air Surveillance radar currently in the Marine Corps inventory. G/ATOR's initial operational capability was achieved in FY 2018 and full operational capability will be achieved in FY 2025.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)						P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: 0204460M, 0506313M			Other Related Program Elements: 0206313M			
Line Item MDAP/MAIS Code: 386										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Ground/Air Task Oriented Radar (G/ATOR)	P-5a, P-21			25 / 967.295	8 / 276.673	8 / 339.369	- / 61.943	- / 0.000	- / 61.943
P-40	Total Gross/Weapon System Cost				25 / 967.295	8 / 276.673	8 / 339.369	- / 61.943	- / 0.000	- / 61.943
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request \$61.943M AN/TPS-80 G/ATOR - FY 2023 funding will continue to provide Engineering Change Orders, Tooling for Depot Facilitization, Tactical Target Generators (TTG's), Gallium Nitride (GaN) Retrofit Kits, to replace the last three (3) remaining Gallium Arsenide (GaAs) Low Rate Initial Production (LRIP) systems, as well as, necessary logistic/program support associated with the delivery of systems, hardware installations, program management and logistics required for G/ATOR fielding related activities. It also replaces existing communications equipment to address mandated GPS M-Code and Crypto modernization requirements, as well as, initiates the procurement of Multi-Domain Radar in a Contested Environment (MuDRaCE) Mid-Range Air Surveillance systems that will be fielded to the Operating Forces. Overall, the \$277.426M decrease in funding from FY 2022 to FY 2023 primarily reflects the completion of the last Full Rate Production Lot and associated hardware as well as the additional procurement of forty-four (44) Long Range Radar Kits in FY 2022.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022							
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15							P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)						Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)							
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:										
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total	
Procurement Quantity (Units in Each)				25			8			8			-			-			-	
Gross/Weapon System Cost (\$ in Millions)				967.295			276.673			339.369			61.943			0.000			61.943	
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-	
Net Procurement (P-1) (\$ in Millions)				967.295			276.673			339.369			61.943			0.000			61.943	
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-	
Total Obligation Authority (\$ in Millions)				967.295			276.673			339.369			61.943			0.000			61.943	
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																				
Initial Spares (\$ in Millions)				-			13.506			13.609			14.422			-			14.422	
Gross/Weapon System Unit Cost (\$ in Millions)				38.692			34.584			42.421			-			-			-	
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																				
Cost Elements		Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
		Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Flyaway - G/ATOR - Active (PE 0204460M) & Reserve (PE 0506313M) Cost																				
Recurring Cost																				
1.1.1) G/ATOR System (Active) ^{(†) (1)}		31.349	17	532.930	28.429	8	227.432	29.407	8	235.256	-	-	-	-	-	-	-	-	-	
1.1.2) G/ATOR System (Reserve) ^(†)		29.819	8	238.548	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.1.3) Recurring Prior Years Cumulative Funding		-	-	54.805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost		-	-	826.283	-	-	227.432	-	-	235.256	-	-	-	-	-	-	-	-	-	
Non Recurring Cost																				
1.2.1) Engineering Change Orders (ECO) ⁽²⁾		-	-	32.231	-	-	7.803	-	-	6.401	-	-	6.771	-	-	-	-	-	6.771	
1.2.2) Depot Tooling/ Facilitization ⁽³⁾		-	-	1.032	-	-	9.455	-	-	13.983	-	-	6.797	-	-	-	-	-	6.797	
1.2.3) Communications Modernization ⁽⁴⁾		-	-	-	-	-	-	-	-	-	-	-	7.506	-	-	-	-	-	7.506	
1.2.4) Pallet Communications Support Processor (PCSP) Installations ⁽⁵⁾		-	-	-	-	-	-	-	-	0.604	-	-	1.672	-	-	-	-	-	1.672	

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15							P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)						Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
1.2.5) Long Range Radar (LRR) Kits Installations ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-	-	2.652	-	-	-	-	-	2.652
1.2.8) Non-Recurring Prior Years Cumulative Funding	-	-	15.556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	48.819	-	-	17.258	-	-	20.988	-	-	25.398	-	-	-	-	-	25.398
Subtotal: Flyaway - G/ATOR - Active (PE 0204460M) & Reserve (PE 0506313M) Cost	-	-	875.102	-	-	244.690	-	-	256.244	-	-	25.398	-	-	-	-	-	25.398
Hardware - G/ATOR - Active (PE 0204460M) Cost																		
Recurring Cost																		
2.1.1) Communications Equipment Group (CEG) Shelters ⁽⁷⁾	-	-	25.417	-	-	8.150	-	-	3.458	-	-	-	-	-	-	-	-	-
2.1.2) Power Equipment Group (PEG) Pallets ⁽⁸⁾	-	-	7.291	-	-	3.200	-	-	2.800	-	-	-	-	-	-	-	-	-
2.1.3) Tactical Target Generators (TTG) Block I ⁽⁹⁾	-	-	-	-	-	-	-	-	1.000	-	-	4.387	-	-	-	-	-	4.387
2.1.5) Pallet Communications Support Processor (PCSP) Retrofit Kits ⁽¹⁰⁾	-	-	-	-	-	6.066	-	-	2.210	-	-	-	-	-	-	-	-	-
2.1.6) PCSP Test Benches ⁽¹¹⁾	-	-	-	-	-	2.498	-	-	2.272	-	-	-	-	-	-	-	-	-
2.1.7) Long Range Radar (LRR) Kits ⁽¹²⁾	-	-	-	-	-	-	-	-	44.000	-	-	-	-	-	-	-	-	-
2.1.8) MuDRaCE ⁽¹³⁾	-	-	-	-	-	-	-	-	-	-	-	4.600	-	-	-	-	-	4.600
2.1.9) GaN Retrofit Kits ⁽¹⁴⁾	-	-	-	-	-	-	-	-	17.000	-	-	18.700	-	-	-	-	-	18.700
Subtotal: Recurring Cost	-	-	32.708	-	-	19.914	-	-	72.740	-	-	27.687	-	-	-	-	-	27.687

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Exhibit P-5, Cost Analysis: PB 2023 Navy										Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15					P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)					Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)			

ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:			

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<i>Subtotal: Hardware - G/ATOR - Active (PE 0204460M) Cost</i>	-	-	32.708	-	-	19.914	-	-	72.740	-	-	27.687	-	-	-	-	-	27.687
Support - G/ATOR - Support Active (PE 0204460M) Cost																		
3.1) Program Management Support ⁽¹⁵⁾	-	-	21.289	-	-	5.363	-	-	4.260	-	-	3.634	-	-	-	-	-	3.634
3.2) Logistics Support (CLS/ICLS) ⁽¹⁶⁾	-	-	35.161	-	-	5.123	-	-	4.592	-	-	4.365	-	-	-	-	-	4.365
3.3) Logistics Support (PCSP) ⁽¹⁷⁾	-	-	-	-	-	1.038	-	-	1.026	-	-	0.492	-	-	-	-	-	0.492
3.4) Logistics Support (Shelters)	-	-	3.035	-	-	0.545	-	-	0.507	-	-	0.367	-	-	-	-	-	0.367
<i>Subtotal: Support - G/ATOR - Support Active (PE 0204460M) Cost</i>	-	-	59.485	-	-	12.069	-	-	10.385	-	-	8.858	-	-	-	-	-	8.858
Gross/Weapon System Cost	38.692	25	967.295	34.584	8	276.673	42.421	8	339.369	-	-	61.943	-	-	0.000	-	-	61.943

(t) indicates the presence of a P-5a

Footnotes:

- (1) Decrease of \$235.256 from FY22 to FY23 due to FY22 funding the last Full Rate Production Lot with delivery of the last system scheduled for January 2025.
- (2) ECO funding addresses corrective actions from DT1E/IOT&E testing, as well as user community feedback to improve Human Systems Integration (HSI). ECO funding also reduces the number of material/electronic obsolescence issues and ultimately improves future Fleet Marine Forces' readiness. FY23 ECOs will continue GB2 Hardware improvement efforts to improve reliability and maintainability while supporting the Warfighter's desire to reduce Radar Emplacement/Displacement time.
- (3) Funding decreases \$7.186M from FY22 to FY23 as G/ATOR continues to fund the procurement of a Digital Spectrum and RF Test Station capability necessary to perform IROAN Depot repairs at Tobyhanna Army Depot. This includes the Original Equipment Manufacturer's (OEM's) Hardware, Software, Tech Support, Training and Integration for both the Far Field and Near Field Ranges testing capability in order to prepare the Depot for the first scheduled IROAN rotation to be conducted in FY24 and stay aligned with the Commandant's Force Design capability timeline. These efforts will increase the USMC's ability to organically sustain the system and ultimately reduce lifecycle sustainment costs over the life of the system.
- (4) Replaces existing Communications Equipment Group (CEG) Shelter communications equipment to address mandated GPS M-Code and Crypto modernization requirements per the National Security Agency's Enterprise Communications Modernization plan. Funding increases \$7.506M from FY22 to FY23 to initiate the procurement of the required communications equipment.
- (5) Pallet Communications Support Processor (PCSP) Retrofit Kits were procured beginning in FY21 in order to improve Radar reliability, maintainability and emplacement/displacement times. PCSP Installation funding increases \$1.068M from FY22 to FY23 as additional PCSP retrofit kits will be installed in FY23.
- (6) Long Range Radar (LRR) Kits installations increase \$2.652M from FY22 to FY23 with installation of the first twelve (12) LRR Kits in FY23.

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15	P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)	Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
⁽⁷⁾ This requirement is derived from Change 4 of G/ATOR Block 2 Capabilities Development Document. The CEG Shelter is comprised of an S-788 Shelter on an up-armored HMMWV, providing the G/ATOR system with operator interfaces and communications processing. The CEG Shelter is an integral component of the G/ATOR System and supports external Command and Control voice and digital communications to CAC2S, CTN, and AFATDS. Funding decreases \$3.458M from FY22 to FY23 with the procurement of the last FRP Lot 4 Systems in FY22. ⁽⁸⁾ Power Equipment Group (PEG) Pallets are primarily composed of Government Furnished Equipment and are assembled and integrated by Tobyhanna Army Depot vice the Prime Contractor. Funding decreases \$2.800M from FY22 to FY23 with the procurement of the last FRP Lot 4 Systems in FY22. ⁽⁹⁾ Per G/ATOR's Air Surveillance/Air Defense JROC approved CPD in Dec 2012, Tactical Target Generators (TTG) are a G/ATOR Block I requirement that ensures forward deployed forces possess the capabilities required to mitigate threats, increasing the survivability of the radar system against anti-radiation missiles in a Peer/Near-Peer Competitive environment. An increase of \$3.387M in FY23 allows for the procurement of eight (8) G/ATOR Block I TTGs, providing four (4) for III MEF and two (2) for both I & II MEF. ⁽¹⁰⁾ Pallet Communications Support Processor (PCSP) Retrofit Kits procures the hardware necessary to replace the Pallet Support Electronics (PSE) and CEG Communications Support Processor (CCPU) to significantly improve system reliability in order to best support the Commandant's 2023 Force Design IOC requirement. Funding decreases \$2.210M from FY22 to FY23 with the procurement of the last PSCP Retrofit Kits in FY22. ⁽¹¹⁾ Pallet Communications Support Processor (PCSP) Test Benches provide an environment necessary to test/verify the correctness and/or soundness of the PSCP's integration with G/ATOR's Radar Equipment Group (REG) without having to utilize/borrow a G/ATOR system that has been fielded to the Fleet Marine Force. Funding decreases \$2.272M From FY22 to FY23 with the procurement of the last PSCP Test Benches in FY22. ⁽¹²⁾ Procures Long Range Radar (LRR) Kits in FY22 in order to fully populate G/ATOR's Radar Array with Gallium Nitride (GaN) Transmit and Receive Modules, thus allowing the Radar to meet its Objective CPD Requirements. This FY22 Congressional Add enhances the Radar's ability to operate at a greater performance level required for Peer Competition, providing increased decision time through detection at greater ranges thus enabling the ability to determine additional solutions in support of developing kill chains. Funding decreases \$44.000M from FY22 to FY23 with the procurement of all LRR Kits in FY22. ⁽¹³⁾ Multi-Domain Radar in a Contested Environment (MuDRaCE) provides detection and air surveillance in spectrum dense environments, without centralized high power RF emitters, allowing for Aviation and Ground Command Control agencies to minimize the probability of detection through signature management. A Future Naval Capability (FNC) that has transitioned from the Office of Naval Research (ONR), the \$4.600 increase of FY23 funding will be applied towards producing Mid-Range systems that will be fielded to the Fleet Marine Force. ⁽¹⁴⁾ GaN Retrofit Kits support the modification of six (6) total GaAS LRIP Systems to the GaN configuration with completion expected in FY26. The first three (3) Mod kits, \$17.000M, are being procured in FY22 (LRIP Tech Refresh) with installation beginning in FY25. The \$1.700M increase for the procurement of the last three (3) GaN Retrofit Kits from FY22 to FY23 is based upon a 10% rate of inflation. ⁽¹⁵⁾ With G/ATOR FRP Lot 4 option being executed in FY22, funding decreases \$0.626M from FY22 to FY23 as program management support continues to migrate from PMC to O&M funding. ⁽¹⁶⁾ G/ATOR's product support strategy employs a combination of Contractor Logistics Support (CLS) and Interim Contactor Logistics Support (ICLS). Logistics support funding decreases \$0.227M from FY22 to FY23, while the program continues to migrate towards an organic maintenance strategy post Full Rate Production phase supporting all G/ATOR's. Contractor Logistics Support/Interim Contactor Logistics Support (CLS/ICLS) will continue to partially support 19 FRP Systems in FY23 to include their maintenance and repair prior to fielding. Additionally, funding will be used to capture necessary usage data in preparation for organic logistics support, complete provisioning requirements, update the Interactive Electronic Technical Manual (IETM) for new software builds and due to high operator and maintainer turnover, conduct several New Equipment Training (NET) events in FY23. These additional CLS efforts will continue through the Production and Deployment phase of the G/ATOR System. ⁽¹⁷⁾ PCSP Logistics support includes all logistics support products necessary for establishing a Technical Data Package (TDP) for a new product configuration baseline as well as establishing and maintaining an Interactive Electronic Technical Manual (IETM), Maintenance Instructions (MI), Installation Team training and providing PCSP New Equipment Training (NET). With Installation Team training completed, PCSP Logistics Support decreases \$0.534M form FY23 to FY23 as the primary focus will be on NET Training while maintaining and updating the TDP and IETM as necessary.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15			P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)					Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) G/ATOR System (Active) ^(†)		2015 ⁽¹⁸⁾	Northrop Grumman. / Linthicum, MD	SS / FPIF	Quantico, VA	Mar 2015	Oct 2017	2	32.511	Y		May 2013
1.1.1) G/ATOR System (Active) ^(†)		2016 ⁽¹⁹⁾	Northrop Grumman.. / Linthicum, MD	SS / FPIF	Quantico, VA	Aug 2016	Jul 2018	3	33.764	Y		Oct 2015
1.1.1) G/ATOR System (Active) ^(†)		2017 ⁽²⁰⁾	Northrop Grumman.. / Linthicum, MD	SS / FPIF	Quantico, VA	Mar 2017	Aug 2019	3	31.837	Y		Oct 2015
1.1.1) G/ATOR System (Active) ^(†)		2018 ⁽²¹⁾	Northrup Grumman..... / Linthicum, MD	SS / FPIF	Quantico, VA	Mar 2018	Sep 2020	3	31.837	Y		Oct 2015
1.1.1) G/ATOR System (Active) ^(†)		2019 ⁽²²⁾	Northrop Gumman / Linthicum, MD	SS / FFP	Quantico, VA	Jun 2019	Oct 2021	2	31.477	Y		Sep 2017
1.1.1) G/ATOR System (Active) ^(†)		2020 ⁽²³⁾	Northrop Grumman..... / Linthicum, MD	SS / FFP	Quantico, VA	Dec 2019	Oct 2022	4	28.160	Y		Sep 2017
1.1.1) G/ATOR System (Active) ^(†)		2021 ⁽²⁴⁾	Northrop Grumman.... / Linthicum, MD	SS / FFP	Quantico, VA	Feb 2021	Oct 2023	8	28.429	Y		Sep 2017
1.1.1) G/ATOR System (Active) ^(†)		2022 ⁽²⁵⁾	Northrop Grumman... / Linthicum, MD	SS / FFP	Quantico, VA	Jan 2022	Jun 2024	8	29.407	Y		Sep 2017
1.1.2) G/ATOR System (Reserve) ^(†)		2019 ⁽²⁶⁾	Northrop Grumman / Linthicum, MD	SS / FFP	Quantico, VA	Jun 2019	Feb 2022	4	31.477	Y		Sep 2017
1.1.2) G/ATOR System (Reserve) ^(†)		2020 ⁽²⁷⁾	Northrop Grumman / Linthicum, MD	SS / FFP	Quantico, VA	Dec 2019	Jan 2023	4	28.160	Y		Sep 2017

^(†) indicates the presence of a P-21

Footnotes:

⁽¹⁸⁾ Date of FY15 First Delivery is based on the actual fielding date.

⁽¹⁹⁾ Date of FY16 First Delivery is based on the actual fielding date.

⁽²⁰⁾ Date of FY17 First Delivery is based on the actual fielding date.

⁽²¹⁾ Date of FY18 First Delivery is based on the current fielding date.

⁽²²⁾ Date of FY19 First Delivery is based on the G/ATOR FRP contract awarded 7 June 2019.

⁽²³⁾ Date of FY20 First Delivery is based on a modification to the G/ATOR FRP contract on 6 December 2019.

⁽²⁴⁾ Date of FY21 First Delivery is based on the G/ATOR FRP contract option exercised 12 February 2021.

⁽²⁵⁾ Date of FY22 First Delivery is based on the G/ATOR FRP contract option being exercised as originally planned for in January 2022.

⁽²⁶⁾ Date of FY19 First Reserve System Delivery is based on the G/ATOR FRP contract awarded 7 June 2019.

⁽²⁷⁾ Date of FY20 First Delivery is based on a modification to the G/ATOR FRP contract on 6 December 2019.

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)										Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)											
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015										Fiscal Year 2016														BALANCE
OCO	MFR#	FY	SERVICE	PROCQTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015										Calendar Year 2016														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) G/ATOR System (Active) ⁽¹⁾																															
	1	2015	NAVY	2	0	2							A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	2	2016	NAVY	3	0	3																							A -	-	3
	2	2017	NAVY	3	0	3																									3
	7	2018	NAVY	3	0	3																									3
	3	2019	NAVY	2	0	2																									2
	6	2020	NAVY	4	0	4																									4
	5	2021	NAVY	8	0	8																									8
	4	2022	NAVY	8	0	8																									8
1.1.2) G/ATOR System (Reserve)																															
	8	2019	NAVY	4	0	4																									4
	8	2020	NAVY	4	0	4																									4
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)													Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2017													Fiscal Year 2018													BALANCE			
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017													Calendar Year 2018																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1.1.1) G/ATOR System (Active) ⁽¹⁾																																				
	1	2015	NAVY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1											0			
	2	2016	NAVY	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1					
	2	2017	NAVY	3	0	3						A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3					
	7	2018	NAVY	3	0	3																A	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	3	2019	NAVY	2	0	2																											2			
	6	2020	NAVY	4	0	4																											4			
	5	2021	NAVY	8	0	8																											8			
	4	2022	NAVY	8	0	8																											8			
1.1.2) G/ATOR System (Reserve)																																				
	8	2019	NAVY	4	0	4																											4			
	8	2020	NAVY	4	0	4	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	4					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)										Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)																
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2019										Fiscal Year 2020														BALANCE					
OCO	MFR#	FY	SERVICE	PROCQTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019										Calendar Year 2020																			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1.1.1) G/ATOR System (Active) ⁽¹⁾																																				
	1	2015	NAVY		2	2	0																									0				
	2	2016	NAVY		3	2	1	-	-	-	-	-	-	-	-	-	1															0				
	2	2017	NAVY		3	0	3	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1								0				
	7	2018	NAVY		3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2						
	3	2019	NAVY		2	0	2									A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
	6	2020	NAVY		4	0	4															A	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	5	2021	NAVY		8	0	8																									8				
	4	2022	NAVY		8	0	8																									8				
1.1.2) G/ATOR System (Reserve)																																				
	8	2019	NAVY		4	0	4									A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4			
	8	2020	NAVY		4	0	4															A	-	-	-	-	-	-	-	-	-	-	-	-	-	4
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)										Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021										Fiscal Year 2022													BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021																Calendar Year 2022												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP				
1.1.1) G/ATOR System (Active) ⁽¹⁾																																			
	1	2015	NAVY		2	2	0																										0		
	2	2016	NAVY		3	3	0																										0		
	2	2017	NAVY		3	3	0																										0		
	7	2018	NAVY		3	1	2	-	1	-	-	-	1																				0		
	3	2019	NAVY		2	0	2	-	-	-	-	-	-	-	-	-	-	1	-	1													0		
	6	2020	NAVY		4	0	4	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4					
	5	2021	NAVY		8	0	8					A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8					
	4	2022	NAVY		8	0	8														A	-	-	-	-	-	-	-	-	-	-	-	-	8	
1.1.2) G/ATOR System (Reserve)																																			
	8	2019	NAVY		4	0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1		0					
	8	2020	NAVY		4	0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)										Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024														BALANCE		
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023										Calendar Year 2024																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.1) G/ATOR System (Active) ⁽¹⁾																																	
	1	2015	NAVY		2	2	0																										0
	2	2016	NAVY		3	3	0																										0
	2	2017	NAVY		3	3	0																										0
	7	2018	NAVY		3	3	0																										0
	3	2019	NAVY		2	2	0																										0
	6	2020	NAVY		4	0	4	1	1	-	-	-	-	-	-	-	1	1											0				
	5	2021	NAVY		8	0	8	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1					0		
	4	2022	NAVY		8	0	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	4		
1.1.2) G/ATOR System (Reserve)																																	
	8	2019	NAVY		4	4	0																										0
	8	2020	NAVY		4	0	4	-	-	-	1	1	-	1	1																		0
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)										Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2025										Fiscal Year 2026														BALANCE		
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	Calendar Year 2025										Calendar Year 2026																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.1) G/ATOR System (Active) ⁽¹⁾																																	
	1	2015	NAVY		2	2	0																										0
	2	2016	NAVY		3	3	0																										0
	2	2017	NAVY		3	3	0																										0
	7	2018	NAVY		3	3	0																										0
	3	2019	NAVY		2	2	0																										0
	6	2020	NAVY		4	4	0																										0
	5	2021	NAVY		8	8	0																										0
	4	2022	NAVY		8	4	4																										1
1.1.2) G/ATOR System (Reserve)																																	
	8	2019	NAVY		4	4	0																										0
	8	2020	NAVY		4	4	0																										0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy			Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15			P-1 Line Item Number / Title: 4655 / Ground/Air Task Oriented Radar (G/ATOR)		
			Item Number / Title [DODIC]: 1 / Ground/Air Task Oriented Radar (G/ATOR)		

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Northrop Grumman. - Linthicum, MD	2	2	2	0	5	31	36	0	5	26	31
2	Northrop Grumman... - Linthicum, MD	2	3	3	0	10	23	33	0	5	29	34
3	Northrop Gumman - Linthicum, MD	2	8	9	0	9	28	37	0	9	28	37
4	Northrop Grumman... - Linthicum, MD	2	8	16	0	9	28	37	0	9	29	38
5	Northrop Grumman..... - Linthicum, MD	2	8	16	0	9	28	37	0	9	32	41
6	Northrop Grumman..... - Linthicum, MD	2	8	9	0	2	34	36	0	0	0	0
7	Northrup Grumman..... - Linthicum, MD	2	8	9	0	5	30	35	0	0	0	0
8	Northrop Grumman - Linthicum, MD	2	8	9	0	9	32	41	0	3	37	40

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							P-1 Line Item Number / Title: 4616 / GCSS-MC					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	7.345	0.634	0.000	1.663	0.000	1.663	1.574	1.355	1.380	1.406	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	7.345	0.634	0.000	1.663	0.000	1.663	1.574	1.355	1.380	1.406	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	7.345	0.634	0.000	1.663	0.000	1.663	1.574	1.355	1.380	1.406	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Global Combat Support System - Marine Corps/Logistics Chain Management (GCSS-MC/LCM) Family of Systems (FoS) serves as the primary technology enabler for the Marine Corps Logistics Modernization strategy. GCSS-MC/LCM provides the backbone for all logistics information required by Marine Forces and the Supporting Establishment. The core for GCSS-MC/LCM Increment 1 is a modern, commercial-off-the-shelf enterprise resource planning software (Oracle e-Business Suite). The Increment 1 design focused on enabling the warfighter to operate while deployed with reach back to Garrison from the battlefield. Increment 1 replaced 5 legacy supply and maintenance information technology systems and currently supports approximately 25,000 users worldwide. The focus of future functions will be enhancing capabilities in the areas of warehousing, distribution, logistics planning, decision support, depot maintenance, and integration with emerging technologies to improve asset visibility.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4616 / GCSS-MC				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Global Combat Support System Marine Corps (GCSS-MC)				- / 7.345	- / 0.634	- / 0.000	- / 1.663	- / 0.000	- / 1.663
P-40	Total Gross/Weapon System Cost				- / 7.345	- / 0.634	- / 0.000	- / 1.663	- / 0.000	- / 1.663
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$1.663M - Funding will continue to support the ongoing need for technology refresh of hardware and software for the major logistics hubs in support of the sustainment of GCSS-MC/LCM Increment 1. Funding increase from FY 2022 to FY 2023 of \$1.663M is due to the increased requirement for hardware and software refresh in FY 2023.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16							P-1 Line Item Number / Title: 4616 / GCSS-MC						Item Number / Title [DODIC]: 1 / Global Combat Support System Marine Corps (GCSS-MC)								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				7.345			0.634			0.000			1.663			0.000			1.663		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				7.345			0.634			0.000			1.663			0.000			1.663		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				7.345			0.634			0.000			1.663			0.000			1.663		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total				
		Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)		
Hardware - GCSS-MC/LCM Hardware Cost																					
Recurring Cost																					
1.1.1) Tech Refresh		-	-	4.805	-	-	0.235	-	-	-	-	-	0.647	-	-	-	-	-	0.647		
Subtotal: Recurring Cost		-	-	4.805	-	-	0.235	-	-	-	-	-	0.647	-	-	-	-	-	0.647		
Subtotal: Hardware - GCSS-MC/LCM Hardware Cost		-	-	4.805	-	-	0.235	-	-	-	-	-	0.647	-	-	-	-	-	0.647		
Software - GCSS-MC/LCM Software Cost																					
Recurring Cost																					
2.1.1) Tech Refresh		-	-	1.770	-	-	0.318	-	-	-	-	-	0.870	-	-	-	-	-	0.870		
Subtotal: Recurring Cost		-	-	1.770	-	-	0.318	-	-	-	-	-	0.870	-	-	-	-	-	0.870		
Subtotal: Software - GCSS-MC/LCM Software Cost		-	-	1.770	-	-	0.318	-	-	-	-	-	0.870	-	-	-	-	-	0.870		
Support - GCSS-MC/LCM HW/SW Engineering Cost																					
3.1) Tech Refresh		-	-	0.770	-	-	0.081	-	-	-	-	-	0.146	-	-	-	-	-	0.146		
Subtotal: Support - GCSS-MC/LCM HW/SW Engineering Cost		-	-	0.770	-	-	0.081	-	-	-	-	-	0.146	-	-	-	-	-	0.146		
Gross/Weapon System Cost		-	-	7.345	-	-	0.634	-	-	0.000	-	-	1.663	-	-	0.000	-	-	1.663		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4733 / Fire Support System						
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	412.002	24.934	33.808	48.322	0.000	48.322	302.107	397.874	430.356	271.260	-	1,920.663
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	412.002	24.934	33.808	48.322	0.000	48.322	302.107	397.874	430.356	271.260	-	1,920.663
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	412.002	24.934	33.808	48.322	0.000	48.322	302.107	397.874	430.356	271.260	-	1,920.663
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Fire Support Systems (FSS) provide the Marine Corps critical operational and logistics capabilities in artillery weapons, fire direction, loitering munitions, and targeting systems. FSS provide the systems needed to create a fully networked sensor to shooter kill chain for the USMC Ground Combat Element. Key systems included are:												
Common Laser Range Finder (CLRF) - The CLRF Integrated Capability (CLRF IC) integrates laser targeting capabilities to provide lightweight man portable targeting systems consistent with the Commandant's Planning Guidance. The CLRF strategy includes replacement of the Portable Lightweight Designator / Rangefinder(PLDR), Thermal Laser Spot Imager (TLSI), Joint Terminal Attack Controller - Laser Target Designator (JTAC LTD), and Enhanced Joint Terminal Attack Controller (EJTAC) into a single hand held targeting system, the Next Generation Hand Held Targeting System (NGHTS). This strategy will result in two affordable systems, a target location system for the Joint fires observer and a laser designator for the JTAC that will support operational targeting requirements well into the 2030 timeframe as well as provide significant reductions in weight and power requirements.												
Fire Support Mods (FSM) - FSM supports a set of Joint Service and Marine Corps unique efforts to address critical operational capabilities in artillery weapons, fire direction control systems, and targeting / Intelligence, Surveillance, and Reconnaissance (ISR) systems. Key programs include: Improved Position and Azimuth Determining Systems (IPADS) and its replacement system Location Azimuth Determining System (LADS), Global Positioning System Survey Replacement (GPSSR), Marine Artillery Survey Set (MASS), and the Modeled Meteorological Information Manager (MMIM).												
Family of Target Acquisition Systems (FTAS) - The FTAS provides the MAGTF the capability to locate, identify and attack enemy indirect fire weapons systems, and observe and direct friendly artillery fire. The FTAS consists of the AN/TPQ-46B Firefinder radar, the AN/TPQ-54(V)1 Lightweight Counter Mortar Radar Mobile (LCMR), and the Ground Counter Fire Sensor-Replacement (GCFS-R), Scalable Passive Acoustic Reporting and Targeting Node (SPARTN). The FTAS is critical in the execution of counterfire and the integration of target acquisition information enabling attack by MAGTF assets. The FTAS also provides artillery firing units the ability to conduct artillery registration and other friendly fire missions. The FTAS encompasses the equipment required to support target acquisition within the target acquisition platoon and is resident in the headquarters battery of each artillery regiment. The program will initiate development of replacement sensor systems and continue to address system issues that arise due to Diminishing Manufacturing Sources and Material Shortages (DMSMS) items with the FTAS.												
Advanced Field Artillery Tactical Data System (AFATDS) Family of Systems (FoS) - The AFATDS FoS consists of two programs: AFATDS, and Mobile Shelters consisting of the Mobile Tactical Shelter (MTS), Target Processing Set (TPS), and the Mobile Command Vehicle (MCV) Shelter. AFATDS integrates all supporting arms assets within the MAGTF, such as mortars, cannon artillery, rockets and missiles, close air support, and naval surface fires support systems. AFATDS automates fire planning, tactical and technical fire direction, and fire support coordination. AFATDS facilitates the employment of USMC and Joint fires capabilities for operations ashore, sea control, sea denial, and other USMC/Joint fires requirements. In FY 2021 the decision was made to transition from the High Mobility Multipurpose Wheeled Vehicle mounted												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4733 / Fire Support System				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
MTS and TPS to the JLTV mounted MCV Shelter for the increased AAO due to Force Design 2030. The MCV Shelter is primarily dedicated to housing the AFATDS and other fire support systems. MCV Shelters enhance the capabilities and survivability of USMC fire support units by enabling rapid emplacements, displacements, and by supporting command, control, and communications on the move. Target Hand-Off System (THS) - The THS addresses a Marine Corps operational requirement for a lightweight, handheld, and digital target acquisition engagement coordination system. The THS is interoperable with all video downlink, Fire Support platforms, and Target Locating Devices designed for the Forward Air Controllers (FAC), Forward Observers (FO), Fire Support Teams (FST), Firepower Control Teams (FCT), Tactical Air Control Parties (TACP), and Reconnaissance Teams. The THS provides the ability to integrate video and sensor information to quickly acquire and digitally prosecute targets in day, night, and near-all-weather visibility conditions in order to conduct precise and rapid indirect surface fire support, Naval Surface Fire Support (NSFS), and Close Air Support (CAS).										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	24.631	32.789	47.255	-	47.255	301.015	396.776	429.238	270.122
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.303	1.019	1.067	-	1.067	1.092	1.098	1.118	1.138
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	24.934	33.808	48.322	-	48.322	302.107	397.874	430.356	271.260

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4733 / Fire Support System				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Fire Support System	P-5a, P-21			- / 412.002	- / 24.934	- / 33.808	- / 48.322	- / -	- / 48.322
P-40	Total Gross/Weapon System Cost				- / 412.002	- / 24.934	- / 33.808	- / 48.322	- / 0.000	- / 48.322
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$48.322M CLRF - \$22.865M Funds will continue procurement of the NGHTS. NGHTS integrates designation, range, and laser spot imaging capabilities into a single lightweight system, which will reduce the overall weight by more the 50%. The increase of \$7.379M from FY 2022 to FY 2023 supports 24 additional Low-Rate Initial Production (LRIP) units, Non-Recurring Engineering (NRE), and required production data. FSM - \$4.646M Funding will continue procurement of IPADS replacements, LADS. This replacement is a lightweight Field Artillery survey system that enables accurate fires in GPS-degraded and denied environments. The increase of \$0.112M from FY 2022 to FY 2023 for both active (\$3.901M) and reserve (\$0.745M), supports the procurement of the LADS replacement systems and initial spares. FTAS - \$3.118M Funding will procure ECP Modification Kits and continue to address DMSMS issues within the FTAS. These kits are fielded to both the active (\$2.796M) and reserve (\$0.322M) components. Increase of \$0.069M from FY 2022 to FY 2023 is due to inflation causing an increase in ECP Modification Kits. AFATDS - \$15.218 Funds continue the procurement of MCV Shelters in support of Force Design operational requirements. Additionally, funding will support AFATDS and MCV enabling hardware components. The increase of \$7.006M from FY 2022 to FY 2023 reflects the procurement of two additional MCVs. THS - \$2.475M Funds will be used to procure and refresh end user device tablets and associated cases and cables required for the system to function properly. The decrease of \$0.052M from FY 2022 to FY 2023 is due to the completed procurement of PRC-161 radios.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16							P-1 Line Item Number / Title: 4733 / Fire Support System							Aggregated Items Title: Fire Support System						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) CLRF																				
1.1) CLRF - Procurement Spt	A		-	-	12.478	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) CLRF Active LRIP	A		48,557.69	104	5.050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) CLRF - Reserve LRIP	A		48,543.48	46	2.233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) CLRF - ECPs	A		-	-	17.651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) NGHTS - Proc Spt. & Equip ⁽¹⁾	A		-	-	-	-	-	-	-	-	2.440	-	-	1.568	-	-	-	-	-	1.568
1.6) NGHTS - LRIP (2)(t)	A		-	-	-	-	-	-	370,469.96	27	10.003	275,741.00	51	14.063	-	-	-	275,741.00	51	14.063
1.7) NGHTS - NRE ⁽³⁾	A		-	-	-	-	-	-	-	-	3.043	-	-	2.164	-	-	-	-	-	2.164
1.8) NGHTS - Production Data ⁽⁴⁾	A		-	-	-	-	-	-	-	-	-	-	-	2.653	-	-	-	-	-	2.653
1.9) NGHTS - PVT ⁽⁵⁾	A		-	-	-	-	-	-	-	-	-	-	-	2.417	-	-	-	-	-	2.417
1.13) NGHTS - SAASM Chips	A		-	-	-	-	-	0.954	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) CLRF			-	-	37.412	-	-	0.954	-	-	15.486	-	-	22.865	-	-	-	-	-	22.865
2) FSM ⁽⁶⁾																				
2.1) FSM - Active	A		-	-	71.782	-	-	4.424	-	-	3.823	-	-	3.901	-	-	-	-	-	3.901
2.2) FSM - Reserve	A		-	-	6.562	-	-	-	-	-	0.711	-	-	0.745	-	-	-	-	-	0.745
Subtotal: 2) FSM			-	-	78.344	-	-	4.424	-	-	4.534	-	-	4.646	-	-	-	-	-	4.646
3) Prior Year Cumulative Funding																				
3.1) Prior Year Cum Funding	A		-	-	257.713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Prior Year Cumulative Funding			-	-	257.713	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) FTAS ⁽⁷⁾																				
4.1) FTAS Upgrades and Installation	A		-	-	5.224	-	-	2.699	-	-	2.741	-	-	2.796	-	-	-	-	-	2.796
4.2) FTAS Upgrades and Installation (Reserve)	A		-	-	0.293	-	-	0.303	-	-	0.308	-	-	0.322	-	-	-	-	-	0.322
Subtotal: 4) FTAS			-	-	5.517	-	-	3.002	-	-	3.049	-	-	3.118	-	-	-	-	-	3.118
5) AFATDS FoS																				
5.1) Fielding Support ⁽⁸⁾	A		-	-	1.867	-	-	1.639	-	-	1.809	-	-	1.586	-	-	-	-	-	1.586

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy										Date: April 2022	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16					P-1 Line Item Number / Title: 4733 / Fire Support System					Aggregated Items Title: Fire Support System	

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.2) Mobile Shelter Modernization (MTS) ^(†)	A		265,966.29	89	23.671	272,226.67	3	0.817	-	-	-	-	-	-	-	-	-	-	-	-
5.3) Mobile Shelter Modernization (MCV) ^{(9)(†)}	A		-	-	-	-	-	-	452,166.67	6	2.713	423,300.00	23	9.736	-	-	-	423,300.00	23	9.736
5.4) Hardware Refresh	A		-	-	-	-	-	6.160	-	-	-	-	-	-	-	-	-	-	-	-
5.5) Ancillary Hardware Components ⁽¹⁰⁾	A		-	-	-	-	-	5.451	-	-	3.690	-	-	3.896	-	-	-	-	-	3.896
Subtotal: 5) AFATDS FoS			-	-	25.538	-	-	14.067	-	-	8.212	-	-	15.218	-	-	-	-	-	15.218
6) THS																				
6.1) Procurement Support	A		-	-	1.644	-	-	0.249	-	-	0.254	-	-	0.249	-	-	-	-	-	0.249
6.2) Hardware Refresh ⁽¹¹⁾	A		-	-	5.834	-	-	2.238	-	-	2.273	-	-	2.226	-	-	-	-	-	2.226
Subtotal: 6) THS			-	-	7.478	-	-	2.487	-	-	2.527	-	-	2.475	-	-	-	-	-	2.475
Total			-	-	412.002	-	-	24.934	-	-	33.808	-	-	48.322	-	-	-	-	-	48.322

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

- (1) NGHTS - Decrease of \$0.872M from FY22 to FY23 is a result of reduced Technical and Engineering Spt. FY23 includes New Equipment Training Coursework Development, Training Material, Start guides, and Safety Spt.
- (2) NGHTS - The increase of \$4.060 from FY22 to FY23 supports 51 LRIP units procured at lower per unit cost.
- (3) NGHTS - NRE includes efforts such as drawings updates for obsolete materials, pouches, and cases; GUI software updates, manufacturing process plans, and tooling and test equipment. The decrease of \$0.879M from FY22 to FY23 is due to completion of drawing updates and manufacturing process plans.
- (4) FY23 production data provides for the delivery of technical data packages, administrative deliverables, logistic data packages, publications and training materials.
- (5) NGHTS - The increase of \$2.417M supports Production Verification Testing (PVT) and refurbishment of LRIP systems that undergo PVT.
- (6) FSM - The increase of \$0.112M from FY22 to FY23 supports the procurement of the Location Azimuth Determining System (LADS).
- (7) FTAS - Increase of \$0.069M from FY22 to FY23 is due to inflation causing an increase in ECP Modification Kits.
- (8) AFATDS - \$0.223M FY22 to FY23 decrease is due to the completion of training package development and training for the MCV shelter.
- (9) AFATDS - increase is due to procuring additional MCVs.
- (10) AFATDS- FY23 \$0.206M increase is due to inflation. FY23 PMC will support procurement of ancillary hardware components to include; Antennas, Cables, Antenna Mounts, Radio Mounts, Intercom Systems, and various SL-3 to radio systems such as SL-3 handsets and speaker boxes.
- (11) THS - Supports procurement and refresh of end user device tablets, cables and cases for the THSv2.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16				P-1 Line Item Number / Title: 4733 / Fire Support System					Aggregated Items: Fire Support System			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) CLRF												
1.6) NGHTS - LRIP ^{(2)(†)}		2022	Northrop Grumman Systems Corporation / Apopka, FL	C / FFP	Quantico, VA	Feb 2022	Oct 2023	27	370,469.96	N	Oct 2023	Apr 2021
1.6) NGHTS - LRIP ^{(2)(†)}		2023	Northrop Grumman Systems Corporation / Apopka, FL	C / FFP	Quantico, VA	Nov 2022	Feb 2024	51	275,741.00	N	Oct 2023	Apr 2021
5) AFATDS FoS												
5.2) Mobile Shelter Modernization (MTS) ^(†)		2019	SAIC / Charleston, SC	C / FFP	MCSC	Nov 2019	Nov 2019	44	265,022.73	Y		
5.2) Mobile Shelter Modernization (MTS) ^(†)		2020	SAIC / Charleston, SC	C / FFP	MCSC	Nov 2020	Nov 2020	45	266,888.89	Y		
5.2) Mobile Shelter Modernization (MTS) ^(†)		2021	SAIC / Charleston, SC	C / FFP	MCSC	Nov 2020	Nov 2020	3	272,226.67	Y		
5.3) Mobile Shelter Modernization (MCV) ^{(9)(†)}		2022	Oshkosh Corp LLC / Oshkosh WI	C / FFP	MCSC	Jun 2022	Dec 2022	6	452,166.67	N	Jun 2022	
5.3) Mobile Shelter Modernization (MCV) ^{(9)(†)}		2023	Oshkosh Corp LLC / Oshkosh WI	C / FFP	MCSC	Dec 2022	Jun 2023	23	423,300.00	Y		
^(†) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4733 / Fire Support System													Aggregated Items: Fire Support System													
Items <i>(Units in Each)</i>							Fiscal Year 2022												Fiscal Year 2023												BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT				Calendar Year 2022												Calendar Year 2023														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1) CLRF																																				
1.6) NGHTS - LRIP ⁽²⁾																																				
	9	2022	NAVY		27	0	27				A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27				
	9	2023	NAVY		51	0	51													A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51
5) AFATDS FoS																																				
5.2) Mobile Shelter Modernization (MTS)																																				
	10	2019	NAVY		44	44	0																										0			
	10	2020	NAVY		45	41	4	4																										0		
	10	2021	NAVY		3	3	0																										0			
5.3) Mobile Shelter Modernization (MCV) ⁽⁹⁾																																				
	11	2022	NAVY		6	0	6									A	-	-	-	-	-	-	1	-	1	-	1	-	1	-	1	-	1	7		
	11	2023	NAVY		23	0	23													A	-	-	-	-	-	-	-	-	4	4	4	4				
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																					Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4733 / Fire Support System											Aggregated Items: Fire Support System												
Items <i>(Units in Each)</i>							Fiscal Year 2024											Fiscal Year 2025											BALANCE				
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT				Calendar Year 2024											Calendar Year 2025												
							OC T	NO V	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		AUG	SEP		
1) CLRF																																	
1.6) NGHTS - LRIP ⁽²⁾																																	
	9	2022	NAVY	27	0	27	3	4	5	5	5																				0		
	9	2023	NAVY	51	0	51	-	-	-	-	1	1	6	6	6	6	6	6	3	3	1									0			
5) AFATDS FoS																																	
5.2) Mobile Shelter Modernization (MTS)																																	
	10	2019	NAVY	44	44	0																											0
	10	2020	NAVY	45	45	0																											0
	10	2021	NAVY	3	3	0																											0
5.3) Mobile Shelter Modernization (MCV) ⁽⁹⁾																																	
	11	2022	NAVY	6	5	1	1																										0
	11	2023	NAVY	23	16	7	4	3																									0
							OC T	NO V	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16				P-1 Line Item Number / Title: 4733 / Fire Support System				Aggregated Items: Fire Support System				
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Northrop Grumman Systems Corporation - Apopka, FL	1	1	360	1	1	0	1	1	1	1	2
2	SAIC - Charleston, SC			TBD	0	1	0	1	0	0	0	0
3	Oshkosh Corp LLC - Oshkosh WI			TBD	0	0	6	6	0	0	6	6
"A" in the Delivery Schedule indicates the Contract Award Date. Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206625M, 0305208M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	720.395	58.887	61.860	182.894	0.000	182.894	196.136	123.205	83.757	82.700	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	720.395	58.887	61.860	182.894	0.000	182.894	196.136	123.205	83.757	82.700	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	720.395	58.887	61.860	182.894	0.000	182.894	196.136	123.205	83.757	82.700	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This budget line item includes Military Intelligence Program (MIP) funds for Marine Corps Intelligence capabilities necessary to support the employment of intelligence, reconnaissance, surveillance (ISR), and target acquisition resources integral to delivering decision advantage at the speed of operational relevance outlined in the 2018 National Defense Strategy and integral to Force Design 2030. This capability involves sensing the operational environment through a variety of systems, from satellites overhead to reconnaissance Marines on the ground.

COMMUNICATION EMITTER SENSING and ATTACKING SYSTEM (CESAS). This is a CMC Force Design program that addresses critical shortfalls in Electronic Warfare (EW) and disruptive, non-lethal capabilities appropriate for countering malign activity by actors pursuing maritime gray zone strategies. CESAS II FoS is the USMC high power, back-packable, team portable, and ground mobile electronic warfare asset employed by Radio Battalion trained Signals Intelligence Electronic Warfare (SIEW) operators capable of supporting EMS dominance against a peer threat. CESAS supports the MAGTF commander in the execution of EW operations and information operations, by detecting, denying, and disrupting hostile communication emitters across a broad range of communication frequencies. CESAS covers the high frequency (HF), very high frequency (VHF), and ultra-high frequency (UHF) frequency ranges against enemy emitters using modern modulation schemes. CESAS allows flexible employment to conduct EW while on the move or in a stationary position, thus optimizing the commander's ability to employ this asset for the greatest success of the mission. An increase to the CESAS II FoS Authorized Acquisition Objective (AAO) in support of Force Design 2030 initiatives equips SIEW Teams to the infantry battalion, and Radio Reconnaissance Teams (RRTs), Light Armored Vehicle - Electronic Warfare (LAV-EW), Marine Corps Forces Special Operations (MARSOC) and the Support Establishment with modern electronic warfare (EW) systems capable of countering peer threat systems. CESAS uses an incremental acquisition strategy, providing technical refresh for legacy systems as the systems become obsolete and/or require technology insertions to maintain pace with our adversaries. CESAS also includes Advanced Electronic Warfare Digital Payload (AEWDP), Spectrum Services Framework (SSF), and Constructive Electromagnetic Operational Environment System (CEMOES). AEWDP provides the MAGTF a modular, scalable, and transportable EW system able to exploit and disrupt enemy command and control, and intelligence surveillance reconnaissance in an anti-access/area denial environment using non- traditional attack vectors. SSF is a Services Oriented Framework enabling the Electromagnetic Operations Cell to perform its mission by providing a critical open backend framework for rapid development of software services and applications across real-time and historical Electromagnetic Spectrum (EMS) data to support mission planning and execution of Electromagnetic Spectrum Operations (EMSO) and Cyberspace Operations across the MAGTF's Operational Environment. CEMOES provides an organic, unit-employable capability that creates a realistic operational frequency environment for multiple occupational fields to perform full electromagnetic spectrum home station training.

INTEGRATED BROADCAST RADIO (IBR). This is a top CMC Force Design program. IBR is a family of terminals that provide direct, over-the-air access to the Integrated Broadcast Service (IBS) and receive and process near-real time (NRT) multi-intelligence data from strategic, theater, and tactical sensors to include: Theater Missile Defense indications and warnings, target tracks, and battlefield awareness information to the tactical user and long-range Fires platforms. IBR terminals conform to the Department of Defense (DoD) objectives of interoperability and commonality to receive and process multi-intelligence data. Able to operate receive-only for critical emissions control, IBR terminals adhere to the 38th Commandant's Planning Guidance and are essential to Force Design 2030 by providing the Marine Stand-In force with

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206625M, 0305208M
Line Item MDAP/MAIS Code: N/A		
low signature, tactical, and affordable capabilities that support Expeditionary Advanced Base Operations, and Distributed Maritime Operations in a fast paced, widely dispersed, peer-threat maritime operating environment. The IBR program is an evolving, multiservice architecture designed to keep pace with Commanders' targeting and information requirements, currently accomplished using the universal serial bus (USB) Embedded National Tactical Receiver (ENTR) version 2 (V2) and the ENTR version 4 (V4) which provides a 50% weight reduction and doubles the life expectancy of the battery compared to the USB ENTR V2. Additionally, IBR is instituting Primary, Alternate, Contingency, Emergency (PACE) Plan requirements identified in the Joint Requirements Oversight Counsel (JROC) approved IBS Enterprise Information Systems - Capability Development Document (IS-CDD). IBR terminals provide connectivity to IBS Common Interactive Broadcast and IBS Alternative Path via UHF satellite communications (SATCOM) channels. The IBR program is also planning a transmit capability to deliver USMC sensor data to the IBS. TACTICAL SIGNALS INTELLIGENCE (SIGINT) COLLECTION SYSTEM (TSCS): This is a CMC Force Design program. TSCS provides modular, lightweight, and team portable/body worn systems and components that provide signals intercept, collection, direction-finding (DF) precision geo-location, reporting and collection management capability in the Marine Air-Ground Task Force (MAGTF). TSCS contributes to the MAGTF's Intelligence, Surveillance, and Reconnaissance (ISR) capability, enables Electronic Warfare (EW), and lethal strike capabilities; and provides the disruptive and less-lethal capabilities appropriate for countering malign activity by actors pursuing maritime "gray zone" strategies that are incorporated in Marine Corps Force Design 2030. These capabilities enable Expeditionary Advanced Base Operations (EABO) by supporting operations to both locate and target advanced adversary communications technology. The TSCS Family of Systems (FoS) incorporates the Radio Reconnaissance Equipment Program (RREP) and Team Portable Collection Systems - Multi-Platform Capable (TPCS-MPC) programs into a single program, providing a modular and scalable suite of equipment that exploits information from more technically advanced target sets. Platform Integration Kits (PIK) allow Marines to utilize equipment from the TSCS FoS, on USMC tactical vehicles and the MV-22 to provide Precision Geolocation (PGL) capability which enables Marines to locate specific signal emitters with much higher levels of accuracy and enables precision targeting. The TSCS FoS has an incremental acquisition strategy, providing technical refresh for legacy TPCS-MPC and RREP systems as the systems become obsolete and/or require technology insertions to maintain pace with our adversaries. The prioritization of capabilities included in each increment is based on obsolescence and required capability upgrades against advanced target sets. Fluctuations within the funding profile are due to the refresh of different components each year. MARINE CORPS SENSITIVE COMPARTMENTED INFORMATION NETWORK (SCINet) is the Top Secret/Sensitive Compartmented Information (TS/SCI) portion of the Defense Information System Network and Intelligence Community (IC) Information Technology (IT) Enterprises. SCINet uses advanced networking technologies that permit point-to-point or multi-point information exchange involving voice, text, graphics, data, and video teleconferencing. The program enables Marine Corps intelligence to access national intelligence data, services and assets in support of current and future operations in both garrison and tactical environments (ashore and afloat). SCINet provides an SCI platform for data exchange of timely, current, and actionable intelligence from other services and agencies in support of Intelligence, Surveillance, Reconnaissance, and Targeting as well as maneuver and fires capabilities at all echelons. Connectivity through both SCINet and NSANet significantly enhance the detail, timeliness, and quality of intelligence support that intelligence organizations provide to Marine operating forces. SENSITIVE COMPARTMENTED INFORMATION (SCI) COMMUNICATIONS (SCI COMMS) is a Ultra-High Frequency, multi-band satellite communications Family of Systems (FoS), that provides a tactical communications capability at the Top Secret (TS)/SCI and Secret Collateral levels to USMC units in support of Intelligence Operations. The SCI COMMS FoS is the only deployable communications system that is dedicated for TS/SCI data, video and voice communications that can receive and transmit bulk data and imagery products to and from national and tactical intelligence sources. It supports Force Design 2030 by enabling a resilient, federated system of networks to ensure all elements can fight in a degraded command and control environment. The FoS consists of palletized, team level, and man-packable systems - High Bandwidth Special Intelligence- Palletized Terminal (HBSI-PT), Sensitive Compartmented Intelligence Kit (SCIK), and SCI Comms Mobility Pack (SCI Comms MP) - which provide USMC tactical commanders with high-capacity, near-real-time access to intelligence from national agencies, joint intelligence centers, coalition service activities, intelligence producers, and other tactical units via connectivity to Sensitive Compartmented Information Network (SCI NET), National Security Agency (NSA) Network, coalition networks, and Secret Internet Protocol Router Network (HBSI-PT only). TERRESTRIAL COLLECTION provides a tactical sensor Family of Systems (FoS) organic to the MAGTF ground and maritime reconnaissance elements to facilitate near-real time Persistent ISR (PISR) sensing to MAGTF decision makers and users. Sensors are networked to enable the sharing of standard data, support of Expeditionary Advanced Basing Operations, and information to support all Marine Corps warfighting functions (Command and Control, Intelligence, Operations, Protection, Fires, Maneuver, and Information) with targeting and battlespace awareness. An array of sensor delivery methods and a variety of sensor characteristics enable operational forces to sense in air, land, and maritime environments to determine threat location, disposition, movement and direction, all-weather multi-modal sensing, location determination, targeting, and tactical indications and warning of enemy activity, organic tactical digital imagery collection, transmission and receiving capability to the MAGTF Commander. The Terrestrial Collection Systems portfolio combined two legacy systems, the Tactical Remote Sensor System and MAGTF Secondary Imaginary Imagery Dissemination System (TRSS and MSIDS) into one program. Starting in FY 2021, the program focused on providing a next generation Family of Persistent Sensors Advanced Unattended Ground Sensors as the successor to the legacy TRSS program, with a potential Initial Operational Capability delivery in FY 2024. In FY 2023 funds related to GBOSS capability were realigned to Mobile All-Domain Observation and Sensing Systems (MA-DOSS).		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206625M, 0305208M
Line Item MDAP/MAIS Code: N/A		
MOBILE ALL-DOMAIN OBSERVATION AND SENSING SYSTEM (MA-DOSS) FoS provides persistent, all-domain sensing and surveillance support, tactical early warning, multi-domain intrusion-detection, and forward edge processing/computing of an AI/ML based computer vision capability to the FMF, at the Marine Littoral Regiment (MLR), down to any sized Marine element, in order to support the Naval Expeditionary Force (NEF) in the conduct of Sea Denial and Sea Control operations, and to enable force protection for expeditionary advanced bases (EABs), forward fixed sites, and installations. By providing mobile, expeditionary, amphibious, modular, multi-spectral, and persistent surveillance systems based on sensor agnostic unmanned platforms, the MA-DOSS FoS will provide the ability to observe, collect, detect, classify, identify, track, record, and report on contacts, objects of interest, and assess threats twenty-four hours a day utilizing a fused sensor data display while reducing manpower requirements and the cognitive workload on operators and analysts. MA-DOSS will employ advanced Human Machine Teaming (HMT) and leverage the force-multiplying capabilities of Artificial Intelligence/Machine Learning (AI/ML) to execute tasks that normally require human intelligence/interface. Additionally, increased mobility will be achieved with autonomous robotic platforms, thereby enhancing survivability of the primary system and stand-in forces operating inside adversary weapon engagement zones (WEX). Beginning FY 2023, funds related to GBOSS capability were realigned from Terrestrial Collection to Mobile All-Domain Observation and Sensing Systems (MA-DOSS). COUNTER INTELLIGENCE AND HUMAN INTELLIGENCE(CI/HUMINT) Equipment Program (CIHEP) provides the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISRE) with an integrated, standardized, and interoperable suite of information and communication systems. The CIHEP program provides specialized equipment that is lightweight, modular, and tailorable, in deployable packages to conduct full spectrum, tactical CI/HUMINT activities, to include technical operations. The technical side of CIHEP operations use techniques to detect, neutralize, and exploit hostile technical surveillance technologies and hazards that permit the unauthorized access to or removal of information. CI/HUMINT elements are generally task-organized in support of a MAGTF or other supported commanders, providing them the capability to rapidly collect, process, and disseminate counterintelligence and human intelligence information in support of military planning and operations. CIHEP is comprised of commercial and government off the-shelf equipment. Different components are selected for refresh each year to maintain current capabilities and ensure interoperability and standardization with related systems. This results in an equipment suite that enhances the operating force's CI/HUMINT capabilities, while maintaining interoperability within the USMC and joint CI/HUMINT communities. The modularity of the CIHEP program allows Marines to perform a variety of missions in support of commanders, while carrying only those items necessary to accomplish the mission. CIHEP provides state-of-the-art mission critical information protection capabilities, as well as the ability to detect, identify, and locate specific technical threats.		

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Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)					P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A				Other Related Program Elements: 0206625M, 0305208M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Intelligence Support Equipment	P-5a, P-21			- / 720.395	- / 58.887	- / 61.860	- / 182.894	- / -	- / 182.894
P-40	Total Gross/Weapon System Cost				- / 720.395	- / 58.887	- / 61.860	- / 182.894	- / 0.000	- / 182.894
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$182.894M

CESAS: \$55.847M will procure CESAS II FoS Core Systems, Back-Packable kits, Team Portable kits as well as Advanced Electronic Warfare Digital Payload (AEWDP) systems. In addition, FY 2023 PMC supports a tactical server upgrade for higher processing power to expand Artificial Intelligence/Machine Learning (AI/ML) capabilities, integrate tactical vehicle PIKs, and upgraded antennas as a part of the CESAS II FoS enhanced EW capability. The increase of \$20.075M from FY 2022 to FY 2023 provides funding for the procurement, fielding, and initial support of CESAS II FoS Force Design initiatives to equip SIEW Teams, Radio Reconnaissance Teams (RRTs), Light Armored Vehicle - Electronic Warfare (LAV-EW), Marine Corps Forces Special Operations (MARSOC) and Supporting Establishment with modern electronic warfare (EW) systems capable of countering peer C2 capability.

IBR: \$1.559M will initiate the procurement for the transmit capability. Increase of \$0.056M from FY 2022 to FY 2023 reflects the initial transmit procurement.

TSCS: \$58.668M will continue to procure TSCS Inc I, II and III AAO increases and initiates procurement of the Inc IV Tethered Antenna. The increase of \$52.084M from FY 2022 to FY 2023 supports the procurement of Force Design AAO and procurement of Inc IV Tethered Antenna. Inc I consists of core receivers, Inc II High Mobility Multipurpose Wheeled Vehicle (HMMWV) Platform Integration Kit (PIK), LAV PIK, General Purpose Antenna, Modular Case and Workstation Refresh. Inc III consists of Body Worn, Server Refresh, and Niche Antenna Kit. Inc IV consists of MV-22 Platform Integration Kit (PIK), Advanced Signal Processor (ASP), Precision Geolocation (PGL) and Tethered Antenna.

SCINET: \$7.935M will procure, field, and sustain servers, storage, voice, video, desktop services and network equipment based on operational needs throughout the Marine Corps Intelligence, Surveillance and Reconnaissance Enterprise (MCISRE) from the Fixed Site located at the Marine Corps Intelligence Activity (MCIA) Service Intelligence Center (SIC) for garrison and tactical requirements. Funding will provide technological refresh of SCI systems necessary to support the tactical SCI local area network and support reach-back interoperability. Funding will provide contractor engineering and integration support for hardware/software refresh of SCI systems. Decrease of \$6.058M from FY22 to FY23 reflects the congressional add in FY 2022 of \$5.551M in support of SCIF expansions and enhancements in support of planned SCIF increases across the MCIEE as well as the completion of the purchase of additional tactical SCINET end user devices that support the voice, video and data requirements necessary for comms connecting to the HBS(I)-PT and SCI-K Programs of Record.

SCI COMMS: \$12.729M reflects purchase of additional Mobility Pack (MP) systems for AAO increase in support Force Design, and modifications kits and upgrades for existing AAO. Increase of \$12.480M from FY 2022 to FY 2023 reflects the purchase of additional Mobility Pack (MP) systems for AAO increase in support Force Design, and modifications kits and upgrades for existing AAO.

Terrestrial Collection: \$14.891M will initiate procurement of AI/ML enabled advanced unattended ground sensor capability and provide a communication architecture to enable the near-real time sharing of sensor data. This modernization will provide modern persistent sensing capability and data interconnectivity across the Fleet in support of Force Design. Increase of \$14.003 from FY 2022 to FY 2023 supports procurement of AI/ML enabled advanced unattended ground sensor and communications equipment.

Mobile All-Domain Observation and Sensing System (MA-DOSS): \$23.870M supports procurement of Artificial Intelligence/Machine Learning enabled MA-DOSS Family of Systems which will provide object detection capabilities

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206625M, 0305208M
Line Item MDAP/MAIS Code: N/A		
resulting in decreased time required to conduct Indications and Warnings (I&W); funds will also procure systems and sensor packages to provide persistent, all-domain sensing and surveillance support, tactical early warning, multi domain intrusion-detection, and forward edge processing/computing of an AI/ML based computer vision capability to the Fleet Marine Force (FMF), at the Marine Littoral Regiment (MLR), down to any sized Marine element, in order to support the Naval Expeditionary Force (NEF) in the conduct of Sea Denial and Sea Control operations, and to enable force protection for expeditionary advanced bases (EABs), forward fixed sites, and installations. Increase of \$23.870M from FY 2022 to FY 2023 supports the procurement of systems and sensor packages to provide persistent, all-domain sensing and surveillance support, tactical early warning, multi-domain intrusion-detection, and forward edge processing/computing of an AI/ML based computer vision capability to the FMF, at the Marine Littoral Regiment (MLR), down to any sized Marine element. CIHEP: \$7.395M will continue the procurement of capability updates for the Technical Surveillance Countermeasures (TSCM) suites. These updates will address obsolescence resulting from emerging technology advancements. Increase of \$4.524M from FY 2022 to FY 2023 reflects initiation of Expeditionary Office Communications Module (EOCM) procurement schedule.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16						P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment									Aggregated Items Title: Intelligence Support Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware																				
1.1) Ground Electronic Attack System - Back-Packable ^{(1)(t)}	A		62,000.00	32	1.984	81,100.00	5	0.406	81,100.00	30	2.433	81,100.00	80	6.488	-	-	-	81,100.00	80	6.488
1.2) Ground Electronic Attack System - Core Systems ^{(2)(t)}	A		224,000.00	33	7.392	245,100.00	23	5.637	245,100.00	57	13.971	245,100.00	56	13.726	-	-	-	245,100.00	56	13.726
1.3) Ground Electronic Attack System - Team-Portable ^{(3)(t)}	A		-	-	-	170,000.00	24	4.080	170,000.00	24	4.080	170,000.00	34	5.780	-	-	-	170,000.00	34	5.780
1.4) Ground Electronic Attack System - Enhanced EW ⁽⁴⁾	A		-	-	-	-	-	-	-	-	14.098	-	-	20.031	-	-	-	-	-	20.031
1.5) Advanced Electronic Warfare Digital Payload (AEWDP) ⁽⁵⁾	A		-	-	-	-	-	-	-	-	-	-	-	7.782	-	-	-	-	-	7.782
Subtotal: 1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware			-	-	9.376	-	-	10.123	-	-	34.582	-	-	53.807	-	-	-	-	-	53.807
2) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Support																				
2.1) Fielding, Initial & Production Support ⁽⁶⁾			-	-	3.949	-	-	0.094	-	-	1.190	-	-	2.040	-	-	-	-	-	2.040
Subtotal: 2) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Support			-	-	3.949	-	-	0.094	-	-	1.190	-	-	2.040	-	-	-	-	-	2.040
3) Integrated Broadcast Radio (IBR) (122700) - Hardware																				
3.1) IBR ENTR Version 4 ^{(7)(t)}	A		34,669.35	248	8.598	33,219.00	20	0.664	34,215.00	23	0.787	-	-	-	-	-	-	-	-	-
3.2) IBR ENTR Version 4 Components and Accessories ⁽⁸⁾	A		-	-	2.948	-	-	0.124	-	-	0.233	-	-	-	-	-	-	-	-	-
3.3) IBR Transceiver ⁽⁹⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.331	-	-	-	-	-	0.331
Subtotal: 3) Integrated Broadcast Radio (IBR) (122700) - Hardware			-	-	11.546	-	-	0.788	-	-	1.020	-	-	0.331	-	-	-	-	-	0.331
4) Integrated Broadcast Radio (IBR) (122700) - Software																				
4.1) Software ⁽¹⁰⁾	A		-	-	0.040	-	-	-	-	-	-	-	-	0.745	-	-	-	-	-	0.745
Subtotal: 4) Integrated Broadcast Radio (IBR) (122700) - Software			-	-	0.040	-	-	-	-	-	-	-	-	0.745	-	-	-	-	-	0.745
5) Integrated Broadcast Radio (IBR) (122700) - Support																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16								P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment							Aggregated Items Title: Intelligence Support Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.1) Program Support IBR			-	-	6.731	-	-	0.706	-	-	0.483	-	-	0.483	-	-	-	-	-	0.483
Subtotal: 5) Integrated Broadcast Radio (IBR) (122700) - Support			-	-	6.731	-	-	0.706	-	-	0.483	-	-	0.483	-	-	-	-	-	0.483
6) Tactical SIGINT Collection System (TSCS) (120514) - Hardware																				
6.1) TSCS Increment 1 (11)	A		-	-	51.685	-	-	10.509	-	-	-	-	-	30.975	-	-	-	-	-	30.975
6.2) TSCS Increment 2 (12)	A		-	-	-	-	-	5.565	-	-	6.406	-	-	2.287	-	-	-	-	-	2.287
6.3) TSCS Increment 3 (13)	A		-	-	-	-	-	-	-	-	-	-	-	16.741	-	-	-	-	-	16.741
6.4) TSCS Increment 4 (14)	A		-	-	-	-	-	-	-	-	-	-	-	8.467	-	-	-	-	-	8.467
Subtotal: 6) Tactical SIGINT Collection System (TSCS) (120514) - Hardware			-	-	51.685	-	-	16.074	-	-	6.406	-	-	58.470	-	-	-	-	-	58.470
7) Tactical SIGINT Collection System (TSCS) (120514) - Support																				
7.1) Fielding and Initial Support (15)			-	-	1.857	-	-	0.236	-	-	0.178	-	-	0.198	-	-	-	-	-	0.198
Subtotal: 7) Tactical SIGINT Collection System (TSCS) (120514) - Support			-	-	1.857	-	-	0.236	-	-	0.178	-	-	0.198	-	-	-	-	-	0.198
8) SCINET (120206) - Hardware																				
8.1) Servers, Storage and Network equipment (16)	A		3,175K	6	19.049	-	-	3.550	-	-	10.029	-	-	3.974	-	-	-	-	-	3.974
Subtotal: 8) SCINET (120206) - Hardware			-	-	19.049	-	-	3.550	-	-	10.029	-	-	3.974	-	-	-	-	-	3.974
9) SCINET (120206) - Software																				
9.1) Software	A		-	-	17.125	-	-	0.103	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 9) SCINET (120206) - Software			-	-	17.125	-	-	0.103	-	-	-	-	-	-	-	-	-	-	-	-
10) SCINET (120206) - Support																				
10.1) Hardware & Software Integration			-	-	17.803	-	-	3.149	-	-	3.964	-	-	3.961	-	-	-	-	-	3.961
Subtotal: 10) SCINET (120206) - Support			-	-	17.803	-	-	3.149	-	-	3.964	-	-	3.961	-	-	-	-	-	3.961
11) Sensitive Compartmented Information Communications (SCI COMMS) (120398) - Hardware																				
11.1) Modification Kits & Upgrades (17)	A		-	-	2.229	-	-	1.224	-	-	-	-	-	3.124	-	-	-	-	-	3.124
11.2) Mobility Pack (formerly Man-	A		-	-	-	200,000.00	26	5.200	-	-	-	-	-	9.371	-	-	-	-	-	9.371

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Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16									P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment						Aggregated Items Title: Intelligence Support Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Packable) Systems (18)(†)																				
Subtotal: 11) Sensitive Compartmented Information Communications (SCI COMMS) (120398) - Hardware			-	-	2.229	-	-	6.424	-	-	-	-	-	12.495	-	-	-	-	-	12.495
12) SCI COMMS (120398) - Support																				
12.1) Fielding and Initial Support			-	-	5.031	-	-	0.245	-	-	0.249	-	-	0.234	-	-	-	-	-	0.234
Subtotal: 12) SCI COMMS (120398) - Support			-	-	5.031	-	-	0.245	-	-	0.249	-	-	0.234	-	-	-	-	-	0.234
13) Terrestrial Collection (121019) - Hardware																				
13.1) GBOSS Advanced Network Components	A		-	-	7.973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
13.2) Terrestrial Collection Ground Reconnaissance Communications	A		-	-	-	-	-	2.448	-	-	-	-	-	-	-	-	-	-	-	
13.3) Terrestrial Collection Sensors (19)	A		-	-	-	-	-	-	-	-	0.888	-	-	13.391	-	-	-	-	13.391	
13.4) Terrestrial Collection AI/ML (20)	A		-	-	-	-	-	-	-	-	-	-	-	1.500	-	-	-	-	1.500	
Subtotal: 13) Terrestrial Collection (121019) - Hardware			-	-	7.973	-	-	2.448	-	-	0.888	-	-	14.891	-	-	-	-	-	14.891
14) Mobile All-Domain Observation and Sensing System (MA-DOSS) (500308) Hardware																				
14.1) MA-DOSS Heavy (21)	A		-	-	-	-	-	-	-	-	-	-	-	23.870	-	-	-	-	23.870	
Subtotal: 14) Mobile All-Domain Observation and Sensing System (MA-DOSS) (500308) Hardware			-	-	0.000	-	-	-	-	-	-	-	-	23.870	-	-	-	-	-	23.870
15) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698) - H																				
15.1) CIHEP Technical Surveillance Countermeasures (TSCM) Components	A		-	-	22.008	-	-	3.263	-	-	-	-	-	-	-	-	-	-	-	
15.2) CIHEP Data Processing Module (DPM) Components	A		-	-	2.439	-	-	4.460	-	-	-	-	-	-	-	-	-	-	-	
15.3) CIHEP Commercial Satellite Comm Set (CSCS)	A		-	-	0.770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15.4) CIHEP Surveillance Kits	A		-	-	-	-	-	6.264	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16								P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment							Aggregated Items Title: Intelligence Support Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
15.5) CIHEP Counterintel (CI) Event Kit	A		-	-	-	-	-	0.960	-	-	-	-	-	-	-	-	-	-	-	-
15.6) CIHEP Commercial Handheld Satellite Comm Set (CHSCS) Refresh ⁽²²⁾	A		-	-	0.788	-	-	-	-	-	1.696	-	-	-	-	-	-	-	-	-
15.7) TSCM Capability Updates ⁽²³⁾	A		-	-	-	-	-	-	-	-	1.175	-	-	4.214	-	-	-	-	-	4.214
15.9) CIHEP Expeditionary Office Communications Module (EOCM) ⁽²⁴⁾	A		-	-	-	-	-	-	-	-	-	-	-	3.181	-	-	-	-	-	3.181
Subtotal: 15) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698) - H			-	-	26.005	-	-	14.947	-	-	2.871	-	-	7.395	-	-	-	-	-	7.395
16) Prior Years Cumulative Funding																				
16.1) Prior Years Cumulative Funding	A		-	-	539.996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 16) Prior Years Cumulative Funding			-	-	539.996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	720.395	-	-	58.887	-	-	61.860	-	-	182.894	-	-	-	-	-	182.894
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
(t) indicates the presence of a P-5a																				
Footnotes:																				
(1) CESAS Ground Electronic Attack System - Back-Packable: \$4.055M increase from FY22 to FY23 supports an increase to the CESAS II FoS Authorized Acquisition Objective (AAO) to equip SIEW Teams to the infantry battalion, and Radio Reconnaissance Teams (RRTs), Light Armored Vehicle - Electronic Warfare (LAV-EW), Marine Corps Forces Special Operations (MARSOC) and the Support Establishment with modern electronic warfare (EW) systems. Unit cost reflects accurate costs associated with contract awards for Back-Packable kits in FY21.																				
(2) CESAS Ground Electronic Attack System - Core Systems: \$0.245M decrease from FY22 to FY23 supports continued procurement of CESAS II FoS AAO to equip the SIEW Teams, Radio Reconnaissance Teams (RRTs), Signals Intelligence Support Teams (SSTs), Light Armored Vehicle - Electronic Warfare (LAV-EW), Marine Corps Forces Special Operations (MARSOC) and the Support Establishment with modern electronic warfare (EW) systems. Unit costs reflects accurate costs associated with contract awards for Core Systems in FY21.																				
(3) CESAS Ground Electronic Attack System - Team Portable: \$1.700M increase from FY22 to FY23 supports an increase to the CESAS II FoS AAO to equip SIEW Teams to the infantry battalion, and Radio Reconnaissance Teams (RRTs), Light Armored Vehicle - Electronic Warfare (LAV-EW), Marine Corps Forces Special Operations (MARSOC) and the Support Establishment with modern electronic warfare (EW) systems. Unit cost reflects costs associated with contract award for Team-Portable kits in FY21.																				
(4) CESAS Ground Electronic Attack System - Enhanced EW: \$5.933M increase from FY22 to FY23 supports procurement of tactical vehicle PIKs, tactical servers, and antennas to provide capability and capacity against peer threats by enabling ground mobile EW systems, forward data processing, integrating AI/ML to identify, characterize and prioritize targets, and maintaining required spectrum coverage in the EW battlespace.																				
(5) Advanced Electronic Warfare Digital Payload: \$7.782M increase from FY22 to FY23 initiates procurement of AEWDP systems to provide the MAGTF a modular, scalable, and transportable EW system able to exploit and disrupt enemy command and control, and intelligence surveillance reconnaissance in an anti-access/area denial environment using non-traditional attack vectors.																				
(6) CESAS Fielding, Initial & Production Support: Increase of \$0.850M from FY22 to FY23 supports continuation of production and fielding efforts for the CESAS II FoS for the increased Authorized Acquisition Objective (AAO) for the Back Packable, Core System, and Team Portable as well as initiation of production efforts for AEWDP, to include documentation, training, and integration efforts.																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16	P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment	Aggregated Items Title: Intelligence Support Equipment
(7) IBR ENTR Version 4: Decrease of \$0.787M from FY22 to FY23 reflects completion of the ENTR V4 procurement. (8) IBR ENTR Version 4 Components and Accessories: Decrease of \$0.233M from FY 2022 to FY2023 reflects completion of procurement of additional ENTR components and accessories in accordance with procrement strategy. (9) IBR Transceiver: Increase of \$0.331M from FY22 to FY23 reflects initial transceiver procurement. (10) IBR Software: Increase of \$0.745M from FY 2022 to FY 2023 reflects transmit capability software procurement. (11) TSCS Increment 1: Increase of \$30.975M from FY22 to FY23 reflects AAO increase to support Force Design modernization and enhancements. (12) TSCS Increment 2: Decrease of \$4.119M from FY22 to FY23 reflects reduced procurement of Increment II. (13) TSCS Increment 3: Increase of \$16.741M from FY 2022 to FY 2023 reflects initial procurement of Increment III components which consists of Body Worn, Server Refresh, and Niche Antenna Kit. (14) TSCS Increment 4: Increase of \$8.467M from FY22 to FY23 reflects procurement of Tethered Antenna in support of Force Design modernization and enhancements. (15) TSCS Fielding and Initial Support: \$0.020M increase from FY22 to FY23 reflects TSCS Increment II and Increment III fielding support. (16) SCINET: \$6.055M decrease from FY22 to FY23 reflects the Congressional add in FY22 of \$5.551M in support of SCIF expansions and enhancements in support of planned SCIF increases across the MCIEE as well as the completion of the purchase of additional tactical SCINet end user devices that support the voice, video and data requirements necessary for comms connecting to the HBS(I)-PT and SCI-K Programs of Record. (17) Increase of \$3.124M from FY 2022 to FY 2023 reflects the purchase of modification kits to upgrade the Mobility Pack (MP) AAO. (18) Increase of \$9.371M from FY 2022 to FY 2023 reflects the purchase of additional Mobility Pack (MP) systems for AAO increase in support of Force Design. (19) Terrestrial Collection Sensors: Increase of \$12.503 from FY22 to FY23 initiates procurement of advanced unattended ground sensor and communications equipment for Terrestrial Collection modernization. (20) Increase of \$1.500M from FY 2022 to FY 2023 initiates procurement of AI/ML capability for advanced unattended ground sensors for Terrestrial Collection modernization. (21) MA-DOSS FoS: Increase of \$23.870M from FY22 to FY23 reflects procurement of MA-DOSS FoS variants to provide persistent, all-domain sensing and surveillance support, tactical early warning, multi-domain intrusion-detection, and forward edge processing/computing of an AI/ML based computer vision capability to the FMF, at the Marine Littoral Regiment (MLR), down to any sized Marine element. (22) CIHEP Commercial Handheld Satellite Comm Set (CHSCS) Refresh: \$1.696M decrease from FY22 to FY23 reflects completion of the procurement of the CHSCS. (23) CIHEP TSCM Capability Updates: \$3.039M increase from FY22 to FY23 procures additional TSCM component updates. These updates will address obsolescence resulting from emerging technology advancements. (24) CIHEP Expeditionary Office Communications Module (EOCM) : \$3.181M increase from FY22 to FY23 initiates the procurement of the EOCM.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16				P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment					Aggregated Items: Intelligence Support Equipment			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware												
1.1) Ground Electronic Attack System - Back-Packable ^{(1)(f)}		2019	Advanced Computer Concepts / McLean VA	C / FFP	Charleston, SC	Sep 2019	Oct 2019	19	62,000.00	Y		Jul 2019
1.1) Ground Electronic Attack System - Back-Packable ^{(1)(f)}		2020	Advanced Computer Concepts / McLean VA	C / FFP	Charleston, SC	Jul 2020	Jan 2021	13	62,000.00	Y		May 2020
1.1) Ground Electronic Attack System - Back-Packable ^{(1)(f)}		2021	Advanced Computer Concepts / McLean VA	C / FFP	Charleston, SC	Apr 2021	Dec 2021	5	81,100.00	Y		Feb 2021
1.1) Ground Electronic Attack System - Back-Packable ^{(1)(f)}		2022	New MFG - Name / New MFG - Loc	TBD	Charleston, SC	Apr 2022	Apr 2022	30	81,100.00	Y		Apr 2022
1.1) Ground Electronic Attack System - Back-Packable ^{(1)(f)}		2023	New MFG - Name / New MFG - Loc	TBD	Charleston, SC	Jun 2023	Jun 2023	80	81,100.00	Y		Apr 2023
1.2) Ground Electronic Attack System - Core Systems ^{(2)(f)}		2019	Advanced Computer Concepts / McLean, VA	C / FFP	Charleston, SC	Sep 2019	Oct 2019	19	224,000.00	Y		Jul 2019
1.2) Ground Electronic Attack System - Core Systems ^{(2)(f)}		2020	Advanced Computer Concepts / McLean, VA	C / FFP	Charleston, SC	Jul 2020	Jan 2021	14	224,000.00	Y		May 2020
1.2) Ground Electronic Attack System - Core Systems ^{(2)(f)}		2021	Advanced Computer Concepts / McLean, VA	C / FFP	Charleston, SC	Apr 2021	Dec 2021	23	245,100.00	Y		Feb 2021
1.2) Ground Electronic Attack System - Core Systems ^{(2)(f)}		2022	New MFG - Name / New MFG - Loc	TBD	Charleston, SC	Apr 2022	Apr 2022	57	245,100.00	Y		Apr 2022
1.2) Ground Electronic Attack System - Core Systems ^{(2)(f)}		2023	New MFG - Name / New MFG - Loc	TBD	Charleston, SC	Jun 2023	Jun 2023	56	245,100.00	Y		Apr 2023
1.3) Ground Electronic Attack System - Team-Portable ^{(3)(f)}		2021	Advanced Computer Concepts / McLean VA	C / FFP	Charleston, SC	Aug 2021	Oct 2021	24	170,000.00	Y		Jul 2021
1.3) Ground Electronic Attack System - Team-Portable ^{(3)(f)}		2022	New MFG - Name / New MFG - Loc	TBD	Charleston, SC	Jul 2022	Aug 2023	24	170,000.00	Y		Jul 2022
1.3) Ground Electronic Attack System - Team-Portable ^{(3)(f)}		2023	New MFG - Name / New MFG - Loc	TBD	Charleston, SC	Jul 2023	Aug 2024	34	170,000.00	Y		Jul 2022
3) Integrated Broadcast Radio (IBR) (122700) - Hardware												
3.1) IBR ENTR Version 4 ⁽⁷⁾		2018	Army Special Projects Office / Alexandria, VA	MIPR	Alexandria	Dec 2017	Mar 2019	100	38,000.00	Y		Oct 2017
3.1) IBR ENTR Version 4 ⁽⁷⁾		2019	Army Special Projects Office / Alexandria, VA	MIPR	Alexandria	Dec 2018	Mar 2020	52	31,620.00	Y		Oct 2018
3.1) IBR ENTR Version 4 ⁽⁷⁾		2020	Army Special Projects Office / Alexandria, VA	MIPR	Alexandria	Dec 2019	Mar 2021	86	32,252.00	Y		Oct 2019
3.1) IBR ENTR Version 4 ⁽⁷⁾		2021	Army Special Projects Office / Alexandria, VA	MIPR	Alexandria	Dec 2020	Mar 2022	20	33,219.00	Y		Oct 2020

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16				P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment					Aggregated Items: Intelligence Support Equipment			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3.1) IBR ENTR Version 4 ⁽⁷⁾		2022	Army Special Projects Office / Alexandria, VA	MIPR	Alexandria, VA	Dec 2021	Mar 2023	23	34,215.00	Y		Oct 2021
11) Sensitive Compartmented Information Communications (SCI COMMS) (120398) - Hardware												
11.2) Mobility Pack (formerly Man- Packable) Systems ⁽¹⁸⁾		2021	L3 Technologies / Victor, NY	C / CPFF	MCSC	Aug 2021	Feb 2022	26	200,000.00	Y		Jun 2020
^(†) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2023 Navy															Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment										Aggregated Items: Intelligence Support Equipment									

Items <i>(Units in Each)</i>							Fiscal Year 2018												Fiscal Year 2019												BALANCE			
OCO#	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT				Calendar Year 2018									Calendar Year 2019															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware																																		
1.1) Ground Electronic Attack System - Back-Packable ⁽¹⁾																																		
	12	2019	NAVY	19	0	19																											A -	19
	12	2020	NAVY	13	0	13																												13
	14	2021	NAVY	5	0	5																												5
	13	2022	NAVY	30	0	30																												30
	13	2023	NAVY	80	0	80																												80
1.2) Ground Electronic Attack System - Core Systems ⁽²⁾																																		
	15	2019	NAVY	19	0	19																											A -	19
	15	2020	NAVY	14	0	14																												14
	16	2021	NAVY	23	0	23																												23
	17	2022	NAVY	57	0	57																												57
	17	2023	NAVY	56	0	56																												56
1.3) Ground Electronic Attack System - Team-Portable ⁽³⁾																																		
	19	2021	NAVY	24	0	24																												24
	18	2022	NAVY	24	0	24																												24
	18	2023	NAVY	34	0	34																												34
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment													Aggregated Items: Intelligence Support Equipment																	
Items <i>(Units in Each)</i>							Fiscal Year 2020													Fiscal Year 2021													BALANCE							
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020													Calendar Year 2021																				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										
1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware																																								
1.1) Ground Electronic Attack System - Back-Packable ⁽¹⁾																																								
	12	2019	NAVY		19	0	19	19																										0						
	12	2020	NAVY		13	0	13											A	-	-	-	-	-	-	13								0							
	14	2021	NAVY		5	0	5																			A	-	-	-	-	-	-								5
	13	2022	NAVY		30	0	30																													30				
	13	2023	NAVY		80	0	80																													80				
1.2) Ground Electronic Attack System - Core Systems ⁽²⁾																																								
	15	2019	NAVY		19	0	19	19																										0						
	15	2020	NAVY		14	0	14											A	-	-	-	-	-	-	14								0							
	16	2021	NAVY		23	0	23																			A	-	-	-	-	-	-								23
	17	2022	NAVY		57	0	57																													57				
	17	2023	NAVY		56	0	56																													56				
1.3) Ground Electronic Attack System - Team-Portable ⁽³⁾																																								
	19	2021	NAVY		24	0	24																					A	-	-								24		
	18	2022	NAVY		24	0	24																													24				
	18	2023	NAVY		34	0	34																													34				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022																						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment													Aggregated Items: Intelligence Support Equipment																						
Items <i>(Units in Each)</i>							Fiscal Year 2022												Fiscal Year 2023												BALANCE														
OCO#	MFR#	FY	SERVICE	PROC	QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023																									
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP													
1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware																																													
1.1) Ground Electronic Attack System - Back-Packable ⁽¹⁾																																													
	12	2019	NAVY		19	19	0																										0												
	12	2020	NAVY		13	13	0																										0												
	14	2021	NAVY		5	0	5	-	-	5																							0												
	13	2022	NAVY		30	0	30													A30																0									
	13	2023	NAVY		80	0	80																							A80											0				
1.2) Ground Electronic Attack System - Core Systems ⁽²⁾																																													
	15	2019	NAVY		19	19	0																										0												
	15	2020	NAVY		14	14	0																										0												
	16	2021	NAVY		23	0	23	-	-	23																							0												
	17	2022	NAVY		57	0	57													A57																0									
	17	2023	NAVY		56	0	56																							A56											0				
1.3) Ground Electronic Attack System - Team-Portable ⁽³⁾																																													
	19	2021	NAVY		24	0	24	24																									0												
	18	2022	NAVY		24	0	24													A -	-	-	-	-	-	-	-	-	-	-	-	-	24	0											
	18	2023	NAVY		34	0	34																									A -	-	-											34
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP															

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Exhibit P-21, Production Schedule: PB 2023 Navy																									Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment															Aggregated Items: Intelligence Support Equipment										
Items <i>(Units in Each)</i>							Fiscal Year 2024													Fiscal Year 2025													B A L A N C E		
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024													Calendar Year 2025															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
1) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware																																			
1.1) Ground Electronic Attack System - Back-Packable ⁽¹⁾																																			
	12	2019	NAVY		19	19	0																												0
	12	2020	NAVY		13	13	0																												0
	14	2021	NAVY		5	5	0																												0
	13	2022	NAVY		30	30	0																												0
	13	2023	NAVY		80	80	0																												0
1.2) Ground Electronic Attack System - Core Systems ⁽²⁾																																			
	15	2019	NAVY		19	19	0																												0
	15	2020	NAVY		14	14	0																												0
	16	2021	NAVY		23	23	0																												0
	17	2022	NAVY		57	57	0																												0
	17	2023	NAVY		56	56	0																												0
1.3) Ground Electronic Attack System - Team-Portable ⁽³⁾																																			
	19	2021	NAVY		24	24	0																												0
	18	2022	NAVY		24	24	0																												0
	18	2023	NAVY		34	0	34	-	-	-	-	-	-	-	-	-	34		O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16					P-1 Line Item Number / Title: 4747 / Intelligence Support Equipment				Aggregated Items: Intelligence Support Equipment			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Advanced Computer Concepts - McLean VA			TBD	0	0	1	1	0	0	6	6
2	New MFG - Name - New MFG - Loc			TBD	0	0	0	0	0	0	0	0
3	Advanced Computer Concepts - McLean VA			TBD	0	0	1	1	0	0	8	8
4	Advanced Computer Concepts - McLean, VA			TBD	0	0	1	1	0	0	6	6
5	Advanced Computer Concepts - McLean,VA			TBD	0	0	18	18	0	0	8	8
6	New MFG - Name - New MFG - Loc			TBD	0	0	0	0	0	0	0	0
7	New MFG - Name - New MFG - Loc			TBD	0	0	13	13	0	0	13	13
8	Advanced Computer Concepts - McLean VA			TBD	0	0	2	2	0	0	8	8
"A" in the Delivery Schedule indicates the Contract Award Date. Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							P-1 Line Item Number / Title: 4757 / Unmanned Air Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0305232M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	159.724	20.889	24.299	47.595	0.000	47.595	92.273	63.793	65.962	98.190	26.718	599.443
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	159.724	20.889	24.299	47.595	0.000	47.595	92.273	63.793	65.962	98.190	26.718	599.443
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	159.724	20.889	24.299	47.595	0.000	47.595	92.273	63.793	65.962	98.190	26.718	599.443
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Description: Family of Small Unmanned Aircraft Systems (FoSUAS) (formerly Small Unit Remote Scouting System (SURSS)) - This is a Commandant of the Marine Corps (CMC) Force Design program. The FoSUAS program provides small unmanned aircraft systems (SUAS) for battalion/company/detachment level units with scalable airborne Reconnaissance, Surveillance and Target Acquisition (RSTA) capabilities to aid in detecting, identifying, engaging, and/or avoiding enemy units. SUAS meet validated operational requirements delineated in the Operational Requirements Document (ORD), Vertical Take Off and Landing (VTOL) Rapid Acquisition Top Level Requirements (TLR), and Long Range/Long Endurance (LR/ LE) TLR. The FoSUAS program also supports several Universal Urgent Needs Statements (U-UNS). The ORD and TLRs are in transition to a new Capability Development Document (CDD) that incorporates all existing requirements as well as allows for unique mission kits, mission payloads, air vehicle enhancements, modifications of SUAS and related Ground Control Stations (GCS). FoSUAS consist of Short Range/Short Endurance (SR/SE), Medium Range/Medium Endurance (MR/ME), and LR/LE systems. LR/LE is a SUAS less than 55 pounds in weight, with 20-50 km range and endurance up to 6 hours. LR/LE provides organic capabilities to battalion level units to satisfy Ground Combat Element (GCE) RSTA needs. LR/LE SUAS are currently deployed to conduct multi-sensor Reconnaissance, Surveillance and Target Acquisition (RTSA) operations for Marine Forces Special Operations Command (MARSOC) and support Marine Corps fires and maneuver elements. SR/SE is a SUAS less than 10 pounds in weight, with 5-10 km range and endurance up to 50 minutes. SR/SE systems address the need for situational awareness in urban and challenging terrain environments and reduce request-to- response timeframes for RSTA coverage. MR/ME is a SUAS less than 20 pounds in weight, with 10-20 km range and endurance up to 4 hours. MR/ME provides an organic, persistent RSTA capability to company level units, Route Clearance Platoons (RCP) and Combat Logistics Patrols (CLP) to enhance force protection, detect Improvised Explosive Devices (IEDs), laser targeting/marketing/range finding, and communication relay.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4757 / Unmanned Air Systems				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0305232M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / RQ-11 UAV	P-5a, P-21			- / 159.724	- / 20.889	- / 24.299	- / 47.595	- / 0.000	- / 47.595
P-40	Total Gross/Weapon System Cost				- / 159.724	- / 20.889	- / 24.299	- / 47.595	- / 0.000	- / 47.595
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$47.595M

The \$47.595M request in FY 2023 includes \$13.346M to procure SR/SE capabilities and \$34.249M to procure LR/LE capabilities. FY 2022 to FY 2023 increase of \$23.296M is directly correlated to the Force Design prioritization of "high-endurance, long-range unmanned systems."

The FY23 funding request includes increased quantities of LR/LE systems to align with Intel Payloads delivery schedules, as the SUAS LR/LE platform is the primary enabler to Organic Precision Fires and the deployment of those capabilities intended for integrated use in Indo-Pacific Command and other theaters of operation. This increase directly supports Distributed Maritime Operations as well as the related concepts of Littoral Operations in a Contested Environment and Expeditionary Advance Base Operations. Fluctuations in unit cost are due to differences in the Type/Model/Series of SUAS platforms being procured.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16						P-1 Line Item Number / Title: 4757 / Unmanned Air Systems							Item Number / Title [DODIC]: 1 / RQ-11 UAV								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				159.724			20.889			24.299			47.595			0.000			47.595		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				159.724			20.889			24.299			47.595			0.000			47.595		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				159.724			20.889			24.299			47.595			0.000			47.595		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Hardware - RQ-11 UAV Cost																					
Recurring Cost																					
1.1.1) Medium Range/ Medium Endurance (MR/ME) ^{(†) (1)}	512,528.74	87	44.590	154,545.00	77	11.900	170,365.85	41	6.985	-	-	-	-	-	-	-	-	-			
1.1.2) Long Range/ Long Endurance (LR/ LE) ^{(†) (2)}	-	-	-	-	-	-	2,460K	4	9.840	2,854K	12	34.249	-	-	-	2,854K	12	34.249			
1.1.3) Short Range/ Short Endurance (SR/ SE) ^{(†) (3)}	97,811.59	69	6.749	56,534.59	159	8.989	63,338.98	118	7.474	94,652.48	141	13.346	-	-	-	94,652.48	141	13.346			
1.1.4) Vertical Takeoff and Landing (VTOL) System	162,157.14	70	11.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.5) Single Operator Man Portable Ground Control Station (SOMGCS/THS)	16,351.65	91	1.488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.6) PUMA SIGINT Payloads	74,250.00	4	0.297	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.7) Laser Marker	75,500.00	40	3.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.8) WASP IV Components	-	-	3.185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.9) PUMA Components	-	-	14.018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16						P-1 Line Item Number / Title: 4757 / Unmanned Air Systems						Item Number / Title [DODIC]: 1 / RQ-11 UAV						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1.1.10) Prior Year Cumulative Funding	-	-	75.026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	159.724	-	-	20.889	-	-	24.299	-	-	47.595	-	-	-	-	-	47.595
Subtotal: Hardware - RQ-11 UAV Cost	-	-	159.724	-	-	20.889	-	-	24.299	-	-	47.595	-	-	-	-	-	47.595
Gross/Weapon System Cost	-	-	159.724	-	-	20.889	-	-	24.299	-	-	47.595	-	-	0.000	-	-	47.595

(t) indicates the presence of a P-5a

Footnotes:

- (1) The FY22 to FY23 decrease of \$6.985 is due to planned shift of procurement of LR/LE and SR/SE platforms for this year.
- (2) The FY22 to FY23 increase of \$24.409M is due to costs associated with standards compliance efforts, anticipated configuration changes and inflation. Fluctuations in unit cost are due to differences in the Type/Model/Series of SUAS platforms being procured this year.
- (3) The FY22 to FY23 increase of \$5.872M is due to fluctuation in SR/SE average unit cost per year and is a result of the quantity mix of systems procured. Fluctuations in unit cost are due to differences in the Type/Model/Series of SUAS platforms being procured this year.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16			P-1 Line Item Number / Title: 4757 / Unmanned Air Systems					Item Number / Title [DODIC]: 1 / RQ-11 UAV				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Medium Range/Medium Endurance (MR/ME) ^(†)		2021	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Apr 2021	Oct 2021	77	154,545.00	Y		Feb 2021
1.1.1) Medium Range/Medium Endurance (MR/ME) ^(†)		2022	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Apr 2022	Oct 2022	41	170,365.85	Y		Feb 2022
1.1.2) Long Range/Long Endurance (LR/LE) ^(†)		2022	Various ⁽⁴⁾ / Various	C / IDIQ	DLA Troop Support, Philadlphia, PA	Apr 2022	Dec 2022	4	2,460K	Y		Nov 2021
1.1.2) Long Range/Long Endurance (LR/LE) ^(†)		2023	Various ⁽⁴⁾ / Various	C / IDIQ	DLA Troop Support, Philadlphia, PA	Dec 2022	Aug 2023	12	2,854K	Y		Oct 2022
1.1.3) Short Range/Short Endurance (SR/SE) ^(†)		2020	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Feb 2021	Aug 2021	59	56,534.59	Y		Dec 2020
1.1.3) Short Range/Short Endurance (SR/SE) ^(†)		2021	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Feb 2021	Aug 2021	159	56,534.59	Y		Dec 2020
1.1.3) Short Range/Short Endurance (SR/SE) ^(†)		2022	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Feb 2022	Aug 2022	118	63,338.98	Y		Dec 2021
1.1.3) Short Range/Short Endurance (SR/SE) ^(†)		2023	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Dec 2022	Jun 2023	141	94,652.48	Y		Oct 2022
^(†) indicates the presence of a P-21												
Footnotes:												
⁽⁴⁾ Maximum production based on 3 systems per month as identified by OEM.												

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Exhibit P-21, Production Schedule: PB 2023 Navy																					Date: April 2022																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4757 / Unmanned Air Systems										Item Number / Title [DODIC]: 1 / RQ-11 UAV																		
Cost Elements (Units in Each)							Fiscal Year 2021										Fiscal Year 2022										BALANCE											
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022																					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP							
1.1.1) Medium Range/Medium Endurance (MR/ME) ⁽¹⁾																																						
Prior Years Deliveries: 87																																						
	1	2021	NAVY	77	0	77						A -	-	-	-	-	-	13	13	13	13	13	12						0									
	1	2022	NAVY	41	0	41																A -	-	-	-	-	-	-	-	-	-	-	-	-	41			
1.1.2) Long Range/Long Endurance (LR/LE) ⁽²⁾																																						
	2	2022	NAVY	4	0	4																A -	-	-	-	-	-	-	-	-	-	-	-	-	4			
	2	2023	NAVY	12	0	12																										12						
1.1.3) Short Range/Short Endurance (SR/SE) ⁽³⁾																																						
Prior Years Deliveries: 10																																						
	3	2020	NAVY	59	0	59						A -	-	-	-	-	-	-	59														0					
	3	2021	NAVY	159	0	159						A -	-	-	-	-	-	-	26	26	26	26	26	29											0			
	3	2022	NAVY	118	0	118																					A -	-	-	-	-	-	-	-	-	20	20	78
	3	2023	NAVY	141	0	141																															141	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16										P-1 Line Item Number / Title: 4757 / Unmanned Air Systems													Item Number / Title [DODIC]: 1 / RQ-11 UAV										
Cost Elements (Units in Each)							Fiscal Year 2023													Fiscal Year 2024													BALANCE
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023													Calendar Year 2024													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.1) Medium Range/Medium Endurance (MR/ME) ⁽¹⁾																																	
Prior Years Deliveries: 87																																	
	1	2021	NAVY	77	77	0																											0
	1	2022	NAVY	41	0	41	10	10	10	11																							0
1.1.2) Long Range/Long Endurance (LR/LE) ⁽²⁾																																	
	2	2022	NAVY	4	0	4	-	-	1	1	1	1																				0	
	2	2023	NAVY	12	0	12	A -		-	-	-	-	-	-	-	3	3	3	3													0	
1.1.3) Short Range/Short Endurance (SR/SE) ⁽³⁾																																	
Prior Years Deliveries: 10																																	
	3	2020	NAVY	59	59	0																											0
	3	2021	NAVY	159	159	0																											0
	3	2022	NAVY	118	40	78	20	20	20	18																							0
	3	2023	NAVY	141	0	141	A -		-	-	-	-	-	24	24	24	24	24	21													0	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16				P-1 Line Item Number / Title: 4757 / Unmanned Air Systems					Item Number / Title [DODIC]: 1 / RQ-11 UAV		

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Various - Various	6	168	168	0	2	6	8	0	2	6	8
2	Various ⁽⁴⁾ - Various	1	36	36	0	2	8	10	0	2	8	10
3	Various - Various	6	168	168	0	2	6	8	0	2	6	8

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽⁴⁾ Maximum production based on 3 systems per month as identified by OEM.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4767 / Distributed Common Ground System (DCGS-MC)						
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: 0505208M, 0206625M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	105.796	37.510	28.633	47.998	0.000	47.998	55.603	52.910	46.652	42.974	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	105.796	37.510	28.633	47.998	0.000	47.998	55.603	52.910	46.652	42.974	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	105.796	37.510	28.633	47.998	0.000	47.998	55.603	52.910	46.652	42.974	Continuing	Continuing
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	0.002	0.002	0.002	Continuing	Continuing
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description: This is a Military Intelligence Program (MIP) program element.												
DISTRIBUTED COMMON GROUND SYSTEM-MARINE CORPS (DCGS-MC). DCGS-MC is a critical Commandant of the Marine Corps (CMC) Force Design program that provides access to and transport of sensor information, along with the core intelligence processing, analysis, production, and dissemination tools to make sense of the operational environment. These capabilities, deployed with Marine Corps organizations, are integral to enabling decision advantage at the speed of operational relevance as outlined in the 2019 Commandant's Planning Guidance. DCGS-MC complies with the DoD DCGS Enterprise interoperability and information sharing requirements necessary for processing, exploitation, analysis, and production capabilities via consolidated functional server and workstation baselines within the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISRE). Through these supported baselines, MCISRE analysts deliver tactically focused, operational, and strategic intelligence at the tactical edge throughout all phases of operations to provide relevant, precise decision support for Joint Task Force (JTF), Naval Force, Marine Air-Ground Task Force (MAGTF), and subordinate Marine units in support of Expeditionary Advanced Base Operations (EABO) and Distributed Maritime Operations (DMO).												
Modernization and efforts are focused on advanced multi-domain information environment tools, and technologies that enable superior awareness of the battlespace. From the MCISRE to Naval Operations Architecture, DCGS-MC achieves information advantage and the rapid weaponization of data to support enhancements of kill webs by streamlining information exchanges, federating track and sensor data for rapid analysis and exploitation, and increasing accessibility of information across all domains. Current programmatic efforts support a service-oriented architecture and migration to common hardware and software solutions to take advantage of commonality in computer administration functions, training and cybersecurity procedures.												
The functional capabilities are grouped by DCGS-MC Geospatial Intelligence (GEOINT), DCGS-MC All Source, and DCGS-MC Signals Intelligence (SIGINT). Future capabilities will be delivered via clearly defined capability drops determined by an integrated assessment of user needs, technology readiness, risk mitigation, and affordability.												
DCGS-MC GEOINT provides geo-referenced data, products and services that establishes the foundation and a common frame of reference to support the Commander's decision-making process. It provides the ability to rapidly respond to or predict threats around the world by providing near real time geospatially referenced data and products that serve as an authoritative data source (ADS) for the full spectrum of the MAGTF, joint, and coalition operations. DCGS-MC GEOINT includes the processing, exploitation, analysis and production of imagery, geospatial, weather and space information to describe, assess and visually depict physical and nonphysical features, atmospheric conditions and geographically referenced activities on the earth. DCGS-MC GEOINT enables mission accomplishment across all domains from National to Tactical and with all mission partners. DCGS-MC GEOINT consists of the recently fielded Common GEOINT Workstation (CGW) and Common GEOINT Server Applications (CGSA); which incorporates capabilities formerly provided by the legacy Tactical Exploitation Group, Topographic Production Capability, Virtual Imagery Processing - Marine Corps, and Target Materials Production systems, into												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		P-1 Line Item Number / Title: 4767 / Distributed Common Ground System (DCGS-MC)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0505208M, 0206625M
Line Item MDAP/MAIS Code: N/A		
a single baseline for optimized capability and functionality. These efforts also provide the foundation for integrating Project Maven AI/ML capabilities into a Program of Record baseline. DCGS-MC GEOINT is a secure, multi-level, integrated, tactical data system that provides Marine analysts with the capability to task, collect, process, analyze, exploit, produce, store, disseminate, and expose GEOINT data and products. DCGS-MC GEOINT is the analytic toolset employed by Imagery and Geospatial analysts at the Marine Corps Intelligence Battalions, Marine Corps Intelligence Activity and Marine Corps Forces (MARFORs) and supports all echelons of operations.		
DCGS-MC All Source is the Marine Corps Intelligence Specialists' primary advanced analytics toolset at all echelons of the Marine Air-Ground Task Force (MAGTF). DCGS-MC All Source facilitates global collaboration with Marine and joint analytical systems, enabling Marines to conduct all-source fusion, analysis, and production of intelligence by automating multiple intelligence functions and processes. In accordance with the 38th CPG and Force Design 2030, DCGS-MC All Source investment in advanced decision support tools that leverage data science and artificial intelligence for the tactical commander. These capabilities include the display of current enemy situation, collection requirements, asset management, message parsing, and database updates. DCGS-MC All Source automatically logs intelligence activities into a journal and provides access to intelligence produced by tactical, theater, and national systems and agencies. It facilitates the dissemination and exchange of intelligence and information with other echelons through tactical local area networks and wide area networks from the Marine Expeditionary Force (MEF) garrison facility down to the infantry company level. DCGS-MC All Source incorporates server-based capabilities formally provided by the Intelligence Analysis System (IAS) (Tier I and Tier II), Topographic Production Capability, Virtual Imagery Processing - Marine Corps, and Enterprise DCGS Integrated Backbone (DIB) Services (EDS) into a single Marine Corps Common Intelligence Server (MCCIS) baseline. DCGS-MC All Source provides multi-intelligence fusion, analysis, and dissemination of intelligence from the Marine Expeditionary Force (MEF) down to the Company level. The Common Intelligence Server is employed at MEF Intelligence Battalions, Marine Corps Intelligence Activity, Regiment, and Division Levels. The Common Intelligence Workstation is employed to Battalion and Company Levels.		
DCGS-MC SIGINT fuses and analyzes SIGINT data from tactical, theater, and national collectors and databases for dissemination to tactical commanders. It automatically collects, stores, retrieves and plays back digital audio signals and provides SIGINT analysis applications to deployable MAGTF units that direct and manage the technical and operational functions of Radio Battalion (RadBn) SIGINT and electronic warfare (EW) assets. Additionally, DCGS-MC SIGINT supports long range precision fires by providing a focal point for national, theater, and tactical data networks for data exchange with tactical SIGINT/EW assets, DCGS-MC All Source and national databases. It enables the transfer of tactical SIGINT collection and analytical data into the Real-Time Regional Gateway (RT-RG) and produces Enterprise Federation enabled products for discovery by any DCGS enabled Marine. The system provides ground processing of Electronic Warfare (EW) information including EW Support and Electronic Attack (EA) data collected by the RadBn and JSF aircraft. The Cross Domain Solution enables the DCGS-MC SIGINT to transfer approved and sanitized file types from Top Secret/Sensitive Compartmented Information (TS/SCI) networks (e.g., SCINET/NSAnet) to Marine Corps Enterprise Network-SIPR (MCEN-S) networks for delivery to Tactical Commanders. DCGS-MC SIGINT consists of the Technical Control Analysis Center (TCAC) Remote Analysis Workstation (RAWS), the Transportable Workstation (TWS), the TCAC General Services (GENSER) and the Cross Domain Solution (CDS), and is the focal point of RadBn, Marine Corps Forces Special Operations Command (MARFORSOC), and Joint Strike Fighter (JSF) Signal Intelligence (SIGINT) operations. Beginning in FY23, DCGS-MC SIGINT also includes the Maritime Targeting Cell - Expeditionary (MTC-X), for which details are held at a higher classification level.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4767 / Distributed Common Ground System (DCGS-MC)				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0505208M, 0206625M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Distributed Common Ground Surface System (DCGS)				- / 105.796	- / 37.510	- / 28.633	- / 47.998	- / 0.000	- / 47.998
P-40	Total Gross/Weapon System Cost				- / 105.796	- / 37.510	- / 28.633	- / 47.998	- / 0.000	- / 47.998
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY2023 Base Appropriation Request: \$47.998M DCGS-MC GEOINT: \$24.236M will support GEOINT procurement of peripherals and software in support of the modernized survey hardware and the Full Motion Video (FMV) Processing Exploitation and Dissemination (PED) site infrastructure updates. GEOINT peripherals include hardware (such as antennas, printers, monitors, and survey equipment), along with software, that receive information required by the GEOINT analyst to produce time-critical data and products. The modernized survey capability will support USMC Force Design 2030 and the execution of Expeditionary Advance Base Operations (EABO) as part of a greater Distributed Maritime Operations. Additionally, funding will support expansion of Geospatial Analytic Artificial Intelligence / Machine Learning (AI/ML) modules and Intelligence capabilities in the cloud. This will enable the analyst to expedite the processing and analysis of geospatial data to improve battlespace awareness and speed up the targeting cycle. Increase from FY2022 to FY2023 of \$8.473M reflects the hardware peripherals and software procurements in support of the modernized survey hardware, the FMV PED site infrastructure updates, and increased capability for Geospatial operations. DCGS-MC ALL SOURCE: \$10.712M will support the procurement of the Cloud Capability Transition, workstations, and servers for the additional / realigned Intelligence Structure in support of Force Design, the software licenses and products required for all domain integration/visualization, and the support required for the fielding of Common Intelligence Workstation (CIW) refresh. This will enable improved access, integration, and utilization of Intel databases, and reporting on Sensitive Compartmented Information Network (SCINet), increased awareness, more efficient utilization, and collection requirements/operations management, and ability to access/sharing of intelligence data, databases, and tools across multiple security domains. Decrease from FY2022 to FY2023 of \$0.313M reflects reduction of activities related to the cloud capability transition. DCGS-MC SIGINT: \$13.050M will support the procurement of workstations, and servers for the additional / realigned Intelligence Structure in support of Force Design, and procurement of classified capability for the Maritime Targeting Cell - Expeditionary (MTC-X). MTC-X Details are held at a higher classification. Additionally, funding will support the procurement of the hardware refresh and software for the Remote Analysis Workstation (RAWS). The RAWS will allow a Marine to retain the advantage over near-peer adversaries to conduct analysis of signals collected and create intelligence products for dissemination to commanders in support of time sensitive decision-making. Increase from FY2022 to FY2023 of \$11.205M reflects the procurement of workstations, and servers in support of Force Design, initial procurement of MTC-X, and the RAWS hardware refresh.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16						P-1 Line Item Number / Title: 4767 / Distributed Common Ground System (DCGS-MC)						Item Number / Title [DODIC]: 1 / Distributed Common Ground Surface System (DCGS)						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				105.796		37.510		28.633		47.998		0.000		47.998				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				105.796		37.510		28.633		47.998		0.000		47.998				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				105.796		37.510		28.633		47.998		0.000		47.998				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		0.000		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
1.1.1) DCGS-MC GEOINT: H/W ⁽¹⁾	-	-	33.116	-	-	16.075	-	-	9.906	-	-	8.713	-	-	-	-	-	8.713
1.1.2) DCGS-MC GEOINT: Peripheral refresh ⁽²⁾	-	-	2.066	-	-	-	-	-	3.211	-	-	8.977	-	-	-	-	-	8.977
1.1.3) DCGS-MC All Source: H/W ⁽³⁾	-	-	4.407	-	-	5.389	-	-	-	-	-	2.758	-	-	-	-	-	2.758
1.1.4) DCGS-MC All Source: Common Intel Workstation ⁽⁴⁾	-	-	-	-	-	-	-	-	5.343	-	-	-	-	-	-	-	-	-
1.1.5) DCGS-MC All Source Cloud Capability Transition ⁽⁵⁾	-	-	-	-	-	-	-	-	5.162	-	-	3.500	-	-	-	-	-	3.500
1.1.6) DCGS-MC SIGINT: Transportable Work Station (TWS)	-	-	3.050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.7) DCGS-MC SIGINT: Cross Domain Solution (CDS)	-	-	-	-	-	3.949	-	-	-	-	-	-	-	-	-	-	-	-
1.1.8) DCGS-MC SIGINT: TCAC Future	-	-	-	-	-	-	-	-	1.295	-	-	0.673	-	-	-	-	-	0.673

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16							P-1 Line Item Number / Title: 4767 / Distributed Common Ground System (DCGS-MC)						Item Number / Title [DODIC]: 1 / Distributed Common Ground Surface System (DCGS)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Capability and TCAC G ⁽⁶⁾																		
1.1.9) DCGS-MC SIGINT: Remote Analyst Work Station (RAWS) ⁽⁷⁾	-	-	-	-	-	-	-	-	-	-	-	2.527	-	-	-	-	-	2.527
1.1.10) DCGS-MC SIGINT: MTC-X ⁽⁸⁾	-	-	-	-	-	-	-	-	-	-	-	9.000	-	-	-	-	-	9.000
1.1.11) Prior Year Funding Total	-	-	23.097	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	65.736	-	-	25.413	-	-	24.917	-	-	36.148	-	-	-	-	-	36.148
Subtotal: Hardware Cost	-	-	65.736	-	-	25.413	-	-	24.917	-	-	36.148	-	-	-	-	-	36.148
Software Cost																		
Recurring Cost																		
2.1.1) DCGS-MC GEOINT: Software ⁽⁹⁾	-	-	5.877	-	-	3.896	-	-	1.016	-	-	4.500	-	-	-	-	-	4.500
2.1.2) DCGS-MC All Source: Software ⁽¹⁰⁾	-	-	1.321	-	-	2.327	-	-	-	-	-	1.689	-	-	-	-	-	1.689
2.1.3) DCGS-MC All Source (FITE): Software ⁽¹¹⁾	-	-	-	-	-	-	-	-	-	-	-	2.200	-	-	-	-	-	2.200
2.1.4) DCGS-MC SIGINT: Software ⁽¹²⁾	-	-	-	-	-	-	-	-	-	-	-	0.750	-	-	-	-	-	0.750
2.1.5) Prior Years Funding Total	-	-	7.351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	14.549	-	-	6.223	-	-	1.016	-	-	9.139	-	-	-	-	-	9.139
Subtotal: Software Cost	-	-	14.549	-	-	6.223	-	-	1.016	-	-	9.139	-	-	-	-	-	9.139
Support Cost																		
3.1) DCGS-MC GEOINT: Support ⁽¹³⁾	-	-	7.001	-	-	3.600	-	-	1.630	-	-	2.046	-	-	-	-	-	2.046
3.2) DCGS-MC All Source: Support ⁽¹⁴⁾	-	-	2.042	-	-	0.512	-	-	0.520	-	-	0.565	-	-	-	-	-	0.565
3.3) DCGS-MC SIGINT: Support ⁽¹⁵⁾	-	-	1.226	-	-	1.762	-	-	0.550	-	-	0.100	-	-	-	-	-	0.100
3.4) Prior Years Funding Total	-	-	15.242	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	25.511	-	-	5.874	-	-	2.700	-	-	2.711	-	-	-	-	-	2.711

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Exhibit P-5, Cost Analysis: PB 2023 Navy										Date: April 2022																			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16					P-1 Line Item Number / Title: 4767 / Distributed Common Ground System (DCGS-MC)										Item Number / Title [DODIC]: 1 / Distributed Common Ground Surface System (DCGS)														
ID Code (A=Service Ready, B=Not Service Ready) :															MDAP/MAIS Code:														

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	105.796	-	-	37.510	-	-	28.633	-	-	47.998	-	-	0.000	-	-	47.998

Footnotes:

- (1) DCGS-MC GEOINT H/W: Decrease from FY 2202 to FY 2023 of \$1.193M reflects the completion of Common Data Link antenna refresh peripheral procurement.
- (2) DCGS-MC GEOINT Peripheral refresh: Increase from FY 2022 to FY 2023 of \$5.766M reflects the procurement of peripherals in support of the modernized survey hardware and the Full Motion Video (FMV) Processing Exploitation and Dissemination (PED) site infrastructure updates.
- (3) DCGS-MC All Source H/W: Increase from FY 2022 to FY 2023 of \$2.758M reflects the procurement of the workstations and servers for the additional / realigned Intelligence Structure in support of Force Design.
- (4) DCGS-MC All Source Common Intel Workstation: Decrease from FY 2022 to FY 2023 of \$5.343M reflects the completion of the procurement of the Common Intelligence Workstation (CIW) refresh.
- (5) DCGS-MC All Source Cloud Capability Transition: Decrease from FY 2022 to FY 2023 of \$1.662M reflects reduction of activities related to the transition of Intelligence Analysis capability into a secure cloud environment. The initial transition will begin in FY2022 with the Marine Corps Common All Source Server Applications.
- (6) DCGS-MC SIGINT TCAC Future Capability and TCAC G: Decrease from FY 2022 to FY 2023 of \$0.622M reflects the completion of TCAC Future Capability (on the network system) procurement.
- (7) DCGS-MC SIGINT Remote Analyst Work Station (RAWS): Increase of FY 2022 to FY 2023 of \$2.527M reflects procurement of the RAWS.
- (8) DCGS-MC SIGINT MTC-X increase of \$9.000M from FY 2022 to FY 2023. Details are held at a higher classification.
- (9) DCGS-MC GEOINT Software: Increase from FY 2022 to FY 2023 of \$3.484M reflects software procurements in support of the modernized survey hardware, the Full Motion Video (FMV) Processing Exploitation and Dissemination (PED) site infrastructure updates, and increased capability for Geospatial operations.
- (10) DCGS-MC All Source Software: Increase from FY 2022 to FY 2023 of \$1.689M reflects the procurement of software products for improvements and enhancements to facilitate increased awareness, more efficient utilization, and access/sharing of intelligence data.
- (11) DCGS-MC All Source (FITE) Software: Increase from FY 2022 to FY 2023 of \$2.200M reflects the procurement of the software licenses and products required for the All Domain Integration & Visualization, and Collections Management Operations Suite in support of the Family of Integrated Targeting and Exploitation (FITE).
- (12) DCGS-MC SIGINT Software: Increase from FY 2022 to FY 2023 of \$0.750M reflects software procurement in support of Remote Analysis Workstation (RAWS) refresh.
- (13) DCGS-MC GEOINT Support: Increase from FY 2022 to FY 2023 of \$0.416M reflects the fielding activities associated with the Common Data Link (CDL) Antenna Refresh, modernized survey hardware and the Full Motion Video (FMV) Processing Exploitation and Dissemination (PED) site infrastructure updates.
- (14) DCGS-MC All Source Support: Increase from FY 2022 to FY 2023 of \$0.045M reflects the fielding activities associated with the Common Intelligence Workstation (CIW) refresh.
- (15) DCGS-MC SIGINT Support: Decrease from FY 2022 to FY 2023 of \$0.450M reflects completion of the Cross Domain Solution (CDS) fielding support.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							P-1 Line Item Number / Title: 4787 / UAS Payloads					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0305242M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	36.479	5.489	3.074	8.619	0.000	8.619	7.205	7.187	7.823	7.143	-	83.019
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	36.479	5.489	3.074	8.619	0.000	8.619	7.205	7.187	7.823	7.143	-	83.019
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	36.479	5.489	3.074	8.619	0.000	8.619	7.205	7.187	7.823	7.143	-	83.019
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Unmanned Aerial Systems (UAS) Sensor Payload program is a Marine Corps Force Design program and supports the Pacific Deterrence Initiative (PDI). It provides the capability to develop, integrate, field, and sustain Intelligence, Surveillance and Reconnaissance (ISR) payloads and enabling technologies for Group 1-3 aerial platforms in the USMC Family of UAS. It will provide capability to integrate and support rapid fielding of ISR payloads and enabling technologies for UAS within the Marine Corps, including procuring payload interfaces that will be more agile and can be utilized by multiple payloads across multiple airframes. In support of Force Design 2030 initiative, tactical UAS ISR is primarily focused on Marine Littoral Regiments (MLR) and on Marine Expeditionary Units (MEU) to enhance their ability to operate within an operating environment characterized by Great Power Competition.

In support of Force Design 2030 requirements, UAS sensor payloads provide modular, low-cost aerial sensing technologies to achieve the Maritime Domain Awareness required by MLRs and MEUs in support of the Joint Forces Maritime Component Command (JFMCC). Within the context of Maritime Domain Operations, Marine forces executing Expeditionary Advanced Base Operations (EABO) require the organic capability to establish and maintain awareness of potential adversary activities in communications degraded or denied environments. UAS Payloads enable sensing of threat indicators across the electromagnetic spectrum and within the visual and radar spectrum, with reduced signature, and minimized risk to personnel. The incorporation of advanced technology enablers such as artificial intelligence/machine learning (AI/ML) and precision geolocation provide automated recognition, identification, tracking, advanced networks, advanced communications, and cross-cueing in support of accelerated battlespace awareness and targeting. As an essential element of the kill chain, UAS payloads are critical to the JFMCC targeting process to find, fix, track, target, engage, and assess the effects of lethal and non-lethal fires. Employment of UAS payloads on platforms distributed across the MLRs and MEUs during EABO allows for greater distribution of forces while maintaining persistent awareness, enhances the security of tactical units and personnel moving across the battlespace, and enables the rapid transition between positions necessary for force survivability. The program is integrating the following ISR payload capabilities.

Signals Intelligence Electronic Support (SIGINT/ES) - Payloads to locate Signals of Interest (SOI) aligned to adversary forces, criminal elements, and local threats for force protection.

Wide Area Maritime Target Detection (WAMTD) - Systems that use advanced imaging techniques to provide images of areas/targets of interest. These may include high-resolution systems for detailed images, or Wide Area Surveillance (WAS) systems that use multiple cameras or other image techniques to observe a wide area simultaneously. WAMTD will also provide object detection, Classification, Identification, tracking, and cueing of other system to enhance battlespace awareness and targeting.

Synthetic Aperture Radar (SAR) with Moving Target Indicator (MTI) - Locate and track ground and maritime targets as part of a broad sensor mesh that is tied directly to the targeting cycle. The ability to locate and tracking moving targets from small tactical UAVs is an essential capability in the widely dispersed, peer contested, high threat maritime operating environment envisioned in the Commandant Marine Corps

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		P-1 Line Item Number / Title: 4787 / UAS Payloads
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0305242M
Line Item MDAP/MAIS Code: N/A (CMC) planning guidance and Force Design requirements. Updates will continue to be made to the SAR/MTI capability, including the ability to send data through a Cross Domain Solution (CDS). The CDS will also be modified for receipt of data. Wide Area Surveillance (WAS)/Wide Area Motion Imagery (WAMI) - Imaging over wide areas (multiple square kilometers, city size area) at varying spatial and temporal resolution at substantial stand-off distances using various sensor modalities, with full motion video (FMV) access, picture in picture user defined watch boxes, and ability to cue other ISR sensors to specific target geolocations. Ability to monitor and disseminate processed imagery data and static full field of view or user defined watch box imagery and disseminate to ground-based disadvantaged users. Artificial Intelligence/Machine Learning (AI/ML) - This effort will place advanced target recognition and tracking processors on tactical UAS to perform object detection, classification, and identification of targets of interest in the data stream in real time at the tactical edge. Communication Relay Payloads (CRP)/Mobile Ad-hoc Networks (MANET) - Provides extended communications and data relay, utilizing radios such as the AN/PRC-117G and the ANW2 waveform. MANET provides Marine Corps ground units an organic airborne communication relay which allows the transmission of mission critical intelligence over vast maritime areas. Novel Sensors - Provide novel sensors such as laser, magnetic, gravity, acoustic, and other sensor modalities as the warfighter requires. Modular Payload Interface - Provides aircraft interface for payloads designed to the platform-agnostic Mod payload standard. Cross Domain Solution - Provides ability to pass platform and payload data from unclassified to classified networks.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						P-1 Line Item Number / Title: 4787 / UAS Payloads				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0305242M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / UAS Payloads	P-5a			- / 36.479	- / 5.489	- / 3.074	- / 8.619	- / 0.000	- / 8.619
P-40	Total Gross/Weapon System Cost				- / 36.479	- / 5.489	- / 3.074	- / 8.619	- / 0.000	- / 8.619
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$8.619M \$8.619M will fund continued modifications and procurements of ISR payloads (SIGINT/ES; MANET; WAMTD; AI/ML; Mod Payload Interface; Cross Domain Solution (CDS); Nonrecurring Engineering for AI/ML and SRA; and Gov't engineering and logistics support for the SIGINT/ES, CRP/MANET, WAMTD, and AI/ML assets procured in FY 2023). UAS Payloads investments increase of \$5.545M from FY 2022 to FY 2023 to align with Force Design 2030 investment increases in Group 2 Long Range/Long Endurance (LR/LE) Tactical UAS platforms. These investments directly support the Maritime Force's conduct of Distributed Maritime Operations and meet Force Design 2030 (FD2030) and CMC planning guidance. FY 2023 funding is required to fulfill LR/LE Payloads capabilities requirements as set forth by USMC per the approved Top Level Requirement Letter (TLR), the CMC's planning guidance, and in support of Force Design 2030. FY 2023 funding increase is directly correlated to the USMC prioritization of Group 2 LR/LE as a key element in fulfillment of CMC planning guidance and FD2030 initiatives. This funding supports procurement of payloads capabilities required to fully meet the Group 2 LR/LE operational needs. Group 2 LR/LE systems procurement is scheduled to begin in FY 2022; FY 2023 funding request is aligned with the planned delivery and fielding schedules for those systems. The FY 2023 funding request was adjusted by \$0.500M to account for the availability of prior year execution balances.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16						P-1 Line Item Number / Title: 4787 / UAS Payloads							Item Number / Title [DODIC]: 1 / UAS Payloads					
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				36.479		5.489		3.074		8.619		0.000		8.619				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				36.479		5.489		3.074		8.619		0.000		8.619				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				36.479		5.489		3.074		8.619		0.000		8.619				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Hardware Cost																		
Recurring Cost																		
1.1.1) UAS - SIGINT/ES	-	-	2.712	78,500.00	2	0.157	127,400.00	5	0.637	102,000.00	15	1.530	-	-	-	102,000.00	15	1.530
1.1.2) UAS - Mobile Ad-Hoc Network (MANET) ⁽¹⁾	-	-	0.653	-	-	-	-	-	-	51,000.00	15	0.765	-	-	-	51,000.00	15	0.765
1.1.3) Wide Area Maritime Target Detection (WAMTD) ^(†) ⁽²⁾	-	-	-	-	-	-	-	-	-	102,000.00	5	0.510	-	-	-	102,000.00	5	0.510
1.1.4) AI/ML ^(†) ⁽³⁾	-	-	-	19,416.67	12	0.233	-	-	-	20,808.00	15	0.312	-	-	-	20,808.00	15	0.312
1.1.5) SIGINT Block 0	-	-	2.971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.6) SIGINT Block 1	-	-	4.247	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.7) SAR/MTI Payload Block 0 ^(†)	-	-	4.646	440,000.00	3	1.320	-	-	-	-	-	-	-	-	-	-	-	-
1.1.8) Project Minotaur	-	-	11.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.9) ISR Transfer Funds	-	-	9.750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.10) Modular Payload Interface ^(†) ⁽⁴⁾	-	-	-	183,000.00	2	0.366	183,000.00	5	0.915	186,660.00	15	2.800	-	-	-	186,660.00	15	2.800
1.1.11) Cross Domain Solution (CDS) ^(†) ⁽⁵⁾	-	-	-	-	-	-	-	-	-	30,000.00	15	0.450	-	-	-	30,000.00	15	0.450
Subtotal: Recurring Cost	-	-	36.479	-	-	2.076	-	-	1.552	-	-	6.367	-	-	-	-	-	6.367

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16							P-1 Line Item Number / Title: 4787 / UAS Payloads						Item Number / Title [DODIC]: 1 / UAS Payloads					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Non Recurring Cost																		
1.2.1) NonRecurring Engineering ⁽⁶⁾	-	-	-	-	-	2.355	-	-	0.470	-	-	1.360	-	-	-	-	-	1.360
Subtotal: Non Recurring Cost	-	-	-	-	-	2.355	-	-	0.470	-	-	1.360	-	-	-	-	-	1.360
Subtotal: Hardware Cost	-	-	36.479	-	-	4.431	-	-	2.022	-	-	7.727	-	-	-	-	-	7.727
Support Cost																		
2.1) Support ⁽⁷⁾	-	-	-	-	-	1.058	-	-	1.052	-	-	0.892	-	-	-	-	-	0.892
Subtotal: Support Cost	-	-	-	-	-	1.058	-	-	1.052	-	-	0.892	-	-	-	-	-	0.892
Gross/Weapon System Cost	-	-	36.479	-	-	5.489	-	-	3.074	-	-	8.619	-	-	0.000	-	-	8.619

^(t) indicates the presence of a P-5a

Footnotes:

- ⁽¹⁾ Increase from FY22 to FY23 of \$0.765M due to platform capability requirements.
- ⁽²⁾ Increase from FY22 to FY23 of \$0.510M is due to requirements and quantities varying each year depending on platform capability requirements. Cost element renamed from Enhanced EO/VIDAR to Wide Area Maritime Target Detection in order to reflect possible future incorporation of both electro-optic and infrared cameras in the solution.
- ⁽³⁾ Increase from FY22 to FY23 of \$0.312M is due to platform capability requirements.
- ⁽⁴⁾ Increase from FY22 to FY23 of \$1.885M is due to the requirement to integrate the capability into the Long Range Long Endurance Platform. Aligns with the number of platforms supported by payload purchases. One interface is required for each platform that will be equipped.
- ⁽⁵⁾ Increase from FY22 to FY23 of \$0.450M is due to efficiencies gained through USDI assets utilized in FY22. FY23 will procure CDS for ground station for the LR/LRE platforms.
- ⁽⁶⁾ Increase from FY22 to FY23 of \$0.890M is due to required support for research, design, development, and testing of payload enhancements and capabilities to meet the mission needs of Group 1-3 UAS. FY23 includes support for procurement of a SIGINT/ES, WAMTD, AI/ML, and TIPS needed for air vehicle performance, structures, weight and balance, overland and maritime operations.
- ⁽⁷⁾ Decrease from FY22 to FY23 of \$0.160M supports requirements for standing up procurement efforts, including engineering and logistics support for payload procurement.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 16			P-1 Line Item Number / Title: 4787 / UAS Payloads						Item Number / Title [DODIC]: 1 / UAS Payloads			
Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.3) Wide Area Maritime Target Detection (WAMTD)		2023	TBD / TBD	C / TBD	TBD	Feb 2023	Aug 2023	5	102,000.00	Y		
1.1.4) AI/ML		2021	Johns Hopkins University Applied Physics Laboratory / Laurel, MD	C / CPFF	Alexandria, VA	Jun 2021	Jul 2022	12	19,416.67	Y		
1.1.4) AI/ML		2023	TBD / TBD	C / TBD	TBD	Feb 2023	Feb 2023	15	20,808.00	Y		
1.1.7) SAR/MTI Payload Block 0		2021	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Nov 2021	Nov 2021	3	440,000.00	Y		
1.1.10) Modular Payload Interface		2021	Various / Various	C / IDIQ	DLA Troop Support, Philadelphia, PA	Jan 2022	Jan 2023	2	183,000.00	Y		
1.1.10) Modular Payload Interface		2022	Various / Various	C / TBD	** NO PCO **	Oct 2021	Oct 2021	5	183,000.00	N		
1.1.10) Modular Payload Interface		2023	Lockheed Martin / TBD	C / TBD	TBD	Jan 2023	Jul 2023	15	186,660.00	Y		
1.1.11) Cross Domain Solution (CDS)		2023	TBD / TBD	C / TBD	TBD	Dec 2023	Aug 2024	15	30,000.00	Y		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0208550M, 0505550M, 0206313M, 0206312M, 0310110M, 0370110M, 0360110M, 0330110M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	518.125	73.612	90.974	276.763	0.000	276.763	249.671	284.200	266.629	225.497	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	518.125	73.612	90.974	276.763	0.000	276.763	249.671	284.200	266.629	225.497	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	518.125	73.612	90.974	276.763	0.000	276.763	249.671	284.200	266.629	225.497	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Marine Corps Enterprise Network (MCEN) Beginning in FY 2023, Secure Operational Network Infrastructure & Communications, Marine Corps Enterprise IT Services, and Marine Corps Common Hardware (all previously in LI 4630), as well as Base Telecommunications Infrastructure (previously in LI 4635), were consolidated with Next Generation Enterprise Network (LI 4625), and LI 4625 was renamed to Marine Corps Enterprise Network. This was done in order to consolidate Marine Corps IT investments to provide transparency, reduce the appearance of duplication, and reduce interdependencies between lines. This will enable the Marine Corps to achieve the objectives that were established in the Network Modernization Plan and it aligns to the Technology Business Framework (TBM) model to provide clarity and transparency in both budgeting and execution of funding. Funding from these programs has been realigned to the four following efforts. Enterprise IT Network Infrastructure provides the equipment to provide network and voice connectivity to the core networks (e.g. Defense Information Systems Network - DISN), between installations, to buildings, access within buildings, and to remote locations. This includes physical and wireless connectivity of the Local Area Network (LAN) and Wide Area Network (WAN). The program also provides the resources that enable and distribute voice networking through on premise equipment. This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the above details. Enterprise IT Security & Compliance provides resources related to IT security compliance and disaster recovery. This includes resources to set policy, establish processes & means, measure compliance, meet relevant legal/compliance requirements (e.g. Data Privacy, multi-factor authentication, etc.), and respond to security breaches and provide real-time operational security measures such as vulnerability scanning, management of firewalls, and intrusion prevention systems. In addition, this program provides resources to set disaster recovery policy, establishing processes & means, and performing disaster recovery testing (note: this does not include resources for disaster relief facility or servers for disaster relief facilities). Enterprise IT End User Devices and Services provides the resources to procure, operate, manage, refresh, sustain and administer end user devices. End user devices include workspace devices (physical desktops, laptops, ruggedized laptops or desktops, and thin or zero client machines), mobile devices (tablets, ruggedized tablets, 2-in-1 devices, and smartphones), network printers, virtual desktops and network conferencing devices. This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the above details.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0208550M, 0505550M, 0206313M, 0206312M, 0310110M, 0370110M, 0360110M, 0330110M
Line Item MDAP/MAIS Code: N/A		
Enterprise IT Compute and Storage provides the standardized enterprise service stacks to replace the obsolete hardware at the Marine Corps Enterprise Data and application sites, on/ off-premise and performing optimization assessments to reduce equipment that is no longer needed. The enterprise computing devices include physical and virtual servers along with Mainframe computers. The program also provides storage capability in the form of online/offline storage to support archiving, backup, and recovery capabilities.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy			Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A		Other Related Program Elements: 0208550M, 0505550M, 0206313M, 0206312M, 0310110M, 0370110M, 0360110M, 0330110M

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Marine Corps Enterprise Network (MCEN)				- / 0.000	- / -	- / -	- / 276.762	- / -	- / 276.762
P-40a	Next Generation Enterprise Network (NGEN)	P-5a, P-21			- / 518.125	- / 73.612	- / 90.974	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost				- / 518.125	- / 73.612	- / 90.974	- / 276.763	- / 0.000	- / 276.763

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Beginning in FY 2023, Secure Operational Network Infrastructure & Communications, Marine Corps Enterprise IT Services, and Marine Corps Common Hardware (all previously in LI 4630), as well as Base Telecommunications Infrastructure (previously in LI 4635), were consolidated with Next Generation Enterprise Network (LI 4625), and LI 4625 was renamed Marine Corps Enterprise Network. This was done in order to consolidate Marine Corps IT investments to provide transparency, reduce the appearance of duplication, and reduce interdependencies between lines. This will enable the Marine Corps to achieve the objectives that were established in the Network Modernization Plan and it aligns to the Technology Business Framework (TBM) model directed by OMB Circular A-11 to provide clarity and transparency in both budgeting and execution of funding. Each new Cost Element (CE) has been mapped to their related PB22 Cost Elements.

FY 2023 request of \$276.762M for MCEN resources are critical to Force Design 2030 Initial Operational Capability (IOC) and a key enabler for the Marine Corps Network Modernization Plan that funds the single global warfighting network for the Marine Corps. Investments in FY 2023 simultaneously increase operational readiness and reduce cyber vulnerabilities throughout the MCEN. If not fully funded, the MCEN will continue to remain vulnerable to cyber-attacks from Nation-States and third party actors along with other cyber vulnerabilities, resulting in end users being isolated from the network and inefficiencies across the workforce and the tactical edge. Additionally, a secure and modern network is foundational for enabling cloud migration, machine learning and artificial intelligence initiatives that are a critical component of Force Design 2030.

Enterprise IT Network Infrastructure: \$140.679M in FY 2023 provides for the refresh and modernization of voice networking, Network Transport, and Tactical Entry Point requirements for planned bases, such as but not limited to: MCAGCC 29 Palms, MCLB Barstow, MCAS Iwakuni, MCLB Albany, Camp Mujuk or MCAS Miramar. Along with supporting Guam and Okinawa IT installation efforts to support the standup of new locations. Funding includes support for Voice Networking (which supports voice modernization and refresh efforts across the MCEN), Network Transport (to refresh, upgrade and standardize the MCEN architecture by streamlining transport communications), Tactical Entry Point (TEP) (which will enable the procurement of TEP sites, as an enabling component of the Deployed MCEN concept, providing tactical users reach-back access), and Defense Policy Review Initiative Equipment (DPRI) (which will support DPRI Guam with the procurement, installation, and accreditation of Information Technology (IT) systems.

Enterprise IT Security & Compliance: \$31.819M in FY 2023 provides for the MCEN Management & Security cyber capabilities. Ensuring the integrity, protection and proper use of the enterprise technology systems and data. Security & Compliance modernization efforts will increase reliability, automation, and threat vulnerability responsiveness for autonomous network operation, monitoring, and defense capabilities, supporting operations and management decisions in a zero-trust environment. These capabilities and services meet modernization requirements for Force Design 2030 and compliance with policy. Funding includes support for Security Solutions (which supports a full range of applications that will provide security-oriented outputs and outcomes), Monitoring and Detection (supporting capabilities that enable monitoring and detection capabilities that run independently without active input or management), and Threat and Vulnerability (for tools that monitor, track, assess risks, and mitigate identified threats and vulnerabilities).

Enterprise IT End User Devices and Services: \$92.044M in FY 2023 reduces cyber vulnerabilities and increases operational readiness throughout the FMF and supporting establishment using the MCEN-N and S. This annual tech refresh is also critical for replacing machines that are incompatible with the DOD mandated transition to the Windows 11 operating system. If not refreshed it will result in technology obsolescence requiring EUDs to be removed from the network, negatively impacting operational readiness and FD 2030 IOC. Funding support End User Devices (EUD) (providing the USMC with compatibility

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0208550M, 0505550M, 0206313M, 0206312M, 0310110M, 0370110M, 0360110M, 0330110M
Line Item MDAP/MAIS Code: N/A		
upgrades required for mandated Windows 11 compliance by FY 2024 and continuing the technology refresh and sustainment cycle in accordance with OMB Memo M-16-02), and DPRI Equipment (continues the technology refresh and sustainment cycle in accordance with OMB Memo M-16-02). Enterprise IT Compute and Storage: \$12.220M in FY 2023 provide for the refresh of standardized Enterprise Service Stacks to replace the end-of-life hardware at the Marine Corps Enterprise Data and application sites and perform optimization assessments to reduce equipment that is no longer needed. Funds Compute (provides for modernization of the servers across the non-classified side of the MCEN), Storage (provides persistent data on remote, network attached storage devices in order to make applications more responsive and the data sets more manageable), and Data Center Components (provides for an enterprise on/off-premises application modernization of the host systems and applications). The FY 2023 funding request was adjusted by \$2.139M to account for the availability of prior year execution balances.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)									Aggregated Items Title: Marine Corps Enterprise Network (MCEN)					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
1) Enterprise IT Network Infrastructure																					
1.1) Voice Networking ⁽¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	15.328	-	-	-	-	-	15.328	
1.2) Network Transport ⁽²⁾	A		-	-	-	-	-	-	-	-	-	-	-	71.739	-	-	-	-	-	71.739	
1.3) Tactical Entry Point ⁽³⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.750	-	-	-	-	-	0.750	
1.4) Defense Policy Review Initiative (DPRI) ⁽⁴⁾	A		-	-	-	-	-	-	-	-	-	-	-	52.862	-	-	-	-	-	52.862	
Subtotal: 1) Enterprise IT Network Infrastructure			-	-	0.000	-	-	-	-	-	-	-	-	140.679	-	-	-	-	-	140.679	
2) Enterprise IT Security and Compliance																					
2.1) Security Solutions ⁽⁵⁾	A		-	-	-	-	-	-	-	-	-	-	-	9.670	-	-	-	-	-	9.670	
2.2) Monitoring and Detection ⁽⁶⁾	A		-	-	-	-	-	-	-	-	-	-	-	17.036	-	-	-	-	-	17.036	
2.3) Threat and Vulnerability ⁽⁷⁾	A		-	-	-	-	-	-	-	-	-	-	-	5.113	-	-	-	-	-	5.113	
Subtotal: 2) Enterprise IT Security and Compliance			-	-	0.000	-	-	-	-	-	-	-	-	31.819	-	-	-	-	-	31.819	
3) Enterprise IT End User Devices and Services																					
3.1) End User Devices (EUDs) ⁽⁸⁾	A		-	-	-	-	-	-	-	-	-	-	-	91.794	-	-	-	-	-	91.794	
3.2) Defense Policy Review Initiative ⁽⁹⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.250	-	-	-	-	-	0.250	
Subtotal: 3) Enterprise IT End User Devices and Services			-	-	0.000	-	-	-	-	-	-	-	-	92.044	-	-	-	-	-	92.044	
4) Enterprise IT Compute and Storage																					
4.1) Compute ⁽¹⁰⁾	A		-	-	-	-	-	-	-	-	-	-	-	1.751	-	-	-	-	-	1.751	
4.2) Storage ⁽¹¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	3.955	-	-	-	-	-	3.955	
4.3) Data Center Components ⁽¹²⁾	A		-	-	-	-	-	-	-	-	-	-	-	6.514	-	-	-	-	-	6.514	
Subtotal: 4) Enterprise IT Compute and Storage			-	-	0.000	-	-	-	-	-	-	-	-	12.220	-	-	-	-	-	12.220	
Total			-	-	0.000	-	-	-	-	-	-	-	-	276.762	-	-	-	-	-	276.762	
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																					

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)	Aggregated Items Title: Marine Corps Enterprise Network (MCEN)
Footnotes: (1) Voice Networking (Cost Element 1.1): \$15.328M will support voice modernization and refresh efforts across the MCEN. These efforts replace legacy telephone network equipment with unified communications capability including an upgraded E911 system in support of both Kari's Law and Ray Baum's Act. Specifically, this funding will procure and install Session Border Controllers (SBCs) which are needed at many Marine Corps Installations in order to transition from analog to IP based networks for voice communications. In addition, funding in this cost element will provide for the procurement and installation of Public Safety Answering Point (PSAP) Customer Premise Equipment (CPE) upgrades that are required to support State transitions to IP networks while maintaining compatibility with legacy PSAPs. Related FY22 submission Cost Element: BLI 4635-BTI-CE 1.3-DWDM (FY22 submission equivalent dollar amount was \$21.425M). The decrease of \$6.097M is due to the decrease in scope and complexity between the FY 2022 base modernization projects (Camp Pendleton) and the FY 2023 base modernization projects which are smaller in size and complexity. (2) Network Transport (Cost Element 1.2): \$71.739M will refresh, upgrade and standardize the MCEN architecture while supporting DISA Unified Capability initiatives and reduce lifecycle costs by streamlining transport communications, which currently funnels through thousands circuits, by reducing that footprint to a single fiber optic cable. In delivering optical transport, this solution improves reliability of video, and data services supporting the day-to-day operations of the base, post, and station. In addition, this effort is a key Foundational element to the Network Modernization plan to both improve transport performance and provide the needed resiliency of the network for all entities within USMC managed facilities. Related FY22 submission Cost Elements: BLI 4635-BTI-CE 1.3-DWDM, BLI 4625-NGEN-CE 1.1.3-Network Equipment Tech Refresh, BLI 4630-SONIC-CE 5.3-Network Equipment Tech Refresh (FY22 submission equivalent dollar amount was \$68.910M). The \$2.829M increase from FY22 submission will replace aging and obsolete network equipment which will provide greater cyber resiliency to the Marine Corps Networks (to include both classified and unclassified networks), reduce the surface area for Nation States and third-party actors to exploit. The replacement of this equipment will also ensure that Marine Corps users will remain unaffected, as equipment that was not replaced would have been removed from the network which would have led to users being isolated. (3) Tactical Entry Point (TEP) (Cost Element 1.3): \$0.750M will allow for the procurement Tactical Entry Point (TEP) sites, as an enabling component of the Deployed Marine Corps Enterprise Network (DMCEN) concept, providing tactical users reach back access to MCEN-NIPRnet (MCEN-N), MCEN-SIPRnet (MCEN-S) and coalition enclave services. The funding will also allow for necessary refresh for the MCEN-S Transport Boundary, including the procurement and installation of new network equipment (e.g. routers, switches, cards, etc.) that are no longer receiving software maintenance updates to the integrated operating system (IOS) (e.g. patches/updates). Investments in modernization increases the Marine Corps' ability to provide MCEN-S services to users at the tactical edge and meet specific requirements outlined by the Commandant in USMC Force Design 2030. Related FY22 submission Cost Element: BLI 4625-NGEN-CE 1.1.3-Network Equipment Tech Refresh (FY22 submission equivalent dollar amount was \$0.750M) (4) Defense Policy Review Initiative Equipment (DPRI) (Cost Element 1.4): \$52.862M funding request includes the increase of \$26.193M will support DPRI Guam with the procurement, installation, and accreditation of Information Technology (IT) systems. BTI funding for FY 2023 supports the C4IT outfitting of newly constructed facilities for MCBG; specifically, MILCON projects. The FY 2023 funding request for BTI will support the procurement and installation of C4IT equipment, for facilities that are set for Beneficial Occupancy Date (BOD) in FY 2024. Funding must be provided one year prior to BOD in order for equipment to be procured and available for installation by BOD. Current estimates support the following construction projects: P-305 4th Marines Regiment Facilities; P-306 CLB-4; P-307 Consolidated Armory; P-311 Central Fuel Station; J-301 Consolidated HQ; J-015 Dining Facility; J-023 BOQ A; J-018 Security/Police Station; J-008 Fire Station; P-312 Distribution Warehouse; P-314 MEB Enablers; P-280 Aviation Admin Bldg; P-317 Combined EOD Facility; J-609 Apra Embark Facility; P-804 Central Issue Facility; P-803 Individual Combat Skills Training; P-802 Base Warehouse; P-326 PEI Warehouse; P-310 Infantry Battalion Company HQ; J-036 BEQ C. Without this funding, facilities will not be able to be occupied, and Forces will be unable to move off of Okinawa. Any delays to force flow have both negative political and cost ramifications. The IT systems are integral in order to occupy the facilities and meet mission requirements. In addition, funding request supports the procurement and installation of required telecommunication infrastructure for the following facilities: MC4212 Postal Distribution Center, and MC2531 Water Storage Tanks. These IT systems are integral in order to occupy the facilities and meet mission requirements. Related FY22 submission Cost Elements: BLI 4635-BTI-CE 1.1-Defense Policy Review Initiative (Guam), BLI 4635-BTI-CE 1.2-Defense Policy Review Initiative (Okinawa) (FY22 submission equivalent dollar amount was \$52.862M) (5) Security Solutions (Cost Element 2.1): \$9.670M will provide funding for capabilities which enable modernization, development, fielding, deployment, and support to a full range of applications that will provide security-oriented outputs and outcomes (e.g. COMSEC Crypto and Commercial Solution for Classified). This equipment will help protect private information, sensitive data and will enhance the security of communications on the MCEN. Related FY22 submission Cost Elements: BLI 4625-NGEN-CE 1.1.4-EIM, BLI 4630-SONIC-CE 5.4-EIM (FY22 submission equivalent dollar amount was \$13.180M). The \$3.510M decrease from FY22 submission to FY23 submission is due to the transition from legacy Crypto equipment to Commercial Solutions for Classified. (6) Monitoring and Detection (Cost Element 2.2): \$17.036M will provide funding for capabilities which enable the modernization, development, fielding/deployment, and support to provide monitoring and detection capabilities that run independently without active input or management (e.g. Next Generation Fire Wall, Intrusion Prevention Systems, and Sensor Grid). These capabilities will identify unauthorized devices on the MCEN and MCEN-S networks enabling a more security environment. These capabilities will provide the ability to detect and stop a variety of attacks that cannot be automatically identified by firewalls, antivirus technologies and other enterprise security controls which will aid in creating a more cyber-resilient network. Related FY22 submission Cost Elements: BLI 4625-NGEN-CE 1.1.4-EIM, BLI 4630-SONIC-CE 5.4-EIM (FY22 submission equivalent dollar amount was \$17.036M). (7) Threat and Vulnerability (Cost Element 2.3): \$5.113M will provide funding for capabilities which enable modernization, development, fielding, deployment, and support to tools that monitor, track, assess risks, and mitigate identified threats and vulnerabilities. This funding would allow for the Marine Corps to provide a modernized (e.g. more flexible, agile, inter-operable and resilient) solution that is proactive and not reactive to cyber threats, while meeting the demands of a hybrid work model which entails secure teleworking from disparate geographical and technological environments. Major efforts within this cost element include Comply to Connect, Data Loss Prevention, and End Point Security. These efforts will provide the process and tools to regularly identify and remediate the most critical and highest-risk vulnerabilities identified on the MCEN which will aid in creating a more cyber-resilient network. Related FY22 submission Cost Elements: BLI 4625-NGEN-CE 1.1.4-EIM, BLI 4630-SONIC-CE 5.4-EIM (FY22 submission equivalent dollar amount was \$0.000M). The \$5.113M increase from FY22 submission is due to the planned refresh of End Point Security equipment which will help prevent unauthorized access to the network and/or malicious attacks from occurring through ensuring that endpoints are in compliance with data security standards. (8) End User Device (EUD) (Cost Element 3.1): \$91.794M will provide the USMC with compatibility upgrades required for DOD mandated WIN11 compliance by FY 2024. Funding continues the technology refresh and sustainment cycle in accordance with OMB Memo M-16-02. This memo directs a refresh rate of every 4-5 years to alleviate aging and cyber vulnerable equipment that remains on the network and to meet industry standard periodicity refresh standards and avoids obsolesce. This will also ensure compliance with future operating system releases such as Windows 11. In order to meet the requirements for Windows 11, the current EUDs need to be replaced with ones that have components (processors, video cards, etc.) which are compatible with the future operating system. If these EUDs are not replaced, the Marine Corps is assuming cybersecurity risk throughout the MCEN and will be required to continue to use devices that are rapidly becoming worn out and inefficient. This leads to more non-productive down time for our end users and will ultimately impact our ability to accomplish operational and supporting establishment missions. Additionally, devices that are non-Windows 11 compatible will be required to be removed off the network as they will be unable to accept the new operating system and related security patches or updates. Related FY22 submission Cost Elements: BLI 4625-NGEN-CE 1.1.1-End User Device (EUD) Tech Refresh, BLI 4630-SONIC-CE 5.1-End User Device (EUD) Tech Refresh, BLI 4630-MCHS-CE 1.1-End User Device (EUD) Tech Refresh (FY22 submission equivalent dollar amount was \$35.706M). The		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)	Aggregated Items Title: Marine Corps Enterprise Network (MCEN)
\$56.088M increase from FY22 submission will reduces cyber vulnerabilities and increases operational readiness throughout the MCEN-N through the procurement of Windows 11 compliant devices which will put the Marine Corps on track to meet Windows 11 compliance in 2024. ⁽⁹⁾ Defense Policy Review Initiative Equipment (Cost Element 3.2): \$0.250M continues the technology refresh and sustainment cycle in accordance with OMB Memo M-16-02. This memo directs a refresh rate of every 4-5 years to alleviate aging equipment that remains on the network and to meet industry standard periodicity refresh standards and avoids obsolesce. This will also ensure compliance with future operating system releases (e.g. Windows 11). If these EUDs are not replaced, the Marine Corps is assuming cybersecurity risk throughout the MCEN and will be required to continue to use devices that are rapidly becoming inefficient which will lead to more down time for the end user and will ultimately impact the mission of the end user. Related FY22 submission Cost Elements: 4625-NGEN-CE 1.1.6-Defense Policy Review Initiative, 4630-SONIC-CE 5.6-Defense Policy Review Initiative (FY22 submission equivalent dollar amount was \$0.050M) ⁽¹⁰⁾ Compute (Cost Element 4.1): \$1.751M provides for modernization of the servers across the non-classified side of the MCEN. These modernization efforts will provide the computing power necessary for the Marine Corps to continue to provide critical MCEN services (e.g. on premise hosting, virtual and physical server racks) to users at the tactical edge and meet specific requirements for Force Design. Related FY22 submission Cost Elements: BLI 4625-NGEN-CE 1.1.3-EIM, BLI 4630-SONIC-CE 5.4-EIM, BLI 4630-MCEITS-CE 3.1-Data Center Tech Refresh (FY22 submission equivalent dollar amount was \$0.051M). The \$0.928M increase from FY22 submission is due to the planned refresh of servers that are going end-of-life, the replacement of these servers will ensure that MCEN services will continue to be provided without degradation. ⁽¹¹⁾ Storage (Cost Element 4.2): \$3.955M provides persistent data on remote, network attached storage devices in order to make applications more responsive and the data sets more manageable. This separation allows compute and storage to scale independently of each other, thereby reducing life-cycle costs. Related FY22 submission Cost Elements: BLI 4625-NGEN-CE 1.1.3-EIM, BLI 4630-SONIC-CE 5.4-EIM, BLI 4630-MCEITS-CE 3.1-Data Center Tech Refresh (FY22 submission equivalent dollar amount was \$3.577M). ⁽¹²⁾ Data Center Components (Cost Element 4.3): \$6.514M provides for an enterprise on/off-premises application modernization of the host systems and applications. These are components that are foundational to the daily operations of a data center (e.g. in row cooler, power supplies, battery backups). Related FY22 submission Cost Element: BLI 4630-MCEITS-CE 3.1-Data Center Tech Refresh (FY22 submission equivalent dollar amount was \$4.653M). The \$1.951M increase from FY22 submission to FY23 submission is due to the planned refresh of data center components that will enable the daily operations to continue.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19								P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)								Aggregated Items Title: Next Generation Enterprise Network (NGEN)			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) NGEN Hardware/Recurring																				
1.1) End User Devices (EUD) Tech Refresh (13)(t)	A		1,076.73	93,284	100.442	1,164.05	15,708	18.285	1,187.28	21,965	26.079	-	-	-	-	-	-	-	-	-
1.2) Fielding Support (14)	A		-	-	12.765	-	-	2.329	-	-	2.371	-	-	-	-	-	-	-	-	-
1.3) Network Equipment Tech Refresh (15)	A		-	-	200.229	-	-	24.621	-	-	29.064	-	-	-	-	-	-	-	-	-
1.4) Enterprise Infrastructure Modernization (EIM) (16)	A		-	-	101.237	-	-	28.348	-	-	33.460	-	-	-	-	-	-	-	-	-
1.5) Wireless Local Area Network (WLAN) (17)	A		-	-	40.224	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) Defense Policy Review Initiative (18)	A		-	-	0.094	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) NGEN Hardware/Recurring			-	-	454.991	-	-	73.612	-	-	90.974	-	-	-	-	-	-	-	-	-
2) NGEN Hardware/Nonrecurring																				
2.1) Network Access Control, Compliance and Remediation (NACCR)	A		-	-	24.764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) Comply to Connect (C2C)	A		-	-	37.647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3) Disaster Relief	A		-	-	0.723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) NGEN Hardware/Nonrecurring			-	-	63.134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	518.125	-	-	73.612	-	-	90.974	-	-	-	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(t) indicates the presence of a P-5a

Footnotes:

(13) Starting in FY 2023, funding that was previously in this cost element has been realigned to Cost Element 3.1 within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

(14) Starting in FY 2023, funding that was previously in this cost element has been realigned to various Cost Elements within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

(15) Starting in FY 2023, funding that was previously in this cost element has been realigned to various Cost Elements within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)	Aggregated Items Title: Next Generation Enterprise Network (NGEN)

⁽¹⁶⁾ Starting in FY 2023, funding that was previously in this cost element has been realigned to various Cost Elements within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

⁽¹⁷⁾ Starting in FY 2023, funding that was previously in this cost element has been realigned to Cost Element 1.2 within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

⁽¹⁸⁾ Starting in FY 2023, funding that was previously in this cost element has been realigned to Cost Element 1.4 within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19				P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)					Aggregated Items: Next Generation Enterprise Network (NGEN)			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) NGEN Hardware/Recurring												
1.1) End User Devices (EUD) Tech Refresh ^{(13)(t)}		2021	DELL Federal Systems / Round Rock, TX	C / FFP	MCSC, Quantico, VA	Mar 2021	Apr 2021	15,708	1,164.05	Y		
1.1) End User Devices (EUD) Tech Refresh ^{(13)(t)}		2022 ⁽¹⁹⁾	DELL Federal Systems / Round Rock, TX	C / TBD	MCSC, Quantico, VA	Mar 2022	Apr 2022	21,965	1,187.28	N	Oct 2021	
^(t) indicates the presence of a P-21 Footnotes: ⁽¹⁹⁾ Vendor will be determined when the contract is awarded in 2Q FY 2022.												

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022																							
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)																			Aggregated Items: Next Generation Enterprise Network (NGEN)													
Items <i>(Units in Thousands)</i>							Fiscal Year 2021														Fiscal Year 2022														BALANCE							
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021							Calendar Year 2022																												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP												
1) NGEN Hardware/Recurring																																										
1.1) End User Devices (EUD) Tech Refresh ⁽¹³⁾																																										
Prior Years Deliveries: 93284																																										
20	2021	NAVY		15.708	.000	15.708								A -	1.718	2.618	2.618	2.618	2.618	2.618	.900															.000						
20	2022	NAVY		21.965	.000	21.965																													A -	3.500	3.700	3.700	3.700	3.700	3.665	.000
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP												

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19					P-1 Line Item Number / Title: 4625 / Marine Corps Enterprise Network (MCEN)				Aggregated Items: Next Generation Enterprise Network (NGEN)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	DELL Federal Systems - Round Rock, TX			37,500	0	0	0	0	0	0	0	0

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4630 / Common Computer Resources					
ID Code (A=Service Ready, B=Not Service Ready): B				Program Elements for Code B Items: 0206313M, 0206623M, 0206624M, 0303150M, 0604766M				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	549.616	32.977	77.315	40.096	0.000	40.096	29.123	25.081	31.828	32.360	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	549.616	32.977	77.315	40.096	0.000	40.096	29.123	25.081	31.828	32.360	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	549.616	32.977	77.315	40.096	0.000	40.096	29.123	25.081	31.828	32.360	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Beginning in FY 2023, Secure Operational Network Infrastructure & Communications, Marine Corps Enterprise IT Services, and Marine Corps Common Hardware (all previously in LI 4630), as well as Base Telecommunications Infrastructure (previously in LI 4635), were consolidated with Next Generation Enterprise Network (LI 4625), and LI 4625 was renamed to Marine Corps Enterprise Network. This was done in order to consolidate Marine Corps IT investments to provide transparency, reduce the appearance of duplication, and reduce interdependencies between lines. This will enable the Marine Corps to achieve the objectives that were established in the Network Modernization Plan and it aligns to the Technology Business Framework (TBM) model directed by OMB Circular A-11 to provide clarity and transparency in both budgeting and execution of funding. Each new Cost Element (CE) has been mapped to their related PB22 Cost Elements. MARINE CORPS COMMON HARDWARE SUITE (MCHS): Provides Commercial-Off-The-Shelf (COTS) laptops, workstations, software, servers, and other information technology (IT) hardware devices (ie Mobility) to support the Operating Forces and other Marine Corps customers. MCHS provides support for two principal groups: 1) United States Marine Corps (USMC) Tactical and Functional Programs of Record that use COTS IT hardware as part of their fielded systems, and 2) tactical and other Marine Corps customers not supported by Next Generation Enterprise Network (NGEN) such as Marine Corps Forces, Europe; Marine Corps Forces, Korea; Marine Corps Forces, Africa; and stand-alone Marine Corps units and schoolhouses. Beginning in FY23, this effort was transferred to LI 4625, Marine Corps Enterprise Network. FORMALIZED SCHOOLS TECHNICAL REFRESH (FSTR): Funds and manages the software and IT hardware required to provide a robust and reliable Computer-Based Training (CBT) capability for TECOM (Training and Education Command) schools. Computers used in TECOM classrooms are not funded or managed by HQMC as part of the Marine Corps Enterprise Network (MCEN), and must therefore be funded and managed by the FSTR program. This program standardizes IT equipment for the 812 classrooms throughout TECOM and formalizes the upgrade and refresh process. In order to maintain adequate reliability and software compliance, computers need to be refreshed every four years. FSTR provides reliable hardware, software, and network resources to support Marine Corps Programs of Instruction and curriculum, delivered in TECOM formal classrooms. The FSTR program is foundational to realizing the Commandant of the Marine Corps' vision of exploiting technology as an enabler to advance Training & Education capabilities. MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS): Provides an overarching portfolio of capabilities to deliver "Power to the Edge" for the Marine Corps. Born from an effort to establish a Continuity of Operations Plan of Headquarters Marine Corps (HQMC) Automated Information Systems, MCEITS is a unifying framework of both the Net-Centric Enterprise Services to be delivered, and the infrastructure and systems which must be deployed to enable delivery of those services. MCEITS realigns the existing USMC environment of applications, databases, networks, and facilities into an integrated architecture. It provides the environment to access enterprise shared data and services while improving operational flexibility, responsiveness, and effectiveness for operating forces and the												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4630 / Common Computer Resources
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0206313M, 0206623M, 0206624M, 0303150M, 0604766M	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
supporting establishment based on a common infrastructure and shared services. MCEITS allows for achievement of architectural standardization, consolidated management, seamless interoperability, and access to the data residing in our currently fielded applications (business and tactical). MCEITS enables access to enterprise information and provides the ability to collaborate and share information across the business and warfighter domains. MCEITS includes work to rationalize, modernize, virtualize, migrate, and host systems and applications residing in the Marine Corps enterprise information technology center (i.e., data center) located in Kansas City, Missouri. MCEITS achieved FOC in March, 2019 and will continue to serve as the primary data center to consolidate applications and data. This capability will host those applications and systems as well as those transformed and supported through hybrid cloud services. Procurement funding provides for various network equipment to include computers, network equipment, racks along with associated installation costs. In addition, procurement funding supports efforts to include cloud aligned to the Managed Services Organization (MSO). Beginning in FY23, this effort was transferred to LI 4625, Marine Corps Enterprise Network. SECURE OPERATIONAL NETWORK INFRASTRUCTURE AND COMMUNICATIONS (SONIC): This funding enables central management of refresh and sustainment of hardware, software, and the infrastructure necessary to provide network services and improve C2 on the Marine Corps Enterprise Network - Secret (MCEN-S). This ensures enterprise architecture goals and standards are established and maintained and takes advantage of quantity-related discounts. The SIPRNET provides Marine Corps forces with a secure digital means to communicate and share data, information, and knowledge at the secret level with dispersed organizations located around the world. SONIC resources the tech refresh of technologically obsolete equipment, shortfalls in network operational capabilities, solutions to resolve and mitigate network security vulnerabilities, and technology insertion for increased SIPRNET capability as expressed by the Marine Corps Forces (MARFORs). Tech Refresh includes the design, configuration, and functional testing and integration of commercial or non-developmental network solutions to resolve and mitigate network security vulnerabilities. Beginning in FY23, this effort was transferred to LI 4625, Marine Corps Enterprise Network. MARINE CORPS INFORMATION OPERATIONS PROGRAM (MCIOP): MCIOP provides MAGTF Commanders and the Marine Corps response and effective Operations in the Information Environment (OIE) to include planning and psychological operations delivery capability by means of deployable support teams and comprehensive general reach-back capability in order to integrate OIE across the range of military operations within the physical, informational, and cognitive dimensions of the information environment in a Service, Joint or Coalition setting. MCIOC supports the Force Design 2030 by leveraging SIGMAN, MISO, and other capabilities in order to facilitates Naval integration and ensure message projection, count malign behavior, and counter influence campaigns. PAPERLESS ACQUISITION (PA) SYSTEMS: Comprised of two programs, Purchase Request Builder (PR Builder) and Standard Procurement System / Procurement Desktop Defense (SPS/PD2). PR Builder is a fully web-based, Mission Assurance Category (MAC) III sensitive business system. SPS/PD2, part of the Joint SPS Acquisition Program, is the USMC's authoritative contracting generation system within the Marine Corps' electronic Systems Business Enterprise. Both of these systems provide system-to-system interface with other DoD financial management systems which include Standard Accounting, Budgeting, and Reporting System (SABRS), Federal Government's Electronic Document Access system (EDA), and Invoice, Receipt Acceptance and Property Transfer. MARINE CORPS RECRUITING INFORMATION SUPPORT SYSTEM (MCRISS): Enterprise level system to automate administrative procedures for recruiting station operations. This customized automated System, centered on procedures in the Guidebook for Recruiters, Volume I, dramatically improves efficiency and effectiveness in Marine Corps recruiting. Furthermore, Military Entrance Processing Command requires Marine Corps recruiting to provide information in electronic format only. MCRISS is the Marine Corps Recruiting Command's program to manage applicant processing from commitment to accession/ commission into the Marine Corps and Marine Corps Reserve. This enterprise approach allows for efficient sharing of information about potential recruits and recruiter screening efforts, yielding a more cost effective process. TECHNOLOGY SERVICES ORGANIZATION (TSO): Provides development, testing, and production hosting environments in support of the Marine Corps enterprise pay, personnel, accounting and financial management systems to include Marine Corps Total Force System (MCTFS), Marine Online, Marine Corps Orders Resource System (MCORS), Standards Accounting, Budgeting and Reporting System (SABRS), and the Marine Corps Financial Integrated Analysis System (MCFIAS). The TSO also provides complete SDLC activities for these systems as well as development of the Navy, Air Guard, and Air Force Reserve Order Writing Systems. The TSO is implementing the Marine Corp's SABRS application to the Department of the Navy. MARINE CORPS WARGAMING CAPABILITY: The enhanced Wargaming Capability enables the Commandant of the Marine Corps' (CMC) Force Design program by utilizing advanced modeling and simulation (M&S) systems and analytic assessments of current Operation Plans, Concepts of Operations, future operational and functional concepts, and operational and technology-based approaches. Wargaming Capability results are used to develop, assess, and refine concepts across the full range of military operations (ROMO); inform requirements generation decisions; assess capability investments; guide capability resource actions; inform the POM development; and provide education and leadership development. These results are critical to refining the CMC's Force Design through the campaign of learning and the		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4630 / Common Computer Resources
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0206313M, 0206623M, 0206624M, 0303150M, 0604766M	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
increase in research capacity, afforded by the Wargaming Capability, to maintain the USMC as a "force-in-readiness." Initial Operational Capability (IOC) will be achieved 4Q FY 2024. IOC is defined as a three-player cell wargame conducted up to the Secret classification level utilizing M&S to support interactive games with visual results. Full Operational Capability (FOC) will be achieved 4Q FY 2025. FOC is defined as the ability to conduct two concurrent wargames up to the Top Secret/Sensitive Compartmented Information classification level with five player cell, full dynamic interactive games and visualized results and data. MARINE AIR GROUND TASK FORCE (MAGTF) TACTICAL WARFARE SIMULATION (MTWS): MTWS is the Marine Corps' only constructive, aggregate-level simulation system used to support the training of Marine commanders and their battle staffs in MAGTF war-fighting principles/concepts and associated command and control procedures. Using complex computer-simulated behavior models, MTWS provides an interactive, decision-based, real-time, war game representing the six war-fighting functional areas of fires, command and control, force protection, logistics, maneuver, and intelligence. It's modeling breadth and flexibility enables users to represent and exercise a wide variety of combat scenarios to prepare leaders to face the military challenges of today's world. MTWS is designed to support the training of commanders and their staffs in exercises involving live and simulated land, air, and naval forces at all operational command levels. The system supports all levels of command throughout the MEF and Joint Task Force (JTF). MTWS can be used as a multi-sided war game, including red, blue, civilian, and non-aligned sides. The system can also be used to validate specific operational plans against a variety of enemy and environmental situations. Thus command personnel may examine alternative tactical solutions on a "what if" basis. PROFESSIONAL DEVELOPMENT - MARINE CORPS UNIVERSITY: The Professional Development Program develops, delivers, and evaluates Professional Military Education (PME) and training through resident and distance education programs to prepare leaders to meet the challenges of the national security environment. The .edu expansion provides wireless connectivity, information sharing, and audio visual capabilities in support of Education Command's effort to modernize PME. Having .edu networks at all of the Marine Corp University campuses creates the opportunity for courses to collaborate, conduct research, wargame, and conduct video teleconferencing. SPECIALIZED SKILLS TRAINING: Installation of Wi-Fi equipment to allow student access to internet for on-line training materials to support classroom and remote area options for student learning access. Equipment will be installed to support schools at Camp Pendleton CA , Camp Lejeune NC , 29 Palms CA , and MCB Quantico VA, Marine Detachment Ft. Leonard Wood MO, Marine Detachment Ft. Sill OK. Purchase of hand held, portable Wi-Fi enabled equipment to utilize the content made available via the Wi-Fi. RECRUIT TRAINING: Force Design Reinvestment - Learning Centric Environment at Marine Corps Recruit Depots (MCRD) San Diego and Parris Island. A Digital learning environment accessible by Recruits and Drill Instructor School students in classrooms and at home, hosted on non-MCEN system. Digital-based curriculum with interactive lesson modules managed by a learning management system. Virtual Reality for Recruit Training at MCRDs require digital learning and immersive training environments that enable multiple reps in practical application and interactive ethical decision games/decision forcing cases to reinforce academic and core values instruction. TRAINING AND EDUCATION HEADQUARTERS SUPPORT: Provides focused war-games content, provides access and training to the FMF, and establishes a wargaming community of interest. It provides a needed framework for resources for technology and related support. This effort is a critical means to support the Marine Corps effort to overhaul the USMC Ground Training & Readiness Program and transition to 21st Century Learning (21 CL) throughout the entire enterprise. MARINE CORPS HERITAGE CENTER: The final phase of Galleries 13 and 14 tell the stories of Marines post-Vietnam War, including the attack on Marine Barracks in Beirut, Desert Shield and Desert Storm, and stories of Marines in Iraq and Afghanistan. Currently, work has been completed on the construction contract - the walls, floors, structure, ductwork, alarms, electrical. Exhibit fabricators are working on wall and floor finishes, scenic painting, installing cast figures, and exhibit graphics. The next phase will be to install the special effects and audio visual components which provide the visitor with an emotional experience, as exists in every other gallery, and makes the Museum a truly memorable place for Marines, their families, and the public. The opening of these galleries is a critical part of the commemoration of the Marine Corps 250th birthday in 2025.		

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ID Code (A=Service Ready, B=Not Service Ready): B				Program Elements for Code B Items: 0206313M, 0206623M, 0206624M, 0303150M, 0604766M			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Common Computer Resources	P-5a			- / 549.616	- / 32.977	- / 77.315	- / 40.096	- / -	- / 40.096
P-40	Total Gross/Weapon System Cost				- / 549.616	- / 32.977	- / 77.315	- / 40.096	- / 0.000	- / 40.096
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: Beginning in FY 2023, the Next Generation Enterprise Network (NGEN), Secure Operational Network Infrastructure & Comms (SONIC), Marine Corps Enterprise IT Services (MCEITS), Marine Corps Common Hardware (MCHS) and Base Telecommunications Infrastructure (BTI) line items were transferred to a new procurement line item, the Marine Corps Enterprise Network (MCEN, BLI 4625), in order to consolidate Marine Corps IT investments into a single budget line item to provide transparency, reduce the appearance of duplication and reduce interdependencies between lines. This will enable the Marine Corps to achieve the objectives that were established in the Network Modernization Plan and it aligns to the Technology Business Framework (TBM) model which IT funding is reported against as directed in the OMB Circular A-11. FY 2023 Base Appropriation Request: \$40.096M FORMALIZED SCHOOLS TECHNICAL REFRESH (FSTR) FY 2023 Base Appropriation Request: \$7.721M full funding will ensure the Marine Corps Training and Education Enterprise receives the necessary technology influx to support not only foundational requirements of TECOM but the implementation of the Force Design operating concept. FSTR assets add to the Next Generation (NGEN) and Secure Operational Infrastructure and Communications (SONIC) programs at each of the 90 TECOM Formal Learning Centers (FLCs) to facilitate a 21st Century Learning Modernization paradigm and support the curriculum needs of more than 140,000 Marines, Sailors, and Recruits annually. Planned refresh cycle for all FSTR assets within TECOM generally mirror that of the NGEN contract (5-7 years). FSTR PMC must support this timeline at a minimum to prevent obsolescence of purchased assets. Increase of \$0.786M from FY 2022 to FY 2023 supports the sustainment of the additional 1,900 student devices required as a result of the implementation of Infantry Marine Course. As tasked in the Marine Corps' Network Modernization Plan, TECOM must accomplish actions including the implementation of ubiquitous web access at all Formal Learning Centers, the implementation of AI/ML, data science, and DevSecOps curricula, and integrating established information systems into a Total Learning Architecture. Given the scope of these investments, the requisite End User Devices are needed to provide a mechanism for students to interact with cloud-based simulations, capitalize on Service investments into the Microsoft 365 environment, and fully exploit the wide-scale development of new course content supporting emerging warfighting methodologies. MARINE CORPS INFORMATION OPERATIONS PROGRAM (MCIOP) FY 2023 Base Appropriation Request: \$0.438M funding will support hardware and software refreshes that are specific to Operations in the Information Environment (OIE). These enhancements will support the growing operational requirements of deployed teams and enable coordination of the operations in the information operational environment across the Marine Corps and in support of Joint requirements. The \$0.009M increase in funding from FY 2022 to FY 2023 is due to the support of real-time Operations in the Information Environment (OIE). PAPERLESS ACQUISITION (PA) SYSTEMS FY 2023 Base Appropriation Request: \$0.135M will provide mission critical hardware required to support the needs of Paperless Acquisition Systems such as Standard Procurement System (SPS), Electronic Procurement System (EPS), and Purchase Request Builder (PRB). MARINE CORPS RECRUITING INFORMATION SUPPORT SYSTEM (MCRISS)										

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
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ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0206313M, 0206623M, 0206624M, 0303150M, 0604766M	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
FY 2023 Base Appropriation Request: \$0.064M funding will support hardware refresh to support Marine Corps Recruiting Command (MCRC) end users.		
TECHNOLOGY SERVICES ORGANIZATION FY 2023 Base Appropriation request: \$0.941M supports laptop and network device procurement that supports the development of Marine Corps enterprise HRM and Financial Management systems. This includes the maintenance of the Marine Corps Total Force System (MCTFS), Marine Online (MOL), Marine Corps Orders Resource System (MCORS), and the Marine Corps Financial Integrated Analysis System (MCFIAS). This Technical refresh/upgrade of MCFIAS database technology to a newer Business Intelligence architecture provides a modern and well-supported database technology that ultimately enables the normalization of Marine Corps financial data reporting.		
MARINE CORPS WARGAMING CAPABILITY FY 2023 Base Appropriation Request: \$8.893M supports the initial procurement, installation and integration of the wargaming software production system, which includes: software production licenses for collaboration; modeling & simulation; and analytic tools. Additionally, FY 2023 funding supports the procurement of the necessary cryptographic devices (i.e. KG-175s) for the wargaming software production system. FY 2022 PMC funded a separate and distinct effort of hardware infrastructure procurement and installation into the Marine Corps Wargaming and Analysis Center (MCWAC). The hardware infrastructure consists of audio visual, information technology, and security system components allowing network services throughout the facility and is separate and distinct from the FY 2023 PMC wargaming software production system procurement. Decrease of \$13.783M from FY 2022 to FY 2023 reflects completion of procurement and associated pre-installation activities of facility infrastructure hardware components for the outfitting of the building construction and security hardware procurement supporting the wargaming production system.		
FY 2023 funding supports the transition of BAE System's wargaming software prototype system to BAE System's wargaming software production system, as a critical enabler to the CMC Force Design program by providing advanced modeling and simulation (M&S) systems and analytic assessments of current Operations Plans, Concepts of Operations, future operational and functional concepts, and operational and technology-based approaches. The wargaming software production system consists of a compilation of software toolsets integrated into one system of systems. The funding will support procurement of the wargaming software production system as well as support cyber testing and accreditation of the production system within the MCWAC operational environment. This funding also includes software production licenses for collaboration, modeling & simulation, and analytic tools that enable the wargaming system's full functionality. Finally, the funding will procure the necessary cryptographic devices (i.e., KG-175s) to support the wargaming production system's data ingest over multiple classification levels required during wargame execution.		
PROFESSIONAL DEVELOPMENT FY 2023 Base Appropriation Request: \$4.143M supports the initiation, installation, and completion of the Kaneohe Bay Noncommissioned Officer Academy (KBAY SNCOA), the Design and Engineering, construction, renovation and modernization, and provides for service fees. Additionally, it supports a 25 percent tech refresh of .edu assets as part of IT modernization efforts for the University. The increase of \$0.990M from FY 2022 to FY 2023 is to initiate, install and complete the KBAY SNCOA and to start the design of the Okinawa SNCOA.		
SPECIALIZED SKILLS TRAINING FY 2023 Base Appropriation request: \$7.470M will support the purchase of student IT training devices (e.g. tablets, laptops) that will be used to access online digital media content in and out of the classroom. As the Marine Corps advances towards a 21st Century Modernization Learning Model, IT devices enables Marines to maximize access to online programs of instruction materials which provides growth in self-paced learning and development of critical thinking skills. The purchase of the student devices builds upon and provides required capability to maximize use of a wireless network connectivity established in FY 2022 at multiple formal learning centers.		
TRAINING AND EDUCATION (T&E) HEADQUARTERS SUPPORT FY 2023 Base Appropriation request: \$2.291M will provide initial capabilities for the USMC TECOM Wargaming Program (one of the Commandant's Planning Guidance (CPG) Tasks to "Institutionalize Wargames across the T&E continuum) that will use wargames to increase the cognitive abilities of junior leaders. This funding provides the TECOM Wargaming Program the ability to purchase commercial off the shelf (COTS) wargames and other products to facilitate delivery of wargaming content In support of 21st Century Learning Modernization and the Commandant's Planning Guidance (CPG). This		
MARINE CORPS HERITAGE CENTER		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4630 / Common Computer Resources
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0206313M, 0206623M, 0206624M, 0303150M, 0604766M	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
FY 2023 Base Appropriation request: \$8.000M supports the Marine Corps Heritage Center's Audio Video (AV) and Special Effects requirement for new and existing historical galleries. Funding will procure AV/ Special Effects systems for both the Final Phase galleries and to update failing AV systems in the existing historical galleries, most of which are well past their expected operational life cycle. AV/Special Effects funding is required in order to open the new galleries to the public and to address safety concerns with the outdated equipment in existing galleries, which are causing issues associated with evacuation lighting and announcements if there is a power failure. RECRUIT TRAINING FY 2023 Base Appropriation request: \$0.000M. Decrease in FY 2023 in the amount of \$5.967M due to completion of the initial procurement in FY 2022. Program supports interactive digital learning materials for active, student centered learning. Employs immersive training technology for ethical decision scenarios, and practical application. Supports 17,000 new Marines annually to the FMF who have several repetitions in ethical and moral decision-making - a more competent, confident, and independent individual Marine. Ability to change or alter scenarios based on ever-changing operating environment at no cost other than that associated with the Content Creator (civilian employee). Database catalogued with timeless scenarios. Hours of ethical discussion following execution allowing all recruits to reflect and defend decisions made in the scenario - drill instructor reinforced as moral leader instruction, virtual leadership reaction courses, and fully immersive Marine Corps history and traditions. MARINE CORPS COMMON HARDWARE SUITE (MCHS) Starting in FY 2023, funding that was previously in this cost element has been realigned to the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. MARINE CORPS ENTERPRISE IT SERVICES (MCEITS) Starting in FY 2023, funding that was previously in this cost element has been realigned to the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. SECURE OPERATIONAL NETWORK INFRASTRUCTURE AND COMMUNICATIONS (SONIC) Starting in FY 2023, funding that was previously in these cost elements has been realigned to the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19						P-1 Line Item Number / Title: 4630 / Common Computer Resources						Aggregated Items Title: Common Computer Resources								
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
1) MARINE CORPS COMMON HARDWARE SUITE (MCHS)																				
1.1) MCHS End User Device Refresh ^{(1)(f)}	A		1.254	71,030	89.095	1.164	645	0.751	1.187	645	0.766	-	-	-	-	-	-	-	-	-
1.2) Fielding Support ⁽²⁾	A		-	-	1.487	-	-	0.221	-	-	0.221	-	-	-	-	-	-	-	-	-
1.3) Prior Year Cumulative Funding	A		-	-	55.775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) MARINE CORPS COMMON HARDWARE SUITE (MCHS)			-	-	146.357	-	-	0.972	-	-	0.987	-	-	-	-	-	-	-	-	-
2) Formal Schools Technical Refresh (FSTR) ⁽³⁾																				
2.1) IT Hardware Refresh	A		-	-	-	-	-	-	-	-	-	-	-	7.721	-	-	-	-	-	7.721
2.2) FSTR Tablets/ Modernization	A		-	-	8.346	-	-	4.259	-	-	4.198	-	-	-	-	-	-	-	-	-
2.3) FSTR Refresh	A		-	-	8.591	-	-	2.741	-	-	2.737	-	-	-	-	-	-	-	-	-
Subtotal: 2) Formal Schools Technical Refresh (FSTR)			-	-	16.937	-	-	7.000	-	-	6.935	-	-	7.721	-	-	-	-	-	7.721
3) MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS)																				
3.1) Data Center Tech Refresh ⁽⁴⁾	A		-	-	33.078	-	-	4.571	-	-	4.563	-	-	-	-	-	-	-	-	-
3.2) Data Center Domain Consolidation	A		-	-	4.050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3) Prior Year Cumulative Funding	A		-	-	71.124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS)			-	-	108.252	-	-	4.571	-	-	4.563	-	-	-	-	-	-	-	-	-
4) Marine Corps Cyberspace Operations Group																				
4.1) DMSS	A		1,009.500	2	2.019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.2) Network Operations Infrastructure(Refresh/ Upgrades)	A		-	-	51.331	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.3) Computer Network Defense	A		-	-	14.917	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.4) AltNOSC Infrastructure Upgrade	A		-	-	5.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.5) Command IT Refresh	A		-	-	5.723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Marine Corps Cyberspace Operations Group			-	-	79.690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) Secure Operational Network Infrastructure and Communications (SONIC)																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19									P-1 Line Item Number / Title: 4630 / Common Computer Resources							Aggregated Items Title: Common Computer Resources				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
5.1) End User Devices (5)(1)	A		6.212	5,934	36.862	1.164	3,436	4.000	1.187	4,937	5.860	-	-	-	-	-	-	-	-	-
5.2) Fielding Support (6)	A		-	-	1.604	-	-	0.279	-	-	0.409	-	-	-	-	-	-	-	-	-
5.3) Network Equipment Tech Refresh (7)	A		-	-	30.753	-	-	3.959	-	-	5.799	-	-	-	-	-	-	-	-	-
5.4) Enterprise Infrastructure Modernization (EIM) (8)	A		-	-	40.868	-	-	5.409	-	-	8.423	-	-	-	-	-	-	-	-	-
5.5) Network Access Control Compliance & Remediation (NACCR)	A		-	-	3.692	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.6) Defense Policy Review Initiative (9)	A		-	-	0.014	-	-	0.607	-	-	0.050	-	-	-	-	-	-	-	-	-
Subtotal: 5) Secure Operational Network Infrastructure and Communications (SONIC)			-	-	113.793	-	-	14.254	-	-	20.541	-	-	-	-	-	-	-	-	-
6) MARINE CORPS INFORMATION OPERATION PROGRAM (MCIOP)																				
6.1) Workstations (10)	A		-	-	6.889	-	-	0.423	-	-	0.429	-	-	0.438	-	-	-	-	-	0.438
Subtotal: 6) MARINE CORPS INFORMATION OPERATION PROGRAM (MCIOP)			-	-	6.889	-	-	0.423	-	-	0.429	-	-	0.438	-	-	-	-	-	0.438
7) MARINE FORCES CYBER COMMAND																				
7.1) Deployable Mission Support Systems (DMSS)	A		-	-	24.228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.2) Distributed Computing Equipment	A		-	-	4.728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.3) Video Teleconferencing and Multi-media Equipment	A		-	-	7.972	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.4) Network Hardware	A		-	-	8.120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.5) Telephone Equipment	A		-	-	0.310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.6) Cable Infrastructure	A		-	-	4.842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.7) Wireless Center IT Equipment	A		-	-	2.803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy														Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19						P-1 Line Item Number / Title: 4630 / Common Computer Resources								Aggregated Items Title: Common Computer Resources						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
7.8) Operations Center IT Equipment	A		-	-	2.696	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) MARINE FORCES CYBER COMMAND			-	-	55.699	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8) Paperless Acquisition (PA) Systems																				
8.1) WebMethod Licenses	A		-	-	3.105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.2) Hardware ⁽¹¹⁾	A		-	-	0.373	-	-	0.130	-	-	0.132	-	-	0.135	-	-	-	-	-	0.135
Subtotal: 8) Paperless Acquisition (PA) Systems			-	-	3.478	-	-	0.130	-	-	0.132	-	-	0.135	-	-	-	-	-	0.135
9) Marine Corps Recruiting Information Support System (MCRISS)																				
9.1) Software Licenses ⁽¹²⁾	A		-	-	0.461	-	-	0.058	-	-	0.077	-	-	0.064	-	-	-	-	-	0.064
Subtotal: 9) Marine Corps Recruiting Information Support System (MCRISS)			-	-	0.461	-	-	0.058	-	-	0.077	-	-	0.064	-	-	-	-	-	0.064
10) Technology Services Organization (TSO)																				
10.1) MOL Modernization	A		-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-
10.2) Hardware ⁽¹³⁾	A		-	-	0.521	-	-	0.175	-	-	-	-	-	-	-	-	-	-	-	-
10.3) Laptop Refresh ^(f)	A		2.875	320	0.920	2.465	160	0.394	2.514	160	0.402	2.514	160	0.402	-	-	-	2.514	160	0.402
10.4) Tech Refresh ⁽¹⁴⁾	A		-	-	0.719	-	-	-	-	-	0.402	-	-	-	-	-	-	-	-	-
10.5) Various Software	A		-	-	0.914	-	-	-	-	-	0.594	-	-	0.539	-	-	-	-	-	0.539
Subtotal: 10) Technology Services Organization (TSO)			-	-	3.074	-	-	3.569	-	-	1.398	-	-	0.941	-	-	-	-	-	0.941
11) Prior Year Cumulative																				
11.1) Prior Year	A		-	-	8.190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 11) Prior Year Cumulative			-	-	8.190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12) Marine Corps Wargaming Capability ⁽¹⁵⁾																				
12.1) Software - Wargaming Solution ⁽¹⁶⁾	A		-	-	-	-	-	-	-	-	-	-	-	8.643	-	-	-	-	-	8.643
12.2) Hardware - Wargaming Solution ⁽¹⁷⁾	A		-	-	-	-	-	-	-	-	21.898	-	-	-	-	-	-	-	-	-
12.3) Computer Network Defense ⁽¹⁸⁾	A		-	-	-	-	-	-	-	-	0.778	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19								P-1 Line Item Number / Title: 4630 / Common Computer Resources								Aggregated Items Title: Common Computer Resources				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
12.4) Cryptographic Equipment ⁽¹⁹⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.250	-	-	-	-	-	0.250
Subtotal: 12) Marine Corps Wargaming Capability			-	-	0.000	-	-	-	-	-	22.676	-	-	8.893	-	-	-	-	-	8.893
14) Professional Development																				
14.1) .EDU Infrastructure			-	-	1.478	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.2) SNCOA	A		-	-	5.318	-	-	2.000	-	-	3.153	-	-	4.143	-	-	-	-	-	4.143
Subtotal: 14) Professional Development			-	-	6.796	-	-	2.000	-	-	3.153	-	-	4.143	-	-	-	-	-	4.143
15) SPECIALIZED SKILLS TRAINING																				
15.1) Specialized Skills Training ⁽²⁰⁾	A		-	-	-	-	-	-	-	-	10.457	-	-	7.470	-	-	-	-	-	7.470
Subtotal: 15) SPECIALIZED SKILLS TRAINING			-	-	0.000	-	-	-	-	-	10.457	-	-	7.470	-	-	-	-	-	7.470
16) RECRUIT TRAINING																				
16.1) Recruit Training ⁽²¹⁾	A		-	-	-	-	-	-	-	-	5.967	-	-	-	-	-	-	-	-	-
Subtotal: 16) RECRUIT TRAINING			-	-	0.000	-	-	-	-	-	5.967	-	-	-	-	-	-	-	-	-
17) TRAINING AND EDUCATION HEADQUARTERS SUPPORT																				
17.1) Training and Education Headquarters Support ⁽²²⁾	A		-	-	-	-	-	-	-	-	-	-	-	2.291	-	-	-	-	-	2.291
Subtotal: 17) TRAINING AND EDUCATION HEADQUARTERS SUPPORT			-	-	0.000	-	-	-	-	-	-	-	-	2.291	-	-	-	-	-	2.291
18) Marine Corps Heritage Center ⁽²³⁾																				
18.1) Marine Corps Heritage Center ⁽²⁴⁾	A		-	-	-	-	-	-	-	-	-	-	-	8.000	-	-	-	-	-	8.000
Subtotal: 18) Marine Corps Heritage Center			-	-	0.000	-	-	-	-	-	-	-	-	8.000	-	-	-	-	-	8.000
Total			-	-	549.616	-	-	32.977	-	-	77.315	-	-	40.096	-	-	-	-	-	40.096

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ Starting in FY2023, funding that was previously in this cost element has been realigned to Cost Element 3.1 (End User Devices [EUDs]) within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

⁽²⁾ Starting in FY2023, funding that was previously in this cost element has been realigned to various Cost Elements within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4630 / Common Computer Resources	Aggregated Items Title: Common Computer Resources
(3) FORMALIZED SCHOOLS TECHNICAL REFRESH (FSTR): Funds and manages the software and IT hardware required to provide a robust and reliable Computer-Based Training (CBT) capability for TECOM (Training and Education Command) schools. Computers used in TECOM classrooms are not funded or managed by HQMC as part of the Marine Corps Enterprise Network (MCEN), and must therefore be funded and managed by the FSTR program. This program standardizes IT equipment for the 812 classrooms throughout TECOM and formalizes the upgrade and refresh process. In order to maintain adequate reliability and software compliance, computers need to be refreshed every four years. FSTR provides reliable hardware, software, and network resources to support Marine Corps Programs of Instruction and curriculum, delivered in TECOM formal classrooms. The FSTR program is foundational to realizing the Commandant of the Marine Corps' vision of exploiting technology as an enabler to advance Training & Education capabilities. (4) Starting in FY2023, funding that was previously in this cost element has been realigned to various Cost Elements with the Enterprise IT Compute and Store Cost Element grouping within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. (5) Starting in FY2023, funding that was previously in this cost element has been realigned to Cost Element 3.1 (End User Devices [EUDs] within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. (6) Starting in FY2023, funding that was previously in this cost element has been realigned to various Cost Elements within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. (7) Starting in FY2023, funding that was previously in this cost element has been realigned to Cost Element 1.2 (Network Transport) within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. (8) Starting in FY2023, funding that was previously in this cost element has been realigned to various Cost Elements within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. (9) Starting in FY2023, funding that was previously in this cost element has been realigned to Cost Element 3.2 (DPRI) within the MCEN BLI (BLI 4625) which consolidated funding from multiple programs to the capabilities defined in the Technology Business Model (found in OMB Circular A-11). This realignment will provide greater transparency in IT spending across the Marine Corps. (10) FY 2023 Base Appropriation Request: \$0.438M funding will support hardware and software refreshes that are specific to Operations in the Information Environment (OIE). These enhancements will support the growing operational requirements of deployed teams and enable coordination of OIE across the Marine Corps and in support of Service and Joint requirements. The \$0.009M increase in funding from FY 2022 to FY 2023 is due to the support of real-time Operations in the Information Environment (OIE). (11) FY 2023 funding will provide mission critical hardware required to support the needs of Paperless Acquisition Systems such as Standard Procurement System (SPS), Electronic Procurement System (EPS), and Purchase Request Builder (PRB). (12) FY 2023 funding will be used for hardware refresh to support MCRC end users and initial software license procurements. (13) Move to cloud has eliminated cost of hardware refreshes. (14) Technical refresh of hardware ended in FY22 as sustained systems move to the Cloud. (15) Wargaming capability efforts are focused within multiple areas to include identifying, defining, and documenting requirements and capabilities; directing cyber security support for initiatives to boost information assurance in the areas of modeling & simulation, network configuration, security control validation, and type accreditation; development of performance specifications; and modeling and simulation prototyping efforts. The wargaming capability facilitates the assessment and evaluation of operating and functional concepts, operational and technology-based approaches, current concepts of operations, and principles and methods that inform decisions in support of force development and requirements generation. Wargaming capability results are used to develop, assess, and refine future operating and functional concepts across the full range of military operations (ROMO). Additionally, they test current OPLANS and CONOPS; examine operational and tactical actions through repeated, multiple iterations; enable the full development of concepts through opportunities for examination and evaluation; assess capability investments while guiding capability resourcing actions and informing the POM development; and provide education and leadership development. (16) Software - Wargaming Solution: Increase of \$8.643M from FY22 to FY23 supports procurement of software required for Phase III production of the vendor's wargaming system that enables the CMC Force Design program by providing advanced modeling and simulation (M&S) systems and analytic assessments of current Operation Plans, Concepts of Operations, future operational and functional concepts, and operational and technology-based approaches. (17) Hardware - Wargaming Solution: Decrease of \$21.898M from FY22 to FY23 reflects completion of procurement and associated pre-installation activities of facility infrastructure hardware components for the outfitting of the building construction (MILCON P-719) which enables the Wargaming solution through the FYDP. (18) Computer Network Defense: Decrease of \$0.778M from FY22 to FY23 reflects the completion of security hardware procurement supporting the wargaming production system being hosted in the Wargaming Center. (19) Cryptographic Equipment: Increase of \$0.250M from FY22 to FY23 reflects initial procurement of Cryptographic devices (i.e. KG-175s) in support of Phase III wargaming software production system efforts. (20) Decrease from FY 2022 to FY 2023 of \$2.987M funds student IT training devices that will be used to access online digital media content in and out of the classroom. (21) Decrease from FY22 to FY23 due to the completion of the initial procurement in FY22. Procurement will resume in FY24. (22) Increase of \$2.291M will provide initial capabilities for the USMC Wargaming Program that will use wargames to increase the cognitive abilities of junior leaders. This funding provides the Wargaming Program the ability to purchase commercial off the shelf wargames and other products to facilitate delivery of wargaming content in support of 21st Century Learning Modernization and the Commandant's Planning Guidance. (23) Final Phase Galleries 13 and 14 tell the stories of Marines post-Vietnam War, including the attack on Marine Barracks in Beirut, Desert Shield and Desert Storm, and stories of Marines in Iraq and Afghanistan. Currently, work has been completed on the construction contract - the walls, floors, structure, ductwork, alarms, electrical. Exhibit fabricators are working on wall and floor finishes, scenic painting, installing cast figures, and exhibit graphics. The next phase will be to install the special effects and audio visual components which provide the visitor with an emotional experience, as exists in every other gallery, and makes the Museum a truly memorable place for Marines, their families, and the public. The opening of these galleries is a critical part of the commemoration of the Marine Corps 250th birthday in 2025.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4630 / Common Computer Resources	Aggregated Items Title: Common Computer Resources
⁽²⁴⁾ Increase from FY22 to FY23 of \$8.000M supports a one-time buy for the Marine Corps Heritage Center's Audio Video (AV) and Special Effects requirement for new and existing historical galleries. Funding will procure AV/Special Effects systems for both the Final Phase galleries and to update failing AV systems in the existing historical galleries, most of which are well past their expected operational life cycle. AV/Special Effects funding is required in order to open the new galleries to the public and to address safety concerns with the outdated equipment in existing galleries, which are causing issues associated with evacuation lighting and announcements if there is a power failure.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19				P-1 Line Item Number / Title: 4630 / Common Computer Resources					Aggregated Items: Common Computer Resources			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) MARINE CORPS COMMON HARDWARE SUITE (MCHS)												
1.1) MCHS End User Device Refresh ⁽¹⁾		2020	HPI Federal LLC / Washington DC	C / FFP	MCSC, Quantico, VA	Aug 2020	Sep 2020	646	1.143	Y		
1.1) MCHS End User Device Refresh ⁽¹⁾		2021	Various / Various	C / TBD	MCSC, Quantico, VA	Mar 2021	Apr 2021	645	1.164	Y		
1.1) MCHS End User Device Refresh ⁽¹⁾		2022	Various / Various	C / TBD	MCSC, Quantico, VA	Mar 2022	Apr 2022	645	1.187	Y		
5) Secure Operational Network Infrastructure and Communications (SONIC)												
5.1) End User Devices ⁽⁵⁾		2020	Dell Federal Systems LP / Round Rock, TX	C / FFP	MCSC, Quantico, VA	Feb 2020	Apr 2020	5,934	0.927	Y		
5.1) End User Devices ⁽⁵⁾		2021	Various / Various	C / TBD	MCSC, Quantico, VAMCSC, Quantico, VA	Mar 2021	Apr 2021	3,436	1.164	Y		
5.1) End User Devices ⁽⁵⁾		2022	Various / Various	C / TBD	MCSC, Quantico, VA	Mar 2022	Apr 2022	4,937	1.187	N	Oct 2021	
10) Technology Services Organization (TSO)												
10.3) Laptop Refresh		2019	TBD / TBD	Reqn	MCSC, Quantico, VA	Aug 2020	Aug 2020	160	2.461	N	Sep 2020	Apr 2020
10.3) Laptop Refresh		2020	TBD / TBD	Reqn	MCSC, Quantico, VA	Feb 2021	Feb 2021	160	2.463	N	Mar 2021	Oct 2020
10.3) Laptop Refresh		2021	TBD / TBD	Reqn	MCSC, Quantico, VA	Aug 2021	Aug 2021	160	2.465	N	Sep 2021	Apr 2021

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy **Date:** April 2022

Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)	P-1 Line Item Number / Title: 4631 / Command Post Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0506313M

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,107.394	26.993	48.633	58.314	0.000	58.314	70.208	30.106	27.392	27.030	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,107.394	26.993	48.633	58.314	0.000	58.314	70.208	30.106	27.392	27.030	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,107.394	26.993	48.633	58.314	0.000	58.314	70.208	30.106	27.392	27.030	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Networking on the Move (NOTM) - NOTM is a critical CMC Force Design program, essential to achieving Force Design initial operational capability (IOC) in FY 2023 and sustaining the momentum to achieve Force Design full operational capability (FOC) by 2030. NOTM is a critical enabler for "Command and Control (C2) in a Degraded Environment," a Force Design 2030 Line of Effort. NOTM enables persistence inside contested environments, and the conduct of sea denial operations as part of the Naval Expeditionary Force. NOTM achieves this by providing a state of the art turn-key open architecture solution that enables forces to exercise command and control across operational domains - land, sea, air, and while transitioning between domains, by providing terrestrial line of sight and beyond line of sight satellite communication gateway services, and access to services and applications that enable forces to exercise command and control while transitioning between static and mobile positions. NOTM provides critical radio, voice, and data command and control links to key leaders in dynamic environments across multiple domains. The USMC has two NOTM programs, the NOTM Ground Combat Vehicle (NOTM-GCV), and the NOTM Airborne (NOTM-A) with requirements to field kits for the following platforms: High Mobility Multipurpose Wheeled Vehicle (HMMWV), Joint Light Tactical Vehicle (JLTV), Amphibious Assault Vehicle (AAV), Amphibious Combat Vehicle (ACV), Ultra-Light Tactical Vehicle (ULTV), KC-130J Hercules and MV-22 Osprey. One NOTM system for HMMWV, JLTV, and AAV consists of three vehicles per system (1 Point of Presence (POP) and 2 Staff Vehicles). Each NOTM system for ULTV, ACV, and airborne platforms consists of one vehicle per system (POP vehicle). NOTM also supports Navy shipboard integration by installing NOTM Tactical Entry Point (TEP) Modem Kits on Amphibious L-class ships to provide services to Marine Littoral Regiment (MLR) forces ashore.

Global Command and Control System - Tactical Combat Operations System (GCCS-TCO) - GCCS-TCO is the principal tool within the MAGTF for situational awareness through distribution of the Common Tactical Picture (CTP). It supports tactical operations by providing information via high speed computer systems in a timely manner and includes the Tactical COP Workstations/Servers.

Hand Held Command and Control (H2C2) - Provides the dismounted user at the tactical edge, handheld devices that provides integrated, on-the-move, secure, timely, and relevant Command & Control/ Situational Awareness (C2/SA) information to tactical combat, combat support and combat service support commanders, leaders, and key C2 nodes. H2C2 provides leaders with a capability for selecting, managing, and assimilating relevant data and information. This allows them to pass orders and graphics that will provide the joint warfighter the capability to visualize the commander's intent and scheme of maneuver, and provide enhanced SA of friendly, reported enemy, neutral, and civilian entities.

Joint Battle Command - Platform (JBC-P) Family of Systems (FoS) - JBC-P FoS is an Army led ACAT II program of Joint Requirements Oversight Council (JROC) interest formerly known as the Blue Force Tracker (BFT) FoS. It is comprised of L-Band Satellite Communications (SATCOM) and is a digital, battle command information FoS that provides integrated, on the move, timely, relevant Command and Control Situational Awareness (C2SA) information to tactical combat, combat support, and combat service support commanders, leaders, and key C2 nodes. JBC-P FoS will provide JROC mandated C2SA convergence across Combat Operations Centers (COC), ground vehicles and dismounted personnel.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4631 / Command Post Systems				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0506313M				
Line Item MDAP/MAIS Code: N/A										
Combat Operations Center (COC) - The COC provides commanders with a rapidly deployable, common, modular, and scalable operational agency that facilitates command and control across the full spectrum of MAGTF operations. The AN/TSQ-239A Family of Systems (FoS) is designed to provide centralized C2 Operational Facilities (OPFAC) to collect, process, and disseminate tactical data for the commander and staff of a Marine Expeditionary Force (MEF), Division, Wing, Marine Logistics Group, Regiment, Marine Air Group, Battalion, and Squadron. The COC provides the commander with a Common Operational Picture (COP) and tactical data and communications assets needed to plan and conduct operations in an expeditionary combat environment. The system enables analytical and intuitive decision-making with a modular and scalable equipment set consisting of a common module OPFAC, C2 system, visual displays, and SW. Existing Tactical Data System software, previously resident on numerous platforms throughout the Marine Air Ground Task Force (MAGTF), have been re-hosted on the COC system to provide commanders with integrated data access and communications. COC program office will begin developing a design for an update to the current COC configuration called Next Generation Operational Facility (OPFAC). The Next Generation OPFAC will provide the MAGTF with a more agile and modular COC capability to better support future Expeditionary Advanced Based Operations (EABO) that require a smaller physical presence. In FY 2021 the Combat Operations Center (COC) requirements transitioned into the Combat Data Network (CDN) BLI 4634 under the title Common Hosting Environment (CHE). [P40A / COSMOS]: Details on this program are available at a higher classification level.										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.213	48.606	58.287	-	58.287	70.177	30.074	27.359	26.996
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.780	0.027	0.027	-	0.027	0.031	0.032	0.033	0.034
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.993	48.633	58.314	-	58.314	70.208	30.106	27.392	27.030

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4631 / Command Post Systems				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0506313M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Command Post Systems	P-5a, P-21			- / 1,107.394	- / 26.993	- / 48.633	- / 58.314	- / -	- / 58.314
P-40	Total Gross/Weapon System Cost				- / 1,107.394	- / 26.993	- / 48.633	- / 58.314	- / 0.000	- / 58.314
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: Networking on the Move (NOTM) \$35.593M (\$35.566M Active, \$0.027M Reserves) - The decrease of \$12.944M from FY 2022 to FY 2023 reflects the completion of System Refresh/Equipment Upgrades, which transitions the NOTM systems from the obsolete HMMWV to the JLTV. NOTM is a critical Marine Corps Force Design program, essential to achieving Force Design Initial Operational Capability (IOC) in FY 2023 and this funding reflects sustaining the momentum to achieve Force Design full operational capability (FOC) by 2030. NOTM is a critical enabler to persisting inside contested environments and conducting sea denial operations as part of the Naval Expeditionary Force, which directly supports the Force Design 2030 Line of Effort "Command and Control (C2) in a Degraded Environment." FY 2023 funding continues the procurement of the NOTM-GCV kits required for the Ultra-Light Tactical Vehicle (ULTV) and retrofits of kits from the legacy MRZR to their replacement ULTV. Unlike all other platforms that host NOTM-GCV kits, ULTVs are internally transportable on an MV-22. This unique NOTM requirement and capability enables Fleet Marine Force units to deploy further distances without sacrificing their ability to digitally command and control. FY 2023 also initiates the procurement of NOTM Amphibious Combat Vehicle (ACV) Systems that are composed of a SATCOM gateway vehicle kit (POP Kit), two vehicle mounted networking suites (Staff Vehicle Kits) and six user interface devices (Staff Kits). ACV-mounted NOTM account for critical capability gaps by providing continuous terrestrial line of sight and beyond line of sight satellite communication gateway services, and access to services and applications that enable forces to exercise command and control while transitioning between static and mobile positions. NOTM provides critical radio, voice, and data command and control links to key leaders in dynamic environments across multiple domains while commanders and staff conduct amphibious operations transitioning from ship to shore. Global Command and Control System - Tactical Combat Operations (GCCS TCO) - The \$0.002M in FY 2023 will provide for the procurement of digital versatile discs (DVDs) for the duplication and delivery of Tactical COP Server (TCS) software to the Fleet Marine Forces. The \$0.094M decrease from President's Budget 2021 reflects the transfer of funding to BA 01, Operation and Maintenance Marine Corps (OMMC), 1A2A Field Logistics for GCSS TCO required for sustainment. Hand Held Command and Control (H2C2) - The \$22.719M in FY 2023 will provide for the initial procurement of tablets that enable dismounted Marines with enhanced map imagery, integrated, on-the-move, timely, and relevant Command and Control Situational Awareness (C2SA) information, to include chat and fires capability. The increase provides funds for the tech refresh for the replacement of EUD hardware and SL-3 in order to account for devices' end-of-life support, wear and tear, and technology upgrades.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4631 / Command Post Systems							Aggregated Items Title: Command Post Systems						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) GCCS-TCO																				
1.1) Refresh-Reserves	A		-	-	0.980	-	-	0.753	-	-	-	-	-	-	-	-	-	-	-	-
1.2) Hardware/Software Refresh ⁽¹⁾	A		-	-	20.490	-	-	-	-	-	0.096	-	-	0.002	-	-	-	-	-	0.002
Subtotal: 1) GCCS-TCO			-	-	21.470	-	-	0.753	-	-	0.096	-	-	0.002	-	-	-	-	-	0.002
2) NOTM																				
2.1) NOTM Reserves Refresh	A		-	-	0.015	-	-	0.027	-	-	0.027	-	-	0.027	-	-	-	-	-	0.027
2.2) Program and Systems, Support, Fielding, & Training ⁽²⁾	A		-	-	45.219	-	-	3.566	-	-	3.293	-	-	3.105	-	-	-	-	-	3.105
2.3) System Refresh/Equipment Upgrades ⁽³⁾	A		-	-	89.293	-	-	4.092	-	-	39.296	-	-	9.381	-	-	-	-	-	9.381
2.4) NOTM Airborne Modification Kits ^(†)	A		380,225.00	80	30.418	379,777.00	40	15.191	-	-	-	-	-	-	-	-	-	-	-	-
2.5) NOTM Utility Task Vehicle (UTV) Systems ^(†)	A		-	-	-	672,000.00	5	3.360	-	-	-	-	-	-	-	-	-	-	-	-
2.6) NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems ^{(4)(†)}	A		-	-	-	-	-	-	845,923.08	7	5.921	845,923.08	10	8.459	-	-	-	845,923.08	10	8.459
2.7) NOTM Amphibious Combat Vehicle (ACV) Systems ^{(5)(†)}	A		-	-	-	-	-	-	-	-	-	1,186K	10	11.861	-	-	-	1,186K	10	11.861
2.8) COSMOS ⁽⁶⁾	A		-	-	-	-	-	-	-	-	-	-	-	2.760	-	-	-	-	-	2.760
Subtotal: 2) NOTM			-	-	164.945	-	-	26.236	-	-	48.537	-	-	35.593	-	-	-	-	-	35.593
3) COC																				
3.1) COC Refresh	A		-	-	24.574	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) COC			-	-	24.574	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	-
4) Prior Year Cumulative Funding																				
4.1) Prior Year Cumulative Funding	A		-	-	896.405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Prior Year Cumulative Funding			-	-	896.405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5) H2C2																				
5.1) H2C2 Tablets ⁽⁷⁾	A		-	-	-	-	-	-	-	-	-	2,296.21	5,783	13.279	-	-	-	2,296.21	5,783	13.279

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19								P-1 Line Item Number / Title: 4631 / Command Post Systems							Aggregated Items Title: Command Post Systems				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.2) Tech Refresh ⁽⁸⁾	A		-	-	-	-	-	-	-	-	-	-	-	9.440	-	-	-	-	-	9.440
Subtotal: 5) H2C2			-	-	0.000	-	-	-	-	-	-	-	-	22.719	-	-	-	-	-	22.719
Total			-	-	1,107.394	-	-	26.993	-	-	48.633	-	-	58.314	-	-	-	-	-	58.314

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ GCCS-TCO Hardware/Software Refresh decrease of \$0.094M from FY22 to FY23 reflects the transfer of funding from PMC to OMMC to reflect sustainment efforts. The \$0.002M remaining will provide for the procurement of DVDs for the duplication and delivery of Tactical COP Server (TCS) software to the Fleet Marine Forces (FMF).

⁽²⁾ NOTM Program and Systems, Support, Fielding, & Training decrease of \$0.188M from FY22 to FY23 is due to completion of installation and fielding activities associated with the NOTM procurement schedule.

⁽³⁾ NOTM System Refresh/Equipment Upgrades decrease of \$29.915M from FY22 to FY23 reflects the completion of kit procurement required to retrofit the NOTM-GCV from the legacy HMMWV to their replacement JLTV, which supports the Force Design 2030 Line of Effort "Protected Mobility and Enhanced Maneuver." \$9.381M will fund the procurement of refresh equipment for the vehicle-to-vehicle secure wireless refresh (Fortress) and kits to transition from HMMWV to JLTV.

⁽⁴⁾ NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems increase of \$2.538M from FY22 to FY23 supports an increase in procurement quantity of NOTM-GCV kits required for the Ultra-Light Tactical Vehicle (ULTV). Each kit consists of 115 Commercial Off The Shelf/Government Off The Shelf components that are integrated into the ULTV. Unlike the other platforms to host NOTM-GCV kits, ULTVs are internally transportable on an MV-22, providing a unique capability enabling units to deploy further distances in expeditionary environments without sacrificing their ability to digitally command and control.

⁽⁵⁾ NOTM Amphibious Combat Vehicle (ACV) Systems increase of \$11.861M from FY22 to FY23 supports procurement of Qty 10 NOTM ACV systems. Each NOTM ACV system consists of 115 Commercial Off The Shelf/ Government Off The Shelf components that are integrated into the ACV for continuous radio, voice, and data command and control to commanders and staff during an amphibious assault while the MAGTF is transitioning from ship to shore to account for critical capability gaps.

⁽⁶⁾ Details are held at a higher classification level.

⁽⁷⁾ Increase of \$13.279M from FY22 to FY23 is due to the continued procurement of H2C2 tablets that enable dismounted Marines with enhanced map imagery, integrated, on-the-move, timely, and relevant Command and Control Situational Awareness (C2SA) information, to include chat and fires capability. The handheld will utilize existing terrestrial and celestial networks, and be interoperable with other C2 systems in order to enable situational, battlespace awareness, and increase lethality. The first portion of this procurement was in FY20 under Cost Element 8.1.

⁽⁸⁾ H2C2 Tech Refresh increase of \$9.440M from FY22 to FY23 Provides for the replacement of EUD hardware and SL-3 in order to account for devices' end-of-life support, wear and tear, and technology upgrades enabling dismounted Marines with enhanced map imagery, integrated, on-the-move, timely, and relevant Command and Control Situational Awareness (C2SA) information, to include chat and fires capability.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19				P-1 Line Item Number / Title: 4631 / Command Post Systems					Aggregated Items: Command Post Systems			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) NOTM												
2.4) NOTM Airborne Modification Kits		2018	ViaSat Inc. / Carlsbad, CA	C / FFP	Chicago, IL	Apr 2018	Oct 2018	54	379,777.00	Y		
2.4) NOTM Airborne Modification Kits		2020	ViaSat Inc. / Carlsbad, CA	C / FFP	Chicago, IL	Nov 2019	May 2020	24	379,777.00	Y		
2.4) NOTM Airborne Modification Kits		2021	ViaSat Inc. / Carlsbad, CA	C / FFP	Chicago, IL	Oct 2020	Apr 2021	40	379,777.00	Y		
2.5) NOTM Utility Task Vehicle (UTV) Systems		2021	Defense Logistic Agency / Philadelphia, PA	C / TBD	** NO PCO **	Oct 2020	Jun 2021	5	672,000.00	Y		
2.6) NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems ^{(4)(t)}		2022	DLA / DLA, Phil, PA	C / FFP	Philadelphia, PA	Jan 2022	Jul 2022	7	845,923.08	Y		
2.6) NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems ^{(4)(t)}		2023	DLA / DLA, Phil, PA	C / TBD	Philadelphia, PA	Jan 2023	Jul 2023	10	845,923.08	N	Jun 2023	
2.7) NOTM Amphibious Combat Vehicle (ACV) Systems ^{(5)(t)}		2023	DLA / DLA, Phil, PA	C / FFP	** NO PCO **	Jan 2023	Jul 2023	10	1,186K	N	Jan 2023	
^(t) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2023 Navy																		Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19									P-1 Line Item Number / Title: 4631 / Command Post Systems									Aggregated Items: Command Post Systems									

Items (Units in Each)							Fiscal Year 2018														Fiscal Year 2019														B A L A N C E
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2017	BAL DUE AS OF 1 OCT				Calendar Year 2018											Calendar Year 2019														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
2) NOTM																																			
2.6) NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems ⁽⁴⁾																																			
	21	2022	NAVY	7	0	7																												7	
	21	2023	NAVY	10	0	10																												10	
2.7) NOTM Amphibious Combat Vehicle (ACV) Systems ⁽⁵⁾																																			
	22	2023	NAVY	10	0	10																												10	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2023 Navy										Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19					P-1 Line Item Number / Title: 4631 / Command Post Systems					Aggregated Items: Command Post Systems									

Items (Units in Each)							Fiscal Year 2020														Fiscal Year 2021														BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT				Calendar Year 2020											Calendar Year 2021														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
2) NOTM																																			
2.6) NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems ⁽⁴⁾																																			
	21	2022	NAVY	7	0	7																													7
	21	2023	NAVY	10	0	10																													10
2.7) NOTM Amphibious Combat Vehicle (ACV) Systems ⁽⁵⁾																																			
	22	2023	NAVY	10	0	10																													10
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4631 / Command Post Systems										Aggregated Items: Command Post Systems													
Items <i>(Units in Each)</i>							Fiscal Year 2022										Fiscal Year 2023													BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT				Calendar Year 2022										Calendar Year 2023													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP		
2) NOTM																																	
2.6) NOTM Ground Combat Vehicles (GCV) Ultra-Light Tactical Vehicle Systems ⁽⁴⁾																																	
	21	2022	NAVY		7	0	7				A	-	-	-	-	-	-	7														0	
	21	2023	NAVY		10	0	10														A	-	-	-	-	-	-	10				0	
2.7) NOTM Amphibious Combat Vehicle (ACV) Systems ⁽⁵⁾																																	
	22	2023	NAVY		10	0	10														A	-	-	-	-	-	-	10				0	
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19					P-1 Line Item Number / Title: 4631 / Command Post Systems					Aggregated Items: Command Post Systems			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)								
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	DLA - DLA, Phil, PA			TBD	0	0	0	0	0	0	0	0	
2	DLA - DLA, Phil, PA		10	TBD	0	0	6	6	0	0	0	0	
"A" in the Delivery Schedule indicates the Contract Award Date. Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).													

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4633 / Radio Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0605873M, 0506313M				
Line Item MDAP/MAIS Code: 000												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,085.644	338.997	401.346	612.450	0.000	612.450	639.387	172.373	104.327	89.759	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,085.644	338.997	401.346	612.450	0.000	612.450	639.387	172.373	104.327	89.759	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,085.644	338.997	401.346	612.450	0.000	612.450	639.387	172.373	104.327	89.759	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: This budget line item procures radios, radio systems, satellite communications systems, and associated equipment. Global Broadcast Service (GBS): GBS is a smart-push/user-pull Satellite Communication (SATCOM) system that provides large volumes of information to deployed, or garrison forces. The AN/TSR-9 and AN/TSR-11 receives and disseminates GBS broadcasts at up to 45 Mbps, and is capable of processing both classified and unclassified information products such as: imagery, intelligence, video (NTSC and Digital), theater message traffic, Joint and service-unique news, weather and MWR programming. Each Transportable Ground Receive Suite (TGRS) consists of a Receive Terminal (including a 1-meter parabolic dish antenna), Receive Broadcast Manager Server, Power Controller Unit, Crypto Device (KG-250), Integrated Receiver-Decoder (for NTSC video), Managed Ethernet Switch, Unmanaged Ethernet Switch, Video Converter, and transit cases. The Portable Receive Suite (PRS) is a man portable ground station single enclave (Classified or Unclassified) receive suite. The PRS can be connected to a LAN with the addition of a user supplied Ethernet switch. The PRS receives information products broadcasted throughout the Global Broadcast Service (GBS) via the Ka-band transponders via the Wideband Global SATCOM (WGS) satellites' Ka-band downlink transponders. Wideband Satellite Communications (WSATCOM) (formerly Very Small Aperture Terminal (VSAT)): This is a critical CMC Force Design program. WSATCOM is an integrated satellite communications family of systems (FoS) that is the primary means to communicate with units that are beyond line-of-sight (BLOS). This capability is critical to the Force Design goals by establishing resilient communications architectures capable of closing kill chains in austere environments (EABO) by utilizing organic and commercial SATCOM. This FoS supports Marine Air-Ground Task Force (MAGTF) operations concept by providing SATCOM capability from the lowest tactical to the most strategic levels of command. WSATCOM systems' are intended to be modular with an architecture that supports technology insertion through scalable and flexible technologies. WSATCOM uses commercial Ku and military X and Ka frequency bands that support communications (NIPRNET, SIPRNET, telephony) at all levels of the MAGTF. WSATCOM systems enable previously disconnected commanders at all levels to communicate with friendly forces and to support a wide range of information operations mission and traditional missions. Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T): SMART-T provides tactical users with protected data and voice via Advanced Extremely High Frequency (AEHF) satellite communications. The SMART-T system is transported on High Mobility Multipurpose Wheeled Vehicles (HMMWVs), providing MAGTF Commanders a secure, survivable, long-haul, low/medium data rate communications link not subject to terrain masking and horizon limitations. The SMART-T is the only USMC asset that possesses a SATCOM AEHF capability. Secure Expeditionary Resilient Positioning, Nav, and Timing (SERPNT) (formerly REPNT): Position, Navigation, and Timing (PNT) enables Marine Air/Ground Task Force (MAGTF) Commanders to know and trust position, effectively navigate, and receive precise and accurate timing for users, platforms, and systems across the MAGTF warfighting functions through an enterprise approach for increasing PNT resiliency												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy			Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4633 / Radio Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A		Other Related Program Elements: 0206313M, 0605873M, 0506313M

Line Item MDAP/MAIS Code: 000

and assurance. SERPNT technologies enable expeditionary operations, by ensuring accurate and resilient position and timing information is available to all users. SERPNT efforts will enable the Marine Corps to transition from the Space-Force-led MGUE Increment I technology maturation effort to the modernized M-Code GPS acquisition program, Mounted Assured Resilient Navigation (MARNAV). The MARNAV solution will enable the sensor to shooter "kill-chain" required for Force Design 2030, Expeditionary Advanced Based Operations (EABO), Distributed Maritime Operations, and Joint War-at-Sea Concepts within a Joint All Domain Command and Control (JADC2) construct. Failure to fully fund this effort delays M-Code GPS and PNT integration efforts across multiple platforms that require resilient and assured PNT capabilities to meet Force Design 2030, EABO, and JADC2 construct.

Tactical Communications Modernization (TCM): This is a CMC Force Design program. TCM addresses the requirements to enhance, replace, and sustain tactical radio systems while achieving interoperability and minimizing the effects of equipment obsolescence. TCM enables Command, Control (C2) and situational awareness at all echelons and elements of the MAGTF. TCM provides for Line of Sight (LOS), Beyond Line of Sight (BLOS) secure voice, and data, operating in frequency bands from 1.6MHz to 2.5GHz. This capability is critical to the Force Design goals of establishing resilient communications architectures capable of closing kill chains in austere environments and JADC2 compatible. TCM procurements enable joint interoperability, mobile networking, and support National Security Agency (NSA) Communications Security (COMSEC) Modernization requirements down to the squad level.

Terrestrial Wideband Transmission Systems (TWTS): This is a CMC Force Design program. TWTS is a portfolio that provides the Fleet Marine Force with the capabilities of high throughput secure Beyond Line of Sight (BLOS) and Line of Sight (LOS) terrestrial digital data transmission. TWTS consists of systems that are Leading Readiness Indicators for the Marine Corps Force Design Effort supporting the conduct of Command and Control in a degraded environment. The Next Generation Troposcatter (NGT) will provide the BLOS capability, which is currently in the Engineering and manufacturing Development Phase. The NGT capability will provide significantly higher bandwidth communications over longer distances compared to the Army/Navy Transportable Radio Communications-170A (AN/TRC-170A) that has been in operations and sustainment since 1992. The Line-of-Sight Radio System Family of Systems (LRS FoS) will begin fielding in FY 2022 and an optical communications system, which was recently designated as an acquisition program. The LRS FoS will provide Naval integration over long distances with both shore-to-shore and shore-to-ship connectivity. This capability is critical to the Force Design goals of establishing resilient communications architectures capable of closing kill chains in austere environments and JADC2 compatible. LRS FoS includes a Transit Case based system for operational flexibility, a vehicle integrated system (MRC), and the Tactical Elevated Antenna Mast II (TEAMS II) which provides the antenna height needed for transmitting over significant distances. The optical communications system will provide Marines with an extremely high data rate communications pathway. The new capabilities within the TWTS portfolio will modernize the Marine Corps ability to connect networks over long distances in contested and satellite-denied environments.

Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	304.565	401.346	612.450	-	612.450	639.387	172.280	104.233	89.662
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	34.432	-	-	-	-	-	0.093	0.094	0.097
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	338.997	401.346	612.450	-	612.450	639.387	172.373	104.327	89.759

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4633 / Radio Systems				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0605873M, 0506313M			
Line Item MDAP/MAIS Code: 000										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Radio Systems	P-5a, P-21			- / 1,085.644	- / 338.997	- / 401.346	- / 612.450	- / -	- / 612.450
P-40	Total Gross/Weapon System Cost				- / 1,085.644	- / 338.997	- / 401.346	- / 612.450	- / 0.000	- / 612.450
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$612.450M Global Broadcast Service (GBS): \$6.720M - Funding will support hardware tech refresh efforts to mitigate obsolescence issues as well as program and fielding support. Increase of \$4.895M from FY 2022 to FY 2023 supports fielding and training support of the previously procured Third Generation Receive Terminal antennas as well as parabolic dish antennas. Wideband Satellite Communications (WSATCOM) (formerly VSAT): \$18.251M - Funding increase of \$16.361M from FY 2022 to FY 2023 will procure Marine Corps Wideband Satellite Light (MCWS-L) which is comprised of a modular multichannel, man-portable and multiband (X, Ku, Ka) SHF (Super High Frequency) satellite terminal that provides transmission capability to support Battalion and smaller sized Marine Corps missions. Funding will also procure MCWS Heavy (MCWS-H) which is comprised of a modular multichannel and multiband (X, Ku, Ka) SHF satellite terminal that provides transmission capability to support Regiment and larger sized Marine Corps missions. Program will also provide associated fielding/production support, and ancillaries/spares components related to MCWS-H and MCWS-L to meet Initial Operational Capability (IOC) in FY 2026. These resources are critical to fielding primary beyond-line-of-sight capabilities to tactical Marine Corps forces and will result in more-reliable communications systems and enhanced command and control. Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T): \$0.979M - Increase in \$0.161M from FY 2022 to FY 2023 reflects procurement of Ethernet Repeater and associated tech refresh components to mitigate End of Life/End of Service (EOL/EOS) and obsolescence issues until Next Generation (NEXGEN) AEHF solution is identified. Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT) (formerly REPNT): \$30.957M - Funding increase of \$29.457 from FY 2022 to FY 2023 will provide for the procurement of M-Code GPS and PNT solutions through Mounted Assured Resilient Navigation (MARNV); MARNV will support the procurement and fielding of a Position, Navigation, and Timing distribution devices for USMC systems and platforms that require resilient PNT and are critical to Force Design 2030 by mitigating threats to legacy GPS solutions (jamming and spoofing) that are currently being used. Resilient and alternative PNT solutions are required to effectively mitigate the current and emerging threats to systems and platforms that use GPS. Tactical Communications Modernization (TCM): \$352.890M - Funding will continue to provide for the procurement of multiple families of radio systems which support the primary voice and data communication requirements for the operational forces. Funding will support procurement of Multi-Channel Hand Held (MCHH) and MCHH Vehicle Integration Kit (VIK) and other radio system capabilities; fielding/production support; ancillaries/accessories components. High Frequency Radio (HFR) II replaces aging legacy HFR systems to meet the National Security Agency (NSA) mandate for Communications Security (COMSEC) modernization with approved cryptographic products. Multi-Channel Radio Family of Systems (MCR FoS), Multi Channel Man-Pack (MCMP) and MCHH, replaces legacy single channel radios to meet the NSA mandate for COMSEC modernization. Ground Link-16 initial procurement of systems in support of the USMC AAO. Increase of \$124.192M from FY 2022 to FY 2023 reflects procurements of systems in support of USMC AAO for MCMP, MBR II, HFR II, Ground Link-16, and associated support costs for fielding and training. Terrestrial Wideband Transmission System (TWTS): \$202.653M - Funding supports procurement of (168) TEAMS II, (250) optical communications systems and ancillary components. Funding also supports the necessary program and fielding support to transition these new technologies to the Marines. LRS FoS includes a Transit Case based system for operational flexibility, a vehicle integrated system (MRC), and the Tactical Elevated Antenna Mast System II (TEAMS II) which provides the antenna height needed for transmitting over significant distances. The optical communications system will provide Marines with an										

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4633 / Radio Systems
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0605873M, 0506313M
Line Item MDAP/MAIS Code: 000		
extremely high data rate communications pathway. TWTS will also continue to sustain legacy systems such as the AN/TRC 170, Army-Navy/Mobile Radio Communications (AN/MRC-142), and Tactical Elevated Antenna Mast System (TEAMS) until NGT, LRS FoS, and the optical communications systems are fielded. The new capabilities within the TWTS portfolio will modernize the Marine Corps ability to connect networks over long distances in contested and satellite-denied environments. Increase of \$36.038M from FY 2022 to FY 2023 supports procurements for Tactical Elevated Antenna Mast II (TEAMS II) and Optical Capability. The FY22 Defense Appropriations Act includes the rescission of \$80.109M of FY 2021 funding. The rescission is distributed within the TCM cost elements on the P-40a. The FY 2023 funding request was adjusted by \$40.000M to account for the availability of prior year execution balances.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy														Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4633 / Radio Systems							Aggregated Items Title: Radio Systems						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Global Broadcast Service (GBS)																				
1.1) Program /Training Support ⁽¹⁾			-	-	2.876	-	-	0.192	-	-	0.684	-	-	0.989	-	-	-	-	-	0.989
1.2) Tech Refresh ⁽²⁾	A		-	-	3.366	-	-	5.702	-	-	0.079	-	-	4.682	-	-	-	-	-	4.682
1.3) Fielding Support ⁽³⁾			-	-	0.195	-	-	0.400	-	-	1.062	-	-	1.049	-	-	-	-	-	1.049
Subtotal: 1) Global Broadcast Service (GBS)			-	-	6.437	-	-	6.294	-	-	1.825	-	-	6.720	-	-	-	-	-	6.720
2) Wideband Satellite Communications (WSATCOM) (Formerly VSAT)																				
2.1) MCWS-X Logistics/Fielding/ Training Support			-	-	5.664	-	-	12.288	-	-	-	-	-	-	-	-	-	-	-	-
2.2) MCWS-X ^(†)	A		120,899.41	169	20.432	120,900.00	3	0.363	-	-	-	-	-	-	-	-	-	-	-	-
2.4) MCWS-L ^{(4)(†)}	A		-	-	-	-	-	-	-	-	-	1,175K	8	9.400	-	-	-	1,175K	8	9.400
2.5) MCWS-L Logistics/Fielding/ Training Support ⁽⁵⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.425	-	-	-	-	-	0.425
2.7) MCWS-H ^{(6)(†)}	A		-	-	-	-	-	-	-	-	-	2,000K	4	8.000	-	-	-	2,000K	4	8.000
2.8) MCWS-H Logistics/Fielding/ Training Support ⁽⁷⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.426	-	-	-	-	-	0.426
2.10) VSAT Legacy Ancillary Components ⁽⁸⁾	A		-	-	0.072	-	-	0.615	-	-	1.890	-	-	-	-	-	-	-	-	-
Subtotal: 2) Wideband Satellite Communications (WSATCOM) (Formerly VSAT)			-	-	26.168	-	-	13.266	-	-	1.890	-	-	18.251	-	-	-	-	-	18.251
3) Secure Mobile Anti-Jam Reliable Tactical - Terminal (SMART-T)																				
3.1) Tech Refresh ⁽⁹⁾	A		-	-	2.106	-	-	1.539	-	-	0.818	-	-	0.979	-	-	-	-	-	0.979
3.2) Tech Refresh (Reserve)	A		-	-	-	-	-	0.013	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Secure Mobile Anti-Jam Reliable Tactical - Terminal (SMART-T)			-	-	2.106	-	-	1.552	-	-	0.818	-	-	0.979	-	-	-	-	-	0.979
4) Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT)																				
4.1) Ancillary/Spares Components ⁽¹⁰⁾	A		-	-	5.319	-	-	0.150	-	-	-	-	-	2.662	-	-	-	-	-	2.662
4.3) MARNAV ^{(11)(†)}	A		-	-	-	-	-	-	-	-	-	22,000.00	1,212	26.664	-	-	-	22,000.00	1,212	26.664
4.4) Engineering/ Program Support ⁽¹²⁾			-	-	0.181	-	-	-	-	-	1.500	-	-	1.631	-	-	-	-	-	1.631

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19						P-1 Line Item Number / Title: 4633 / Radio Systems										Aggregated Items Title: Radio Systems				
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 4) Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT)			-	-	5.500	-	-	0.150	-	-	1.500	-	-	30.957	-	-	-	-	-	30.957
5) Tactical Communications Modernization (TCM)																				
5.1) Engineering, Fielding & Program Support ⁽¹³⁾			-	-	49.142	-	-	9.436	-	-	9.147	-	-	10.476	-	-	-	-	-	10.476
5.2) TCM FoS Ancillary, Accessory Components and Waveforms	A		-	-	31.873	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.3) MBR II R/T 117G ^{(14)(t)}	A		-	-	-	-	-	-	47,025.00	342	16.083	47,025.00	532	25.017	-	-	-	47,025.00	532	25.017
5.4) MBR II AN/ VRC-114(V) ₁ ^{(15)(t)}	A		-	-	-	-	-	-	-	-	-	69,546.00	100	6.955	-	-	-	69,546.00	100	6.955
5.5) MBR II AN/ VRC-114(V) ₂ ^{(16)(t)}	A		-	-	-	-	-	-	273,037.00	1	0.273	-	-	-	-	-	-	-	-	-
5.6) MBR II MRC-145 ^{(17)(t)}	A		-	-	-	-	-	-	273,000.00	95	25.935	273,000.00	55	15.015	-	-	-	273,000.00	55	15.015
5.7) MBR II MUOS Antenna OE-4702/G ^{(18)(t)}	A		-	-	-	-	-	-	4,948.00	171	0.846	4,948.00	103	0.510	-	-	-	4,948.00	103	0.510
5.8) MBR II MUOS Antenna OE-4703/G ^{(19)(t)}	A		-	-	-	-	-	-	5,209.00	171	0.891	5,209.00	242	1.261	-	-	-	5,209.00	242	1.261
5.10) MBR II Ancillary and Accessory Components (SL-3) ⁽²⁰⁾	A		-	-	-	-	-	-	-	-	30.367	-	-	-	-	-	-	-	-	-
5.11) MBR II Waveforms	A		-	-	-	-	-	18.802	-	-	-	-	-	-	-	-	-	-	-	-
5.12) Ground Link-16 ⁽²¹⁾	A		-	-	-	-	-	-	-	-	-	-	-	16.400	-	-	-	-	-	16.400
5.14) HFR II Manpack AN/PRC-160(V) ₅ ^{(22)(t)}	A		26,858.88	4,521	121.429	-	-	-	-	-	-	25,219.00	1,321	33.314	-	-	-	25,219.00	1,321	33.314
5.15) HFR II VRC AN/ VRC-104C ^{(23)(t)}	A		22,711.62	749	17.011	-	-	-	-	-	-	71,401.00	221	15.780	-	-	-	71,401.00	221	15.780
5.16) HFR II MRC AN/ MRC-148A ^{(24)(t)}	A		22,711.69	1,044	23.711	-	-	-	-	-	-	79,442.00	108	8.580	-	-	-	79,442.00	108	8.580
5.17) HFR II TRC AN/ TRC-209D ^{(25)(t)}	A		22,712.57	748	16.989	-	-	-	-	-	-	86,083.00	166	14.290	-	-	-	86,083.00	166	14.290

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19						P-1 Line Item Number / Title: 4633 / Radio Systems									Aggregated Items Title: Radio Systems					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
5.18) HFR II Remotes (26)(†)	A		-	-	-	19,640.00	872	17.126	19,640.00	1,728	33.938	-	-	-	-	-	-	-	-	-
5.19) HFR II Remotes Sparing (27)(†)	A		-	-	-	-	-	-	-	-	-	15,000.00	260	3.900	-	-	-	15,000.00	260	3.900
5.20) HFR II Ancillary, Accessory Components (28)	A		-	-	-	-	-	-	-	-	2.524	-	-	12.777	-	-	-	-	-	12.777
5.21) MCMP R/T (29)(†)	A		-	-	-	-	-	-	-	-	-	55,000.00	259	14.245	-	-	-	55,000.00	259	14.245
5.22) MCMP VRC (30)	A		-	-	-	-	-	-	-	-	-	92,000.00	559	51.428	-	-	-	92,000.00	559	51.428
5.25) MCHH R/T Kit (31)(†)	A		-	-	-	13,604.60	8,475	115.299	10,149.01	5,899	59.869	10,130.00	5,883	59.595	-	-	-	10,130.00	5,883	59.595
5.26) MCHH R/T Sparing (32)(†)	A		-	-	-	-	-	-	9,424.35	1,150	10.838	-	-	-	-	-	-	-	-	-
5.27) MCHH R/T Accessory, Ancillary Components (33)	A		-	-	-	-	-	0.962	-	-	1.152	-	-	12.349	-	-	-	-	-	12.349
5.28) MCHH (Reserve) (34)	A		-	-	-	-	-	2.810	-	-	-	-	-	-	-	-	-	-	-	-
5.29) MCHH VIK (35)(†)	A		-	-	-	33,911.85	2,666	90.409	12,081.25	2,560	30.928	19,555.00	2,297	44.918	-	-	-	19,555.00	2,297	44.918
5.30) MCHH VIK Accessory, Ancillary Components (36)	A		-	-	-	-	-	-	-	-	5.907	-	-	-	-	-	-	-	-	-
5.31) MCHH VIK (Reserve) (37)	A		-	-	-	-	-	9.577	-	-	-	-	-	-	-	-	-	-	-	-
5.33) SCC (38)(†)	A		-	-	-	-	-	-	-	-	-	21,555.00	20	0.431	-	-	-	21,555.00	20	0.431
5.34) TCM Ground Radios Sparing (IIP)	A		-	-	10.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.36) TCM FoS Capability Refresh/ Replacement/ Enhancement (39)	A		-	-	-	-	-	-	-	-	-	-	-	5.649	-	-	-	-	-	5.649
Subtotal: 5) Tactical Communications Modernization (TCM)			-	-	270.249	-	-	264.421	-	-	228.698	-	-	352.890	-	-	-	-	-	352.890
6) Terrestrial Wideband Transmission Systems (TWTS)																				
6.1) Engineering and Program Support (40)			-	-	6.363	-	-	1.116	-	-	1.210	-	-	1.416	-	-	-	-	-	1.416

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19								P-1 Line Item Number / Title: 4633 / Radio Systems								Aggregated Items Title: Radio Systems			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6.2) Next Generation Troposcatter (NGT) (41)(†)	A		998,333.33	30	29.950	-	-	-	561,260.00	150	84.189	-	-	-	-	-	-	-	-	-
6.3) Line of Sight Radios ^(†)	A		240,230.77	143	34.353	254,128.00	23	5.845	-	-	-	-	-	-	-	-	-	-	-	-
6.4) Fielding/NET Support ⁽⁴²⁾	A		-	-	0.398	-	-	1.881	-	-	2.557	-	-	2.840	-	-	-	-	-	2.840
6.5) LRS FoS Mobile Radio Communication (MRC) ^{(43)(†)}	A		236,000.00	2	0.472	254,128.00	175	44.472	254,128.00	189	48.030	-	-	-	-	-	-	-	-	-
6.6) Ancillary Components ⁽⁴⁴⁾	A		-	-	-	-	-	-	-	-	3.887	-	-	17.802	-	-	-	-	-	17.802
6.7) Optical Capability ^{(45)(†)}	A		-	-	-	-	-	-	515,000.00	24	12.360	515,000.00	250	128.750	-	-	-	515,000.00	250	128.750
6.8) Optical Spares ⁽⁴⁶⁾	A		-	-	-	-	-	-	-	-	-	-	-	12.875	-	-	-	-	-	12.875
6.9) LRS FoS TEAMS II (Independent Mast) ^{(47)(†)}	A		-	-	-	-	-	-	231,965.00	62	14.382	231,965.00	168	38.970	-	-	-	231,965.00	168	38.970
Subtotal: 6) Terrestrial Wideband Transmission Systems (TWTS)			-	-	71.536	-	-	53.314	-	-	166.615	-	-	202.653	-	-	-	-	-	202.653
7) Prior Year Cumulative Funding																				
7.1) Prior Year Cumulative Funding	A		-	-	703.648	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) Prior Year Cumulative Funding			-	-	703.648	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	1,085.644	-	-	338.997	-	-	401.346	-	-	612.450	-	-	-	-	-	612.450

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) GBS Program/Training Support - Increase of \$0.305M from FY 2022 to FY 2023 is due to procurement of Start Guides technical manual supporting the PRS-11.

(2) GBS Tech Refresh: Increase of \$4.603M from FY 2022 to FY 2023 reflects cryptographic and laptop refresh procurements to support upgrades to fielded GBS systems.

(3) GBS Fielding Support - Decrease of \$0.013M from FY 2022 to FY 2023 reflects conclusion of Third Generation Receive Terminal (TGRT) antenna deliveries and associated fielding costs. Fielding will continue for other upgraded equipment such as crypto and laptop refreshes.

(4) MCWS-L: Increase of \$9.400M from FY 2022 to FY 2023 reflects procurement of 8 MCWS-L systems. The MCWS-L unit cost is less than the MCWS-H unit cost because the system is comprised of a modular multichannel, man-portable and multiband (X, Ku, Ka) SHF (Super High Frequency) satellite terminal that provides transmission capability to support Battalion and smaller sized Marine Corps missions. Due to schedule delays, FY 2022 funding previously within this CE has been realigned to CE 5.18 to support procurement of HFR II Remotes. MCWS Light and Heavy RFP was delayed and timeline was reassessed to account for legal and contractual reviews, subsequently moving MCWS Light and Heavy test asset procurement to FY 2023.

(5) MCWS-L Support: Increase of \$0.425M from FY 2022 to FY 2023 reflects program support for development of logistics and fielding documentation.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4633 / Radio Systems	Aggregated Items Title: Radio Systems
⁽⁶⁾ MCWS-H: Increase of \$8.000M from FY 2022 to FY 2023 reflects procurement of 4 MCWS-H systems. The MCWS-H unit cost is greater than the MCWS-L unit cost because it is comprised of a modular multichannel and multiband (X, Ku, Ka) SHF satellite terminal that provides transmission capability to support Regiment and larger sized Marine Corps missions. Due to schedule delays, FY22 funding previously within this CE has been realigned to CE 5.18 to support procurement of HFR II Remotes. MCWS Light and Heavy RFP was delayed and timeline was reassessed to account for legal and contractual reviews, subsequently moving MCWS Light and Heavy test asset procurement to FY 2023. In FY 2023, an additional \$27M was realigned to CE 5.18 to support procurement of HFR II Remotes. MCWS Light and Heavy can only execute PMC on the procurement of test assets, so the \$27M is above and beyond the requirement in FY 2023. ⁽⁷⁾ MCWS-H Support: Increase of \$0.426M from FY 2022 to FY 2023 reflects program support for development of logistics and fielding documentation. ⁽⁸⁾ The decrease of \$1.890M is due to VSAT sustainment being supported by O&M,MC funds. ⁽⁹⁾ SMART-T Tech Refresh: Increase of \$0.161M from FY 2022 to FY 2023 due to tech refresh required to mitigate EOL/EOS obsolescence issues. ⁽¹⁰⁾ Ancillary/Spares: Increase in \$2.662M from FY 2022 to FY 2023 reflects procurement spares/ancillary components for MARNAV solution. ⁽¹¹⁾ MARNAV: Increase of \$26.664M from FY 2022 to FY 2023 reflects initial procurement of Qty 1,212 MARNAV. This capability will enable Commanders to know and trust position data, effectively navigate, and receive precise and accurate timing across warfighting functions and complete the sensor to shooter "kill-chain" which is required for Force Design 2030, EABO, Distributed Maritime Operations, and Joint War-at-Sea Concepts within a Joint All Domain Command and Control (JADC2) construct. Due to schedule delays, FY 2022 funding previously within this CE has been realigned to CE 5.18 to support procurement of HFR II Remotes. ⁽¹²⁾ PNT Engineering/Program Support: Increase in \$0.131M reflects additional acquisition support for MARNAV MAPS Gen II. ⁽¹³⁾ TCM Engineering, Fielding & Program Support increase from FY 2022 to FY 2023 of \$1.329M reflects additional support required during the procurement/production, new equipment training (NET), and fielding efforts planned with multiple radio systems/waveforms within the TCM portfolio. Additionally, USMC requirements for Waveform Modernization, Ground Link-16, & Halo-C2 Array were added to the TCM portfolio in FY 2022. ⁽¹⁴⁾ TCM MBR II R/T 117G: increase of \$8.934M from FY 2022 to FY 2023 reflects continued procurement of MBR II R/T 117G systems. ⁽¹⁵⁾ Increase of funds in the amount of \$6.955M from FY 2022 to FY 2023 supports the procurement of 100 VRC-114 (V1) to fulfill the Marine Logistic Group's AAO shortfall. ⁽¹⁶⁾ TCM MBR II AN/VRC-114(V)2 Decrease of \$0.273M from FY 2022 to FY 2023 reflects the completion of procurements of the AN/VRC-114(V)2. ⁽¹⁷⁾ TCM MBR II MRC-145: Decrease of \$10.920M from FY 2022 to FY 2023 reflects continued procurement of MBR II MRC-145 systems. ⁽¹⁸⁾ TCM MBR II MUOS Antenna OE-4702/G: Decrease of \$0.336M from FY 2022 to FY 2023 reflects completion of procurements in support of MBR II MUOS Antenna OE-4702/G. ⁽¹⁹⁾ TCM MBR II MUOS Antenna OE-4703/G: Increase of \$0.370M from FY 2022 to FY 2023 reflects final procurement of MBR II MUOS Antenna OE-4703/G. ⁽²⁰⁾ TCM MBR II Ancillary and Accessory Components (SL-3): Decrease of \$30.367M from FY 2022 to FY 2023 reflects the completion of Vehicle Amplifier Adaptors (VAA) procurement. ⁽²¹⁾ TCM Ground Link-16: Increase of \$16.4M from FY 2022 to FY 2023 reflects initial procurement of Ground Link-16 in support of Force Design Modernization and Enhancements. ⁽²²⁾ TCM HFR II MANPACK AN/PRC-160(V)5: increase of \$33.314M from FY 2022 to FY 2023 reflects procurement of Qty 1321 HFR II Manpack AN/PRC-160(V)5 systems. The FY 2020 strategy for these systems was to reutilize ancillaries from legacy HFR systems already in the Marine Corps inventory. This strategy of reutilization allowed the Program Office to upgrade MRC, VRC, and TRC systems via purchase of the RT-2060 and a power amplifier adapter plate. The reutilization significantly reduced the cost of the amplified configurations. As the HFR II procurements planned for FY 2023 are in support of a Force Design 2030 increased AAO, the strategy of reutilization is no longer feasible. MRC, VRC, and TRC systems procured in FY 2023 require the procurement of complete systems to include power amplifiers, antenna couplers, antennas, cabling, mounting bracketry, transit cases and other ancillary components. The necessity of procuring complete systems to include ancillary components is the driving factor in the unit cost increase. ⁽²³⁾ TCM HFR II VRC AN/VRC-104C: Increase of \$15.780M from FY 2022 to FY 2023 reflects procurement of Qty 221 HFR II VRC systems. The FY 2020 strategy for these systems was to reutilize ancillaries from legacy HFR systems already in the Marine Corps inventory. This strategy of reutilization allowed the Program Office to upgrade MRC, VRC, and TRC systems via purchase of the RT-2060 and a power amplifier adapter plate. The reutilization significantly reduced the cost of the amplified configurations. As the HFR II procurements planned for FY 2023 are in support of a Force Design 2030 increased AAO, the strategy of reutilization is no longer feasible. MRC, VRC, and TRC systems procured in FY 2023 require the procurement of complete systems to include power amplifiers, antenna couplers, antennas, cabling, mounting bracketry, transit cases and other ancillary components. The necessity of procuring complete systems to include ancillary components is the driving factor in the unit cost increase. ⁽²⁴⁾ TCM HFR II MRC AN/MRC-148A: Increase of \$8.580M from FY 2022 to FY 2023 reflects procurement of Qty 158 HFR II MRC systems. The FY 2020 strategy for these systems was to reutilize ancillaries from legacy HFR systems already in the Marine Corps inventory. This strategy of reutilization allowed the Program Office to upgrade MRC, VRC, and TRC systems via purchase of the RT-2060 and a power amplifier adapter plate. The reutilization significantly reduced the cost of the amplified configurations. As the HFR II procurements planned for FY 2023 are in support of a Force Design 2030 increased AAO, the strategy of reutilization is no longer feasible. MRC, VRC, and TRC systems procured in FY 2023 require the procurement of complete systems to include power amplifiers, antenna couplers, antennas, cabling, mounting bracketry, transit cases and other ancillary components. The necessity of procuring complete systems to include ancillary components is the driving factor in the unit cost increase. ⁽²⁵⁾ TCM HFR II TRC AN/TRC-209D: Increase of \$14.290M from FY 2022 to FY 2023 reflects procurement of Qty 166 HFR II TRC209D systems. The FY 2020 strategy for these systems was to reutilize ancillaries from legacy HFR systems already in the Marine Corps inventory. This strategy of reutilization allowed the Program Office to upgrade MRC, VRC, and TRC systems via purchase of the RT-2060 and a power amplifier adapter plate. The reutilization significantly reduced the cost of the amplified configurations. As the HFR II procurements planned for FY 2023 are in support of a Force Design 2030 increased AAO, the strategy of reutilization is no longer feasible. MRC, VRC, and TRC systems procured in FY 2023 require the procurement of complete systems to include power amplifiers, antenna couplers, antennas, cabling, mounting bracketry, transit cases and other ancillary components. The necessity of procuring complete systems to include ancillary components is the driving factor in the unit cost increase. ⁽²⁶⁾ HFR II Remotes: Decrease of \$33.938M from FY 2022 to FY 2023 reflects completion of AAO procurement for 2600 HFR II Remotes. ⁽²⁷⁾ TCM HFR II Remotes Sparing: Increase of \$3.900M from FY 2022 to FY 2023 reflects AAO procurement of 260 HFR II Remote Spares.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4633 / Radio Systems	Aggregated Items Title: Radio Systems
(28) HFR II Ancillary, Accessory Components and waveforms: Increase of \$10.253M from FY 2022 to FY 2023 reflects the procurement of circuit cards in support of HFR II radios. (29) TCM MCMP R/T: Increase of \$14.245M from FY 2022 to FY 2023 supports initial procurement of Qty 259 MCMP systems. (30) TCM MCMP VRC: Increase of \$51.428M from FY 2022 to FY 2023 reflects the total procurement of Qty 559 MCMP VRC's. (31) TCM MCHH: Decrease of \$0.274M from FY 2022 to FY 2023 reflects continued procurement of MCHH systems to ensure the program meets the production, delivery, training and fielding prior to NSA COMSEC mandate. The FY21 funding shown includes \$29.447M that was rescinded by the FY22 Defense Appropriations Act. (32) TCM MCHH R/T: Decrease of \$10.838M from FY 2022 to FY 2023 reflects completion of the initial spares procurement. (33) TCM MCHH R/T Accessory, Ancillary Components: Increase in funds of \$11.197M from FY 2022 to FY 2023 reflects the procurement of MCHH ancillary components. (34) The FY21 funding shown includes \$2.810M that was rescinded by the FY22 Defense Appropriations Act. (35) TCM MCHH VIK: decrease of \$13.990M from FY 2022 to FY 2023 reflects the continued procurement of systems to fulfill the AAO for handheld vehicle integration kits. MCHH VIK does not contain an R/T. The FY21 funding shown includes \$38.275M that was rescinded by the FY22 Defense Appropriations Act. (36) TCM MCHH VIK Accessory, Ancillary Components: Decrease of \$5.907M reflects completion of initial procurement of MCHH VIK accessory components. (37) The FY21 funding shown includes \$9.577M that was rescinded by the FY22 Defense Appropriations Act. (38) TCM SCC: Increase of \$0.431M from FY 2022 to FY 2023 supports the procurement of 20 Secure Communications Controllers (SCC). (39) TCM FoS Capability Refresh/Replacement/Enhancement: Increase of \$5.649M from FY 2022 to FY 2023 reflects the purchase of software licenses in support of the VRC 113 Tactical Hand-Held Radio COMSEC Compliance. (40) TWTS Engineering and Program Support: Increase of \$0.206M from FY 2022 to FY 2023 reflects additional support required for NGT and TEAMS II fielding. (41) TWTS NGT: Decrease of \$84.189M from FY 2022 to FY 2023 reflects completion of NGT procurement. (42) TWTS Fielding/NET Support: Increase of \$0.283 from FY 2022 to FY 2023 supports increase quantities of LRS MRCs, TEAMS II and NGT being fielded. (43) LRS FoS Mobile Radio Communication (MRC): Decrease of \$48.030M from FY 2022 to FY 2023 reflects completion of MRC procurements. (44) TWTS Ancillary Components: Increase of \$13.915M from FY 2022 to FY 2023 support 15 MM Mast for the Optical System. (45) TWTS Optical Capability: The LRS FoS Standalone Optical transitioned to Optical Capability in FY 2022. The increase of \$116.390M from FY 2022 to FY 2023 will support the procurement of 250 optical systems. (46) TWTS Optical Spares: Increase of \$12.875M from FY 2022 to FY 2023 supports procurement of initial spares for Optical Capability. (47) TWTS LRS FoS TEAMS II: TEAMS II is a 34 meter antenna mast, primarily used with LRS but also compatible with other transmission systems such as the Optical Capability. TEAMS II provides the height required to overcome terrain obstacles and the curvature of the earth to communicate over long distances, provides the height required to overcome terrain obstacles and the curvature of the earth to communicate over long distances. Increase of \$24.588M from FY 2022 to FY 2023 supports procurement of 168 TEAMS II.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19				P-1 Line Item Number / Title: 4633 / Radio Systems					Aggregated Items: Radio Systems			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) Wideband Satellite Communications (WSATCOM) (Formerly VSAT)												
2.2) MCWS-X ^(†)		2020	L3 Technologies, Inc. / Victor, NY	C / FFP	Quantico, VA	Oct 2020	Feb 2021	169	120,900.00	Y		
2.2) MCWS-X ^(†)		2021	L3 Technologies, Inc. / Victor, NY	C / FFP	Quantico, VA	Jul 2021	Feb 2022	3	120,900.00	Y		
2.4) MCWS-L ^{(4)(†)}		2023	TBD / TBD	C / TBD	Quantico, VA	Apr 2023	Apr 2024	8	1,175K	Y		
2.7) MCWS-H ^{(6)(†)}		2023	TBD / TBD	C / TBD	Quantico, VA	Sep 2023	Sep 2024	4	2,000K	N		
4) Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT)												
4.3) MARNAV ^{(11)(†)}		2023	TBD / TBD	C / TBD	TBD	Jan 2023	Jan 2024	1,212	22,000.00	N	May 2022	Jul 2022
5) Tactical Communications Modernization (TCM)												
5.3) MBR II R/T 117G ^{(14)(†)}		2022	Harris Corp / Rochester, NY	C / IDIQ	Quantico, VA	May 2022	Feb 2023	342	47,025.00	Y		
5.3) MBR II R/T 117G ^{(14)(†)}		2023	Harris Corp / Rochester, NY	C / IDIQ	Quantico, VA	Nov 2022	Aug 2023	532	47,025.00	Y		
5.4) MBR II AN/VRC-114(V) ₁ ^{(15)(†)}		2023	Harris Corp / Rochester, NY	C / TBD	** NO PCO **	Jan 2023	Jul 2023	100	69,546.00	Y		
5.5) MBR II AN/VRC-114(V) ₂ ⁽¹⁶⁾		2022	Harris Corp / Rochester, NY	C / IDIQ	Quantico, VA	Oct 2021	Oct 2021	1	273,037.00	Y		
5.6) MBR II MRC-145 ^{(17)(†)}		2022	Harris Corp / Rochester, NY	C / TBD	** NO PCO **	Oct 2021	Oct 2021	95	273,000.00	Y		
5.6) MBR II MRC-145 ^{(17)(†)}		2023	Harris Corp / Rochester, NY	C / IDIQ	** NO PCO **	Oct 2022	Oct 2022	55	273,000.00	Y		
5.7) MBR II MUOS Antenna OE-4702/G ⁽¹⁸⁾		2022	Harris Corp / Rochester, NY	C / TBD	** NO PCO **	Oct 2021	Oct 2021	171	4,948.00	Y		
5.7) MBR II MUOS Antenna OE-4702/G ⁽¹⁸⁾		2023	Harris Corp / Rochester, NY	C / TBD	** NO PCO **	Oct 2022	Oct 2022	103	4,948.00	Y		
5.8) MBR II MUOS Antenna OE-4703/G ⁽¹⁹⁾		2022	Harris Corp / Rochester, NY	C / TBD	Quantico, VA	Oct 2021	Oct 2021	171	5,209.00	Y		
5.8) MBR II MUOS Antenna OE-4703/G ⁽¹⁹⁾		2023	Harris Corp / Rochester, NY	C / TBD	Quantico, VA	Oct 2022	Oct 2022	242	5,209.00	Y		
5.14) HFR II Manpack AN/ PRC-160(V) ₅ ^{(22)(†)}		2020	Harris Corp / Rochester, NY	C / IDIQ	MCSC	Mar 2020	Sep 2020	1,263	22,000.00	Y		Jun 2019
5.14) HFR II Manpack AN/ PRC-160(V) ₅ ^{(22)(†)}		2023	Harris Corp / Rochester, NY	C / TBD	MCSC	Mar 2023	Sep 2023	1,321	25,219.00	Y		Jun 2019
5.15) HFR II VRC AN/VRC-104C (23)(†)		2020	Harris Corp / Rochester, NY	C / IDIQ	MCSC	Mar 2020	Sep 2020	749	22,712.00	Y		Jun 2019
5.15) HFR II VRC AN/VRC-104C (23)(†)		2023	Harris Corp / Rochester, NY	C / IDIQ	MCSC	Mar 2023	Sep 2023	221	71,401.00	Y		Jun 2019
5.16) HFR II MRC AN/MRC-148A (24)(†)		2020	Harris Corp / Rochester, NY	C / IDIQ	MCSC	Mar 2020	Sep 2020	1,044	22,712.00	Y		Jun 2019

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19			P-1 Line Item Number / Title: 4633 / Radio Systems					Aggregated Items: Radio Systems				
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
5.16) HFR II MRC AN/MRC-148A (24)(†)		2023	Harris Corp / Rochester, NY	C / IDIQ	** NO PCO **	Apr 2023	Apr 2023	108	79,442.00	Y		
5.17) HFR II TRC AN/TRC-209D (25)(†)		2020	Harris Corp / Rochester, NY	C / IDIQ	MCSC	Mar 2020	Sep 2020	748	22,712.00	Y		Feb 2019
5.17) HFR II TRC AN/TRC-209D (25)(†)		2023	Harris Corp / Rochester, NY	C / IDIQ	MCSC	Mar 2023	Sep 2023	166	86,083.00	Y		Feb 2019
5.18) HFR II Remotes (26)		2021	L3Harris / Rochester, NY	C / IDIQ	MCSC	Oct 2020	Oct 2020	872	19,640.00	Y		Mar 2020
5.18) HFR II Remotes (26)		2022	L3Harris / Rochester, NY	C / IDIQ	MCSC	Oct 2021	Oct 2021	1,728	19,640.00	Y		Mar 2020
5.19) HFR II Remotes Sparing (27)		2023	L3 Harris / Rochester NY	C / TBD	Quantico, VA	Mar 2023	Mar 2023	260	15,000.00	N		Feb 2021
5.21) MCMP R/T (29)(†)		2023	TBD / TBD	TBD	TBD	Nov 2022	Feb 2023	259	55,000.00	Y		Jun 2022
5.25) MCHH R/T Kit (31)(†)		2021	TBD / TBD	C / IDIQ	MCSC, Quantico, VA	Mar 2022	Feb 2023	8,475	13,604.60	Y		Aug 2021
5.25) MCHH R/T Kit (31)(†)		2022	TBD / TBD	C / IDIQ	MCSC, Quantico, VA	Jan 2022	Feb 2022	5,899	10,149.01	Y		Aug 2021
5.25) MCHH R/T Kit (31)(†)		2023	TBD / TBD	C / IDIQ	MCSC, Quantico, VA	Feb 2023	May 2023	5,883	10,130.00	Y		Aug 2021
5.26) MCHH R/T Sparing (32)		2022	Harris Corp @Rochester, NY / Rochester NY	C / IDIQ	Quantico, VA	Jan 2022	Dec 2022	1,150	9,424.35	Y		Feb 2021
5.29) MCHH VIK (35)(†)		2021 (48)	L3 Harris / Rochester NY	C / IDIQ	MCSC, Quantico, VA	Feb 2022	May 2022	2,666	33,911.85	Y		Aug 2021
5.29) MCHH VIK (35)(†)		2022	L3 Harris / Rochester NY	C / IDIQ	MCSC, Quantico, VA	Sep 2022	Dec 2022	2,560	12,081.25	Y		Aug 2021
5.29) MCHH VIK (35)(†)		2023	L3 Harris / Rochester NY	C / IDIQ	MCSC, Quantico, VA	Feb 2023	May 2023	2,297	19,555.00	Y		Aug 2021
5.33) SCC (38)		2023	Trident Systems Inc / Fairfax, VA	C / FFP	MCSC	Nov 2022	Feb 2023	20	21,555.00	Y		Nov 2021
6) Terrestrial Wideband Transmission Systems (TWTS)												
6.2) Next Generation Troposcatter (NGT) (41)(†)		2019	GATR Technologies / Huntsville, AL	C / FFP	Quantico, VA	Oct 2019	Aug 2021	30	998,333.00	Y		May 2019
6.2) Next Generation Troposcatter (NGT) (41)(†)		2022	GATR Technologies / Huntsville, AL	C / FFP	Quantico, VA	Aug 2022	May 2023	150	561,260.00	Y		
6.3) Line of Sight Radios(†)		2018	Ultra / Canada	C / IDIQ	Aberdeen, MD	Sep 2020	Jun 2021	29	235,834.28	Y		
6.3) Line of Sight Radios(†)		2020	Ultra / Canada	C / IDIQ	Aberdeen, MD	Sep 2020	Jun 2021	114	241,350.00	Y		
6.3) Line of Sight Radios(†)		2021	Ultra / Canada	C / IDIQ	Aberdeen, MD	Feb 2021	Nov 2021	23	254,128.00	Y		
6.5) LRS FoS Mobile Radio Communication (MRC) (43)		2018	Ultra / Canada	C / IDIQ	Aberdeen, MD	Dec 2019	Sep 2020	2	235,834.28	Y		
6.5) LRS FoS Mobile Radio Communication (MRC) (43)		2021	Ultra / Canada	C / IDIQ	Aberdeen, MD	Jun 2021	Mar 2022	175	254,128.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19				P-1 Line Item Number / Title: 4633 / Radio Systems					Aggregated Items: Radio Systems			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
6.5) LRS FoS Mobile Radio Communication (MRC) ⁽⁴³⁾		2022	Ultra / Canada	C / IDIQ	Aberdeen, MD	Feb 2022	Nov 2022	189	254,128.00	Y		
6.7) Optical Capability ⁽⁴⁵⁾		2022	TBD / TBD	C / TBD	Quantico, VA	May 2022	May 2023	24	515,000.00	Y		Aug 2021
6.7) Optical Capability ⁽⁴⁵⁾		2023	TBD / TBD	C / TBD	Quantico, VA	Jul 2023	Jul 2024	250	515,000.00	Y		
6.9) LRS FoS TEAMS II (Independent Mast) ^{(47)(†)}		2022	TBD / TBD	C / TBD	Quantico, VA	Sep 2022	Apr 2023	62	231,965.00	Y		Jun 2021
6.9) LRS FoS TEAMS II (Independent Mast) ^{(47)(†)}		2023	TBD / TBD	C / TBD	** NO PCO **	Jan 2023	Aug 2023	168	231,965.00	Y		

^(†) indicates the presence of a P-21

Footnotes:

⁽⁴⁸⁾ FY21 MCHH VIK: Contract award shifted from Sept 2021 to Feb 2022 due to vendor protest of the Request for Proposal (RFP), released March 2021, necessitating a cancellation and re-issuance to broaden the competitive range and ensure USMC requirements are met.

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4633 / Radio Systems										Aggregated Items: Radio Systems											
Items <i>(Units in Each)</i>							Fiscal Year 2020										Fiscal Year 2021														B A L A N C E
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT				Calendar Year 2020										Calendar Year 2021											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
2) Wideband Satellite Communications (WSATCOM) (Formerly VSAT)																															
2.2) MCWS-X																															
	23	2020	NAVY		169	0	169											A -	-	-	-	2	-	3	-	17	29	38	42	38	
	23	2021	NAVY		3	0	3																					A -	-	-	3
2.4) MCWS-L ⁽⁴⁾																															
	24	2023	NAVY		8	0	8																					8			
2.7) MCWS-H ⁽⁶⁾																															
	25	2023	NAVY		4	0	4																					4			
4) Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT)																															
4.3) MARNAV ⁽¹¹⁾																															
	26	2023	NAVY		1,212	0	1,212																					1,212			
5) Tactical Communications Modernization (TCM)																															
5.3) MBR II R/T 117G ⁽¹⁴⁾																															
	27	2022	NAVY		342	0	342																					342			
	27	2023	NAVY		532	0	532																					532			
5.4) MBR II AN/VRC-114(V)1 ⁽¹⁵⁾																															
	28	2023	NAVY		100	0	100																					100			
5.6) MBR II MRC-145 ⁽¹⁷⁾																															
	29	2022	NAVY		95	0	95																					95			
	29	2023	NAVY		55	0	55																					55			
5.14) HFR II Manpack AN/PRC-160(V)5 ⁽²²⁾																															
Prior Years Deliveries: 3258																															
	30	2020	NAVY		1,263	0	1,263				A -	-	-	-	-	-	-	1,263											0		
	30	2023	NAVY		1,321	0	1,321																					1,321			
5.15) HFR II VRC AN/VRC-104C ⁽²³⁾																															
	31	2020	NAVY		749	0	749				A -	-	-	-	-	-	-	749											0		
	31	2023	NAVY		221	0	221																					221			
5.16) HFR II MRC AN/MRC-148A ⁽²⁴⁾																															
	32	2020	NAVY		1,044	0	1,044				A -	-	-	-	-	-	-	1,044											0		
	32	2023	NAVY		108	0	108																					108			
5.17) HFR II TRC AN/TRC-209D ⁽²⁵⁾																															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4633 / Radio Systems												Aggregated Items: Radio Systems														
Items (Units in Each)							Fiscal Year 2020										Fiscal Year 2021										B A L A N C E						
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 9	BAL D U E A S O F 1 O C T	Calendar Year 2020										Calendar Year 2021																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P		
	33	2020	NAVY	748	0	748																										0	
	33	2023	NAVY	166	0	166																										166	
5.21) MCMP R/T ⁽²⁹⁾																																	
	34	2023	NAVY	259	0	259																										259	
5.25) MCHH R/T Kit ⁽³¹⁾																																	
	35	2021	NAVY	8,475	0	8,475																										8,475	
	35	2022	NAVY	5,899	0	5,899																										5,899	
	35	2023	NAVY	5,883	0	5,883																										5,883	
5.29) MCHH VIK ⁽³⁵⁾																																	
	36	2021	NAVY	2,666	0	2,666																										2,666	
	36	2022	NAVY	2,560	0	2,560																										2,560	
	36	2023	NAVY	2,297	0	2,297																										2,297	
6) Terrestrial Wideband Transmission Systems (TWTS)																																	
6.2) Next Generation Troposcatter (NGT) ⁽⁴¹⁾																																	
	37	2019	NAVY	30	0	30	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	18	
	37	2022	NAVY	150	0	150																										150	
6.3) Line of Sight Radios																																	
	38	2018	NAVY	29	0	29													A -	-	-	-	-	-	-	-	-	-	-	29		0	
	38	2020	NAVY	114	0	114													A -	-	-	-	-	-	-	-	-	-	30	30	30	24	0
	38	2021	NAVY	23	0	23																						A -	-	-	-	-	23
6.9) LRS FoS TEAMS II (Independent Mast) ⁽⁴⁷⁾																																	
	39	2022	NAVY	62	0	62																										62	
	39	2023	NAVY	168	0	168																										168	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4633 / Radio Systems										Aggregated Items: Radio Systems																										
Items <i>(Units in Each)</i>						Fiscal Year 2022												Fiscal Year 2023												B A L A N C E																
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023																											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P															
2) Wideband Satellite Communications (WSATCOM) (Formerly VSAT)																																														
2.2) MCWS-X																																														
	23	2020	NAVY	169	131	38	38																										0													
	23	2021	NAVY	3	0	3	-	-	-	-	3																						0													
2.4) MCWS-L ⁽⁴⁾																																														
	24	2023	NAVY	8	0	8																										A -	-	-	-	-	-	-	8							
2.7) MCWS-H ⁽⁶⁾																																														
	25	2023	NAVY	4	0	4																										A -	4													
4) Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT)																																														
4.3) MARNV ⁽¹¹⁾																																														
	26	2023	NAVY	1,212	0	1,212																										A -	-	-	-	-	-	-	-	-	-	-	-	-	-	1,212
5) Tactical Communications Modernization (TCM)																																														
5.3) MBR II R/T 117G ⁽¹⁴⁾																																														
	27	2022	NAVY	342	0	342													A -	-	-	-	-	-	-	-	-	342								0										
	27	2023	NAVY	532	0	532													A -				-	-	-	-	-	-	-	-	-	532				0										
5.4) MBR II AN/VRC-114(V)1 ⁽¹⁵⁾																																														
	28	2023	NAVY	100	0	100																										A -	-	-	-	-	-	-	100				0			
5.6) MBR II MRC-145 ⁽¹⁷⁾																																														
	29	2022	NAVY	95	0	95	A95																										0													
	29	2023	NAVY	55	0	55													A55											0																
5.14) HFR II Manpack AN/PRC-160(V)5 ⁽²²⁾																																														
Prior Years Deliveries: 3258																																														
	30	2020	NAVY	1,263	1,263	0																											0													
	30	2023	NAVY	1,321	0	1,321																										A -	-	-	-	-	-	-	1,321	0						
5.15) HFR II VRC AN/VRC-104C ⁽²³⁾																																														
	31	2020	NAVY	749	749	0																											0													
	31	2023	NAVY	221	0	221																										A -	-	-	-	-	-	-	30	191						
5.16) HFR II MRC AN/MRC-148A ⁽²⁴⁾																																														
	32	2020	NAVY	1,044	1,044	0																											0													
	32	2023	NAVY	108	0	108																										A108				0										
5.17) HFR II TRC AN/TRC-209D ⁽²⁵⁾																																														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P																

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4633 / Radio Systems												Aggregated Items: Radio Systems															
Items (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 2 1	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
	33	2020	NAVY	748	748	0																									0			
	33	2023	NAVY	166	0	166													A - - - - - - - 15												151			
5.21) MCMP R/T ⁽²⁹⁾																																		
	34	2023	NAVY	259	0	259													A - - - 259												0			
5.25) MCHH R/T Kit ⁽³¹⁾																																		
	35	2021	NAVY	8,475	0	8,475													A - - - - - - - - 5,000 3,475												0			
	35	2022	NAVY	5,899	0	5,899	A - 100 - - - - - - - - 5,799																								0			
	35	2023	NAVY	5,883	0	5,883													A - - - 2,883 - - - - - 3,000												3,000			
5.29) MCHH VIK ⁽³⁵⁾																																		
	36	2021	NAVY	2,666	0	2,666	A - - - 531 - - 631 - - 482 - 569 - - 453																								0			
	36	2022	NAVY	2,560	0	2,560													A - - - 507 - 498 - 494 - - 492 - - 569												569			
	36	2023	NAVY	2,297	0	2,297													A - - - 2,297												0			
6) Terrestrial Wideband Transmission Systems (TWTS)																																		
6.2) Next Generation Troposcatter (NGT) ⁽⁴¹⁾																																		
	37	2019	NAVY	30	12	18	-	-	18																									0
	37	2022	NAVY	150	0	150													A - - - - - - - 15 15 15 15 15												75			
6.3) Line of Sight Radios																																		
	38	2018	NAVY	29	29	0																									0			
	38	2020	NAVY	114	114	0																									0			
	38	2021	NAVY	23	0	23	-	23																									0	
6.9) LRS FoS TEAMS II (Independent Mast) ⁽⁴⁷⁾																																		
	39	2022	NAVY	62	0	62													A - - - - 25 25 12												0			
	39	2023	NAVY	168	0	168													A - - - - 25 25												118			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4633 / Radio Systems										Aggregated Items: Radio Systems												
Items <i>(Units in Each)</i>						Fiscal Year 2024												Fiscal Year 2025												BALANCE		
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024												Calendar Year 2025													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	
2) Wideband Satellite Communications (WSATCOM) (Formerly VSAT)																																
2.2) MCWS-X																																
	23	2020	NAVY		169	169	0																							0		
	23	2021	NAVY		3	3	0																							0		
2.4) MCWS-L ⁽⁴⁾																																
	24	2023	NAVY		8	0	8	-	-	-	-	-	-	8																0		
2.7) MCWS-H ⁽⁶⁾																																
	25	2023	NAVY		4	0	4	-	-	-	-	-	-	-	-	-	4													0		
4) Secure Expeditionary Resilient Positioning, Navigation and Timing (SERPNT)																																
4.3) MARNAV ⁽¹¹⁾																																
	26	2023	NAVY		1,212	0	1,212	-	-	-	101	101	101	101	101	101	101	101	101	101	101	101									0	
5) Tactical Communications Modernization (TCM)																																
5.3) MBR II R/T 117G ⁽¹⁴⁾																																
	27	2022	NAVY		342	342	0																							0		
	27	2023	NAVY		532	532	0																							0		
5.4) MBR II AN/VRC-114(V)1 ⁽¹⁵⁾																																
	28	2023	NAVY		100	100	0																							0		
5.6) MBR II MRC-145 ⁽¹⁷⁾																																
	29	2022	NAVY		95	95	0																							0		
	29	2023	NAVY		55	55	0																							0		
5.14) HFR II Manpack AN/PRC-160(V)5 ⁽²²⁾																																
Prior Years Deliveries: 3258																																
	30	2020	NAVY		1,263	1,263	0																							0		
	30	2023	NAVY		1,321	1,321	0																							0		
5.15) HFR II VRC AN/VRC-104C ⁽²³⁾																																
	31	2020	NAVY		749	749	0																							0		
	31	2023	NAVY		221	30	191	-	-	-	-	-	-	191																0		
5.16) HFR II MRC AN/MRC-148A ⁽²⁴⁾																																
	32	2020	NAVY		1,044	1,044	0																							0		
	32	2023	NAVY		108	108	0																							0		
5.17) HFR II TRC AN/TRC-209D ⁽²⁵⁾																																
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																		
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4633 / Radio Systems										Aggregated Items: Radio Systems																		
Items <i>(Units in Each)</i>							Fiscal Year 2024										Fiscal Year 2025														BALANCE							
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024										Calendar Year 2025																					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								
	33	2020	NAVY	748	748	0																													0			
	33	2023	NAVY	166	15	151	-	-	-	-	-	-	-	151																								0
5.21) MCMP R/T ⁽²⁹⁾																																						
	34	2023	NAVY	259	259	0																													0			
5.25) MCHH R/T Kit ⁽³¹⁾																																						
	35	2021	NAVY	8,475	8,475	0																													0			
	35	2022	NAVY	5,899	5,899	0																													0			
	35	2023	NAVY	5,883	2,883	3,000	-	-	-	-	-	-	-	3,000																								0
5.29) MCHH VIK ⁽³⁵⁾																																						
	36	2021	NAVY	2,666	2,666	0																													0			
	36	2022	NAVY	2,560	1,991	569	569																										0					
	36	2023	NAVY	2,297	2,297	0																													0			
6) Terrestrial Wideband Transmission Systems (TWTS)																																						
6.2) Next Generation Troposcatter (NGT) ⁽⁴¹⁾																																						
	37	2019	NAVY	30	30	0																													0			
	37	2022	NAVY	150	75	75	15	15	15	15	15																					0						
6.3) Line of Sight Radios																																						
	38	2018	NAVY	29	29	0																													0			
	38	2020	NAVY	114	114	0																													0			
	38	2021	NAVY	23	23	0																													0			
6.9) LRS FoS TEAMS II (Independent Mast) ⁽⁴⁷⁾																																						
	39	2022	NAVY	62	62	0																													0			
	39	2023	NAVY	168	50	118	25	25	25	25	18																					0						
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19				P-1 Line Item Number / Title: 4633 / Radio Systems				Aggregated Items: Radio Systems			

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	L3 Technologies, Inc. - Victor, NY			TBD	0	0	3	3	0	0	3	3
2	TBD - TBD			TBD	0	0	0	0	0	0	0	0
3	TBD - TBD			TBD	0	0	0	0	0	0	0	0
4	TBD - TBD			TBD	0	0	0	0	0	0	0	0
5	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
6	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
7	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
8	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
9	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
10	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
11	Harris Corp - Rochester, NY			TBD	0	0	0	0	0	0	0	0
12	TBD - TBD			TBD	0	0	0	0	0	0	0	0
13	TBD - TBD			TBD	0	0	0	0	0	0	0	0
14	L3 Harris - Rochester NY	1,750	2,500	48,000	0	10	3	13	0	0	0	0
15	GATR Technologies - Huntsville, AL			TBD	0	0	18	18	0	0	9	9
16	Ultra - Canada	30	45	1,000	0	0	9	9	0	0	9	9
17	TBD - TBD			360	0	0	5	5	0	0	5	5

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4634 / Comm Switching & Control Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0506313M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	528.752	30.575	42.294	51.976	0.000	51.976	46.264	40.974	41.334	42.074	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	528.752	30.575	42.294	51.976	0.000	51.976	46.264	40.974	41.334	42.074	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	528.752	30.575	42.294	51.976	0.000	51.976	46.264	40.974	41.334	42.074	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Communications Security (COMSEC): COMSEC is the USMC Commodities Management Office (CMO) providing support for installations and designated acquisition program COMSEC requirements, intermediate logistics, and configuration management. COMSEC provides support for Protected Secure Voice and Data transmissions, Key Management Infrastructure (KMI), the National Security Agency (NSA) directed Cryptographic Modernization of the COMSEC infrastructure, Installations (base, posts, and station), and platforms. COMSEC CMO ensures the protection of Marine Corps and Joint cyberspace systems from exploitation and attack. Cyberspace systems include wired and wireless telecommunications systems, Information Technology (IT) systems, and the content processed, stored, or transmitted therein. Rapid changes in the underlying commercial and government cyber infrastructures makes cyber security an increasingly complex and dynamic problem. COMSEC CMO provides the Warfighter the essential information trust characteristics of availability, confidentiality, integrity, authentication, and non-repudiation. Joint Communications Support Element (JCSE): Joint Communications Support Element (JCSE), headquartered at MacDill Air Force Base, Fla., rapidly delivers secure, reliable, and scalable command, control, communications, and computer capabilities (C4) ranging from small mobile team missions to full Joint task force headquarters (JTF HQ) deployments. Combat Data Network (CDN) (formerly Tactical Data Network (TDN) Data Distribution System - Modular (DDS-M)): The CDN provides the commander a modular, integrated, and interoperable Internet Protocol (IP) - based Local Area Network (LAN) and Wide Area Network (WAN) capability that forms the data communications backbone to the tactical organizations within a Marine Air-Ground Task Force (MAGTF). The CDN provides an extension of the DOD Information Network (DODIN), Secret Internet Protocol Router Network (SIPRNet), Sensitive But Unclassified (SBU), Non-secure Internet Protocol Router Network (NIPRNet), as well as a coalition network. The CDN provides Marine Corps maneuver elements with a modular and scalable IP data transport capability by providing computers, servers, routers, data switches, In-line Network Encryption (INE) devices supporting IP Security (IPSec), and Virtual Private Networking (VPN). CDN also provides software support for email, telephone, and internet services while in a tactical environment. CDN hardware hosts the Common Hosting Environment (CHE) which provides a suite of applications supporting command and control at the tactical level. The CDN bridges the gap between current capabilities and the future of the tactical data communications backbone, Operational Command Post (OCP). OCP aligns the CDN with strategic guidance and enables future concepts, such as Expeditionary Advanced Base Operations (EABO). OCP aims to increase survivability in degraded environments through reduced size, weight, and power and enhanced networking capability at the tactical edge.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	22.512	37.652	47.056	-	47.056	41.216	35.815	36.081	36.727		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)					P-1 Line Item Number / Title: 4634 / Comm Switching & Control Systems					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0506313M			
Line Item MDAP/MAIS Code: N/A										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	8.063	4.642	4.920	-	4.920	5.048	5.159	5.253	5.347
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	30.575	42.294	51.976	-	51.976	46.264	40.974	41.334	42.074

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4634 / Comm Switching & Control Systems				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0506313M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Comm Switching & Control Systems				- / 528.752	- / 30.575	- / 42.294	- / 51.976	- / -	- / 51.976
P-40	Total Gross/Weapon System Cost				- / 528.752	- / 30.575	- / 42.294	- / 51.976	- / 0.000	- / 51.976
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$51.976M (\$47.056M Active, \$4.920M Reserves) COMSEC: \$0.522M (\$0.247M Active, \$0.275M Reserves). Funds support Engineering Change Proposal (ECP) upgrades to currently fielded assets, Simple Key Loader refresh fielding, procurement of replacement equipment, ancillary devices, and program support for product verification/validation testing. JCSE: \$0.514M (\$0.508M Active, \$0.006M Reserves). Increase of \$0.013M from FY 2022 to FY 2023 reflects the Marine Corps share of efforts to keep the JCSE equipped with the latest state-of-the-art equipment to accomplish its Joint Staff Mission. CDN: \$50.940M (\$46.301M Active, \$4.639M Reserves). Increase of \$9.672M from FY 2022 to FY 2023 reflects the initiation of Operational Command Post under Cost Element 3.4 and initiation of the firewall and server technology refresh under Cost Element 3.3 ECP Networking Equipment. Cost Element 3.1 (Program Support/Fielding/Contractor Logistics Support/Training) funds will support management, acquisition, logistics, manpower support, personnel, and training analysis as well as training plan development and associated support. Cost Element 3.2 (ECP Networking Equipment (Network Modernization)) reflects the completion of the initial procurement of Expeditionary Form Factor network equipment (transmission devices) and continuation of funding to address Expeditionary Form Factor requirements which extends the tactical network to small unit formations and will support SATCOM in expeditionary environments with degraded communications. Cost Element 3.3 (ECP Networking Equipment) funds will support the initiation of firewall and server technology refresh required to maintain security posture and mitigate cybersecurity threats. Cost Element 3.4 (Operational Command Post) will support the procurement of ancillary equipment (laptops, phones, displays, projectors, VTCs) to field in support of Initial Operational Capability (IOC) for the Operational Command Post (OCP) in FY 2024. Ancillary equipment is not currently provided under the CDN program and is required for OCP. Cost Element 3.5 (CDN ECP Cryptographic Equipment) reflects the completion of cryptographic device refresh. Cost Element 3.7 (ECP Network Equipment (Reserves)) funding supports the procurement of routers, switches, and other components necessary to support and keep the reserve component technologically abreast with the Fleet Marine Forces and industry alike. The stand-alone capability of CDN directly supports the concept of small, tactical Marine formations conducting Expeditionary Advanced Base Operations. Overall planning and programming decisions from FY 2022 to FY 2023 reflects CDN Network Modernization efforts, which enable critical artificial intelligence and cloud technologies that are in alignment to achieving Marine Corps Force Design Objectives.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19								P-1 Line Item Number / Title: 4634 / Comm Switching & Control Systems							Aggregated Items Title: Comm Switching & Control Systems					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Communications Security (COMSEC)																				
1.1) Program/ Production Support	A		-	-	1.121	-	-	0.167	-	-	0.146	-	-	0.146	-	-	-	-	-	0.146
1.2) COMSEC Hardware	A		-	-	12.383	-	-	0.549	-	-	0.108	-	-	0.101	-	-	-	-	-	0.101
1.3) COMSEC Hardware (Reserves)	A		-	-	1.231	-	-	0.250	-	-	0.271	-	-	0.275	-	-	-	-	-	0.275
Subtotal: 1) Communications Security (COMSEC)			-	-	14.735	-	-	0.966	-	-	0.525	-	-	0.522	-	-	-	-	-	0.522
2) Joint Communications Support Equipment (JCSE)																				
2.1) USMC Contribution to JCSE (Reserves)	A		-	-	-	-	-	0.051	-	-	0.003	-	-	0.006	-	-	-	-	-	0.006
2.2) USMC Contribution to JCSE			-	-	3.795	-	-	0.501	-	-	0.498	-	-	0.508	-	-	-	-	-	0.508
Subtotal: 2) Joint Communications Support Equipment (JCSE)			-	-	3.795	-	-	0.552	-	-	0.501	-	-	0.514	-	-	-	-	-	0.514
3) Combat Data Network (CDN)																				
3.1) Program Support/ Fielding/CLS/Training (1)			-	-	53.806	-	-	4.441	-	-	4.515	-	-	4.744	-	-	-	-	-	4.744
3.2) ECP Expeditionary Form Factor (Network Optimization) (2)	A		-	-	30.069	-	-	-	-	-	9.918	-	-	5.500	-	-	-	-	-	5.500
3.3) ECP Networking Equipment (3)	A		-	-	100.178	-	-	16.856	-	-	14.707	-	-	23.407	-	-	-	-	-	23.407
3.4) Operational Command Post (4)	A		-	-	-	-	-	-	-	-	-	-	-	12.650	-	-	-	-	-	12.650
3.5) ECP Cryptographic Equipment (5)	A		-	-	-	-	-	-	-	-	7.760	-	-	-	-	-	-	-	-	-
3.6) ECP Laptops	A		-	-	0.789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.7) ECP Network Equipment (Reserves)	A		-	-	11.543	-	-	7.760	-	-	4.368	-	-	4.639	-	-	-	-	-	4.639
Subtotal: 3) Combat Data Network (CDN)			-	-	196.385	-	-	29.057	-	-	41.268	-	-	50.940	-	-	-	-	-	50.940
4) Prior Year Cumulative Funding																				
4.1) Prior Year Funding			-	-	313.837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Prior Year Cumulative Funding			-	-	313.837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	528.752	-	-	30.575	-	-	42.294	-	-	51.976	-	-	-	-	-	51.976

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19	P-1 Line Item Number / Title: 4634 / Comm Switching & Control Systems	Aggregated Items Title: Comm Switching & Control Systems

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

- (1) CDN Program Spt/Fielding/CLS/Training: The increase of \$0.229M from FY22 to FY23 supports the continuation of Contractor Logistics Support, Program Office Support, and Technical Support to the Fleet Marine Force.
- (2) CDN Expeditionary Form Factor (Network Optimization): The decrease of \$4.418M from FY22 to FY23 reflects completion of the procurement of Expeditionary Form Factor. \$5.5M funding in FY23 will support kitting and fielding efforts in support of Expeditionary Form Factor.
- (3) CDN ECP Network Equipment: Increase of \$8.700M from FY22 to FY23 reflects the initiation of firewall and server technology refresh. The refresh will replace firewalls and servers that have reached end of life/end of support. This funding is required to maintain security posture and mitigate cybersecurity threats due to obsolescence while sustaining the capability of the Marine Corps to conduct tactical networking operations.
- (4) CDN Operational Command Post: Increase of \$12.650M from FY22 to FY23 procures ancillary equipment (laptops, phones, displays, projectors, VTCs) to field in support of Initial Operational Capability (IOC) for the Operational Command Post (OCP) in FY24. Ancillary equipment is not currently provided under the CDN program, and is required for OCP to replace a portion of the functionality divested with COC.
- (5) CDN ECP Cryptographic Equipment: Decrease of \$7.760M from FY22 to FY23 reflects the completion of cryptographic device refresh.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4635 / Comm & Elec Infrastructure Supt					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206313M, 0206479M, 0605013M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	412.176	43.782	95.943	26.029	0.000	26.029	31.493	27.555	28.037	29.141	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	412.176	43.782	95.943	26.029	0.000	26.029	31.493	27.555	28.037	29.141	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	412.176	43.782	95.943	26.029	0.000	26.029	31.493	27.555	28.037	29.141	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Beginning in FY 2023, Secure Operational Network Infrastructure & Communications, Marine Corps Enterprise IT Services, and Marine Corps Common Hardware (all previously in LI 4630), as well as Base Telecommunications Infrastructure (previously in LI 4635), were consolidated with Next Generation Enterprise Network (LI 4625), and LI 4625 was renamed Marine Corps Enterprise Network. This was done in order to consolidate Marine Corps IT investments to provide transparency, reduce the appearance of duplication, and reduce interdependencies between lines. This will enable the Marine Corps to achieve the objectives that were established in the Network Modernization Plan and it aligns to the Technology Business Framework (TBM) model directed by OMB Circular A-11 to provide clarity and transparency in both budgeting and execution of funding. Each new Cost Element (CE) has been mapped to their related PB22 Cost Elements. CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS) is a centrally managed program to field a technology solution in support of emergency dispatch personnel that facilitates timely responses when emergency calls for services are received. CERS provides command and coordination dispatch functions for first responders to support All-Hazard missions. It standardizes Emergency Dispatch Centers to provide notification functions, resource management and situational awareness in order to increase efficient emergency and day-to-day first responder operations. CERS capability is achieved through delivery of Enhanced 911 (E911) and emergency dispatch capabilities consisting of Computer Aided Dispatch (CAD) and Fire Station Alerting (FSA). ENTERPRISE LAND MOBILE RADIOS (E-LMR) is a modern, digital, Association of Public Safety Communications Officials (APCO) Project 25 (P25) Trunked Radio Systems (TRSs) at all Marine Corps Bases, Posts and Stations (BPS). It provides the wireless Radio Frequency (RF) communications that are required to support the Consolidated Emergency Response System and First Responders (i.e. Police, Fire, Emergency Medical Services) as part of the Emergency Management Command and Coordination initiative. Specifically, the radio system provides RF coverage to BPS populated areas and roads in-between, permitting positive command and coordination between Dispatchers and First Responders and enables their ability to respond to incidents during normal, crisis, and recovery operations. In the wake of 9/11 and Ft. Hood incidents, DoD recognized that effective emergency communications and mutual aid support operations are key elements in providing homeland security, reducing the loss of life and the preservation of property. Thus, the objective for the E-LMR acquisition is to bring forth a reliable interoperability wireless communication system with a limited data capability. This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the above details. BASE TELECOMMUNICATIONS INFRASTRUCTURE (BTI) provides all Marine Corps installations with the base area network communications infrastructure that connects the end-user to the DISA network. These resources are a critical component of the Marine Corps Network Modernization Plan. BTI modernizes, sustains, upgrades and enhances the telecommunications systems infrastructure for all Marine Corps Installations in order to meet the demands required to support the Marine Air Ground Task Force (MAGTF). BTI is designed to maintain current industry standards as they relate to technological capabilities for all voice, video and data services (both wired and wireless connections) and are transported via each installation's infrastructure. These data services include Enhanced 911 (E911), Video-Teleconferencing,												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4635 / Comm & Elec Infrastructure Supt
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0206479M, 0605013M
Line Item MDAP/MAIS Code: N/A		
Integrated Services Digital Network, Marine Corps Enterprise Network, Energy Monitoring Control Systems, Intrusion Detection Systems, Access Control Systems, Fire Alarm Control Networks and Fleet Training Systems. This includes supporting systems such as optical networks, telecommunications management systems, primary power, voice mail, teleconferencing, and outside plant infrastructure. The ongoing focus is technology refresh and standardization on DISA Unified Capabilities (UC) (voice, video, collaboration, and data) through modernization of installation infrastructure in order to maintain connection to the DISA network. This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the above details. Beginning in FY 2023, this effort was transferred to LI 4625, Marine Corps Enterprise Network.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4635 / Comm & Elec Infrastructure Supt				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206313M, 0206479M, 0605013M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Comm & Elec Infrastructure Supt				- / 412.176	- / 43.782	- / 95.943	- / 26.029	- / -	- / 26.029
P-40	Total Gross/Weapon System Cost				- / 412.176	- / 43.782	- / 95.943	- / 26.029	- / 0.000	- / 26.029
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Request: \$26.029M Beginning in FY 2023, the Next Generation Enterprise Network (NGEN), Secure Operational Network Infrastructure & Comms (SONIC), Marine Corps Enterprise IT Services (MCEITS), Marine Corps Common Hardware (MCHS) and Base Telecommunications Infrastructure (BTI) line items were transferred to a new procurement line item, the Marine Corps Enterprise Network (MCEN, BLI 4625), in order to consolidate Marine Corps IT investments to provide transparency, reduce the appearance of duplication, and reduce interdependencies between lines. This will enable the Marine Corps to achieve the objectives that were established in the Network Modernization Plan and it aligns to the Technology Business Framework (TBM) model which IT funding is reported against as directed in the OMB Circular A-11. CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS) \$6.908M: CERS - Hardware Tech Refresh & Equipment (Cost Element 2.1) \$5.000M. Funding in FY 2023 provides for the modernization of the E911 systems that are reaching end of life and will no longer be supported by the vendor which could result in removal from the network due to cybersecurity risks. This funding will also provide for Windows 10 updates which are mandated by DoD policy. Consolidated Emergency Response System is required for first responders' to react to emergency situations for which delayed responses may result in loss of life. CERS - Tech Refresh Engineering & Fielding (Cost Element 2.2) \$1.908M. Funding increase of \$0.133M from FY 2022 to FY 2023 supports the inherently governmental prep work and fielding support for regional technical refresh modernization efforts occurring in FY 2023. ENTERPRISE LAND MOBILE RADIOS (E-LMR) \$19.121M: ELMR - Mobile Land Radio (MBR) Tech Refresh (Cost Element 3.1) \$7.000M. Funding increase of \$0.104M from FY 2022 to FY 2023 is required as the refresh replacement radio installs continues at the USMC installations, allowing USMC First Responders to achieve operational mission support to protect life and property. ELMR - Regional Infrastructure Refresh (Cost Element 3.2) \$8.867M. Funding increase of \$4.474M from FY 2022 to FY 2023 continues the replacement of equipment that is at its end of life. FY 2023 funding will refresh the Western and Pacific Regions. If this equipment is not replaced, it will impact the first responders ability to carry out their missions. This equipment is required to ensure that First Responders are able to effectively communicate and respond to emergencies in a timely manner. The program is on a 7 year refresh cycle in each region (Pacific, Western, and Eastern) and its current equipment is becoming obsolete and requires immediate replacement and modernization. ELMR Fielding Activities (Cost Element 3.3) \$3.204M. Funding decrease of \$0.865M from FY 2022 to FY 2023 is directly related to the reduction in the fielding activities associated with the multi-band radio (MBR) technical refresh. The funding will be used for the ramping up of the Regional Infrastructure Refresh. This cost element provides fielding support for the ongoing fielding efforts for ELMR.										

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4635 / Comm & Elec Infrastructure Supt
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206313M, 0206479M, 0605013M
Line Item MDAP/MAIS Code: N/A		
ELMR - Defense Policy Review Initiative Equipment (Cost Element 3.4) \$0.050M. Funding is required to procure equipment DPRI Okinawa construction project MC4008-T Camp Hansen Fire Station and Extension of Berry Street. ELMR expansion is vital to supporting the Okinawa Consolidation effort in support of the Defense Policy Review Initiative.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19									P-1 Line Item Number / Title: 4635 / Comm & Elec Infrastructure Supt						Aggregated Items Title: Comm & Elec Infrastructure Supt					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Base Telecommunications Infrastructure (BTI)																				
1.1) BTI - Defense Policy Review Initiative Equipment (Guam) ⁽¹⁾	A		-	-	45.524	-	-	11.458	-	-	21.142	-	-	-	-	-	-	-	-	-
1.2) BTI - Defense Policy Review Initiative Equipment (Okinawa) ⁽²⁾	A		-	-	0.248	-	-	4.941	-	-	3.687	-	-	-	-	-	-	-	-	-
1.3) BTI - Unified Capabilities & Dense Wave Division Multiplexing ⁽³⁾	A		-	-	157.270	-	-	11.252	-	-	48.955	-	-	-	-	-	-	-	-	-
1.4) BTI-Prior Year Cumulative Funding	A		-	-	7.773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) BTI- Hurricane Disaster Recovery	A		-	-	50.600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Base Telecommunications Infrastructure (BTI)			-	-	261.415	-	-	27.651	-	-	73.784	-	-	-	-	-	-	-	-	-
2) CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS)																				
2.1) CERS - Hardware Tech Refresh & Equipment	A		-	-	1.000	-	-	3.807	-	-	5.000	-	-	5.000	-	-	-	-	-	5.000
2.2) CERS - Tech Refresh Engineering & Fielding ⁽⁴⁾	A		-	-	-	-	-	1.578	-	-	1.775	-	-	1.908	-	-	-	-	-	1.908
2.4) CERS - Prior Year Cumulative Funding	A		-	-	82.749	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS)			-	-	83.749	-	-	5.385	-	-	6.775	-	-	6.908	-	-	-	-	-	6.908
3) Enterprise Land Mobile Radio (ELMR)																				
3.1) ELMR - Mobile Land Radio (MBR) Tech Refresh ⁽⁵⁾	A		-	-	3.782	-	-	7.418	-	-	6.896	-	-	7.000	-	-	-	-	-	7.000
3.2) ELMR - Regional Infrastructure Refresh ⁽⁶⁾	A		-	-	-	-	-	1.089	-	-	4.393	-	-	8.867	-	-	-	-	-	8.867
3.3) ELMR - Fielding Activities ⁽⁷⁾	A		-	-	4.367	-	-	2.103	-	-	4.069	-	-	3.204	-	-	-	-	-	3.204
3.4) ELMR - Defense Policy Review Initiative Equipment ⁽⁸⁾	A		-	-	6.155	-	-	0.136	-	-	0.026	-	-	0.050	-	-	-	-	-	0.050

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4645 / Cyberspace Activities					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: 0206313M, 0330110M, 0305251M				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	27.632	43.985	25.377	17.759	0.000	17.759	21.973	19.840	20.195	23.773	-	200.534
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	27.632	43.985	25.377	17.759	0.000	17.759	21.973	19.840	20.195	23.773	-	200.534
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	27.632	43.985	25.377	17.759	0.000	17.759	21.973	19.840	20.195	23.773	-	200.534
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Beginning in FY 2023, joint efforts in this line item (LI) 4645 (Cyber Mission Forces) were transferred to LI 4646 Cyberspace Activities to establish a new budget line item within existing appropriation structure for the FY 2023 President's Budget submission in order to separately identify the cyber mission force program, funding, and civilian personnel to provide transparency for budgeting and execution of the mission, funding, and personnel that transfer to USCYBERCOM in FY 2024. DEFENSIVE CYBERSPACE WEAPON SYSTEMS (DCWS) (formerly USMC MAGTF DCO-IDM Suite): The USMC Defensive Cyberspace Weapon Systems (DCWS) program provides the self-contained, flyaway equipment (hardware and software) for USMC Corps Cyber Protection Teams (CPT) and Marine Corps Air Ground Task Force (MAGTF) Defensive Cyberspace Operations-Internal Defensive Measures (DCO-IDM) Teams to conduct vulnerability analysis (VA), incident response (IR), and other DCO functions concurrently on classified and unclassified networks, and the ability to locate, close with, and defeat malicious cyberspace activity in response to an adversary bypassing or breaching DoD information systems. The CPTs and DCO-IDM teams utilize the interface (a laptop), data from passive and active sensors (servers, laptops, and taps), and the analytic capability from the hardware and software in order to determine the state of networks, hosts, and major weapon systems. Software includes Government Off-the-Shelf (GOTS), Commercial Off-the-Shelf (COTS), and free and open-source software (FOSS). DCWS are a part of a common family of systems in support of Marine Corps cyberspace operations, and are operable in both garrison and tactical/deployed environments. ROBUST INFRASTRUCTURE (formerly titled MARFORCYBER) [Directly supports U.S. Cyber Command Execute Order 19-0035]: Cyber Capability to Support the Cyber Mission Force. U.S. Cyber Command Execute Order 19-0035 directs MARFORCYBER to establish and sustain a secure and effective common firing platform for offensive cyber missions. Currently used platforms are not interoperable or efficient, limiting flexibility and effectiveness of cyber mission forces. Through divesting in multiple legacy platforms and investing in a joint common access platform (JCAP) that will be established across all Joint Mission Operations Centers (JMOCs), offensive operations will be more effective and efficient, improving mobility, resiliency, collaboration, force multiplication, and scalability. SECURE, OPERATE, DEFEND AND ENABLE the Marine Corps Cyberspace Environment (MCCE) (formerly titled MCCOG): Marine Forces Cyberspace Command is responsible for enhancing freedom of action across the Cyberspace domain, while denying the efforts of adversaries to degrade or disrupt this advantage through cyberspace. The Marine Corps Cyberspace Operations Group (MCCOG) is a command element under Marine Corps Forces Cyberspace Command responsible for securing, operating, and defending the Marine Corps Cyberspace Environment (MCCE) - to include providing network situational awareness; command and control; and technical support to Marine Corps operating forces and supporting establishment organizations, both in garrison and while deployed. In addition to being the primary DOD Cybersecurity Service Provider (CSSP) for the U.S. Marine Corps and only certified Red Team, MCCOG performs Vulnerability Management, Malware Protection, Web Assessment, Hunt												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		P-1 Line Item Number / Title: 4645 / Cyberspace Activities
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0206313M, 0330110M, 0305251M	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
Operations, and Cyber Incident Response focused on preventing and responding to prevent and respond to security incidents. The MCCOG delivers enterprise services for the Marine Corps to include Directory, Enterprise Storage, Messaging, Application Management, Mobility, Deployed Support, Mainframe, and Unified Communication. ENTERPRISE INFORMATION TECHNOLOGY (IT) SECURITY & COMPLIANCE (formerly titled PUBLIC KEY INFRASTRUCTURE (PKI)): Is a framework of laws, policies, procedures, and technologies for the use of Public Key Infrastructure (PKI). This consists of digital credentials that provide confidentiality, integrity, authenticity, and non-repudiation in electronic communications and transactions. PKI allows secure access to IT systems and facilitates the ability to electronically sign documents, encrypt messages and documents, and to authenticate and protect web access. In compliance with DoD policy and direction, the USMC PKI program provides the resources, manpower and equipment (hardware and software), dedicated to the management (generation, production, distribution, control, accounting and destruction) of keys and certificates used by public key-based security services to include garrison and deployed NIPRNet and SIPRNet. The PKI program operates the USMC Certificate Validation Infrastructure necessary to ensure that only authorized users and server based applications are allowed to operate on the Marine Corps Enterprise Network (MCEN). These services are required for user access to all information system components on the MCEN including network accounts, applications and web sites. PKI must be operable in garrison and tactical/deployed environments. PUBLICLY AVAILABLE INFORMATION (PAI) AND OPEN SOURCE INTELLIGENCE (OSINT) SUPPORT TO FMF: Delivers an enterprise solution for PAI and OSINT to the Marine Corps Information Environment Enterprise (MCIEE) through Infrastructure as a Service (IaaS) and Software as a Service (SaaS) which is mission critical for the competition and conflict phases.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4645 / Cyberspace Activities				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: 0206313M, 0330110M, 0305251M			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Cyberspace Activities				- / 27.632	- / 43.985	- / 25.377	- / 17.759	- / -	- / 17.759
P-40	Total Gross/Weapon System Cost				- / 27.632	- / 43.985	- / 25.377	- / 17.759	- / 0.000	- / 17.759
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation: \$17.759M Active DEFENSIVE CYBERSPACE WEAPON SYSTEMS (DCWS) (formerly USMC MAGTF DCO-IDM Suite): (\$8.788M) Decrease of \$6.978M from FY 2022 to FY 2023 due to (1) \$4.036M transferred from BLI 4545 to BLI 4646 to align funding of Deployable Mission Support Systems (DMSS) kit procurement to US Cyber Command in support of the Enhance Budget Control (EBC) Authority for Cyber Operations (2) \$2.942M due to reduced requirements for hardware and software purchases in FY 2023. FY 2023 funding will support Marine Corps defensive cyber operations. The systems include MAGTF DCO-IDM Suites (MDS) in support of MAGTF DCO-IDM Teams. MDS suites provide the self-contained, fly-away equipment (hardware and software) for MAGTF DCO-IDM Teams to conduct vulnerability analysis, incident response, and other DCO-IDM functions on classified and unclassified networks. The mission is to preserve the ability to utilize blue cyberspace capabilities, protect data, networks, cyberspace-enabled devices, and other designated systems by defeating on-going or imminent malicious cyberspace activity. In FY 2023, the program office will deliver (13) MDS suites across all three Marine Expeditionary Forces (MEFs) and Marine Corps Forces Reserve in support of achieving the approved acquisition objective. SECURE, OPERATE, DEFEND AND ENABLE the Marine Corps Cyberspace Environment (MCCE) (formerly titled MCCOG): (\$8.285M) The increase of \$0.165M from FY 2022 to FY 2023 will support the procurement of three (3) Marine Security Information & Event Management (M-SIEM) Secret Internet Protocol Router (SIPR) Network stacks located in Camp Lejeune, Camp Pendleton, and Okinawa, Japan. These three hardware and software stacks, replaces outdated hardware and software that is vulnerable to attacks from adversaries. The M-SIEM SIPR capability aggregates relevant data from multiple sources (logs, events), identifies deviations from the norm, and allows defenders to take appropriate action. Additionally, Security Orchestration, Automation and Response (SOAR) capabilities integrated with M-SIEM SIPR technologies provide the means to counteract threats within seconds of detection. Whether manually or automatically initiated, SOAR will provide the ability to automate the responsive action for cybersecurity defenses. ENTERPRISE INFORMATION TECHNOLOGY (IT) SECURITY & COMPLIANCE (formerly titled PUBLIC KEY INFRASTRUCTURE (PKI): (\$0.686M) The decrease of \$0.805M from FY 2022 to FY 2023 is due to the technical refresh cycle of equipment that occurred in FY 2022. FY 2023 funding will support the technical refresh cycle of equipment which is not on a smoothed spend cycle. The down peaks in funding indicate years in which smaller independent components (i.e. digital scanner) are refreshed (FY 2023). The up peaks in funding (FY 2024 and FY 2025) indicate years in which multiple larger interdependent components (i.e. switches and servers) are refreshed to ensure interoperability of hardware.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4645 / Cyberspace Activities							Aggregated Items Title: Cyberspace Activities						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Cyberspace Activities																				
1.1) DEFENSIVE CYBER OPERATIONS - INTERNAL DEFENSIVE MEASURES ⁽¹⁾	A		-	-	5.000	-	-	8.324	-	-	15.766	-	-	8.788	-	-	-	-	-	8.788
1.2) ROBUST INFRASTRUCTURE	A		-	-	14.289	-	-	26.199	-	-	-	-	-	-	-	-	-	-	-	-
1.3) SECURE, OPERATE, DEFEND AND ENABLE ⁽²⁾	A		-	-	7.841	-	-	7.994	-	-	8.120	-	-	8.285	-	-	-	-	-	8.285
1.4) ENTERPRISE IT SECURITY & COMPLIANCE ⁽³⁾	A		-	-	0.502	-	-	1.468	-	-	1.491	-	-	0.686	-	-	-	-	-	0.686
Subtotal: 1) Cyberspace Activities			-	-	27.632	-	-	43.985	-	-	25.377	-	-	17.759	-	-	-	-	-	17.759
Total			-	-	27.632	-	-	43.985	-	-	25.377	-	-	17.759	-	-	-	-	-	17.759

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

⁽¹⁾ Decrease of \$6.978M from FY2022 to FY2023 due to: (1) \$4.036M transferred from BLI 4545 to BLI 4646. Beginning in FY 2023, efforts in this line item (LI) 4645 (Cyber Mission Forces) were transferred to LI 4646 Cyberspace Activities as directed to establish a new budget line item within existing appropriation structure for the FY 2023 President's Budget submission to separately identify the cyber mission force program, funding, and civilian personnel to provide transparency for budgeting and execution of the mission, funding, and personnel that transfer to USCYBERCOM in FY 2024. (2) \$2.942M due to reduced requirements for hardware and software purchases in FY2023.

⁽²⁾ The increase of \$0.165M from FY 2022 to FY 2023 will support the buildout and integration of the SIPR version of Big Data Platform - Cyber Hunt Analytic Operations System (BDP-CHAOS).

⁽³⁾ The decrease of \$0.805M from FY 2022 to FY 2023 is due to the technical refresh cycle of equipment that occurred in FY 2022.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							P-1 Line Item Number / Title: 4646 / Cyber Mission Forces					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: 0305251M				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	0.000	0.000	4.036	0.000	4.036	0.000	0.000	0.000	0.000	-	4.036
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	0.000	0.000	4.036	0.000	4.036	0.000	0.000	0.000	0.000	-	4.036
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	0.000	0.000	4.036	0.000	4.036	0.000	0.000	0.000	0.000	-	4.036
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Beginning in FY 2023, joint efforts from line item (LI) 4645 (Cyber Mission Forces) were transferred to this LI 4646 Cyberspace Activities to establish a new budget line item within existing appropriation structure for the FY 2023 President's Budget submission in order to separately identify the cyber mission force program, funding, and civilian personnel to provide transparency for budgeting and execution of the mission, funding, and personnel that transfer to USCYBERCOM in FY 2024. DEFENSIVE CYBERSPACE WEAPON SYSTEMS (DCWS) (formerly USMC MAGTF Defensive Cyberspace Weapons System (MDS): The USMC Defensive Cyberspace Weapon Systems (DCWS) program provides the self-contained, flyaway equipment (hardware and software) for joint Cyber Protection Teams (CPT) to conduct vulnerability analysis (VA), incident response (IR), and other DCO functions concurrently on classified and unclassified networks, and the ability to locate, close with, and defeat malicious cyberspace activity in response to an adversary bypassing or breaching DoD information systems. The CPTs utilize the interface (a laptop), data from passive and active sensors (servers, laptops, and taps), and the analytic capability from the hardware and software in order to determine the state of networks, hosts, and major weapon systems. Software includes Government Off-the-Shelf (GOTS), Commercial Off-the-Shelf (COTS), and free and open-source software (FOSS). DCWS are a part of a common family of systems in support of joint cyberspace operations, and are operable in both garrison and tactical/deployed environments.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						P-1 Line Item Number / Title: 4646 / Cyber Mission Forces				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: 0305251M			Other Related Program Elements: N/A			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Cyber Mission Forces				- / 0.000	- / 0.000	- / 0.000	- / 4.036	- / 0.000	- / 4.036
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 0.000	- / 0.000	- / 4.036	- / 0.000	- / 4.036
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation: \$4.036M Active

DEFENSIVE CYBERSPACE WEAPON SYSTEMS (DCWS) (formerly USMC MAGTF Defensive Cyberspace Weapons System (MDS): (\$4.036 million): FY 2023 funding will support joint defensive cyber operations via the procurement of Deployable Mission Support Systems (DMSS) kits. DMSS systems are composed of hardware and software that provide joint Cyber Protection Teams the ability to locate, close with, and defeat malicious cyberspace activity in response to an adversary bypassing or breaching DoD information systems. The mobile, modular, and scalable DMSS provides a self-contained capability to enable hunt operations against advanced nation-state actors and enables hardening and assessment actions on DoD classified and unclassified networks. FY 2023 funding will enable the program office to complete the fielding of 24 DMSS kits initiated in FY 2022.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19							P-1 Line Item Number / Title: 4646 / Cyber Mission Forces							Item Number / Title [DODIC]: 1 / Cyber Mission Forces							
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000			0.000			0.000			4.036			0.000			4.036		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000			0.000			0.000			4.036			0.000			4.036		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				0.000			0.000			0.000			4.036			0.000			4.036		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Hardware - Cyber Mission Forces Cost																					
Non Recurring Cost																					
1.1.1) DEFENSIVE CYBERSPACE WEAPON SYSTEMS (1)	-	-	-	-	-	-	-	-	-	-	-	4.036	-	-	-	-	-	4.036			
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	4.036	-	-	-	-	-	4.036			
Subtotal: Hardware - Cyber Mission Forces Cost	-	-	-	-	-	-	-	-	-	-	-	4.036	-	-	-	-	-	4.036			
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	-	-	4.036	-	-	0.000	-	-	4.036			
Footnotes:																					
(1) Beginning in FY 2023, efforts in this line item (LI) 4646 (Cyber Mission Forces) were transferred from LI 4645 Cyberspace Activities as directed to establish a new budget line item within existing appropriation structure for the FY 2023 President's Budget submission to separately identify the cyber mission force program, funding, and civilian personnel to provide transparency for budgeting and execution of the mission, funding, and personnel that transfer to USCYBERCOM in FY 2024.																					

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 1: Administrative Vehicles							P-1 Line Item Number / Title: 5006 / Commercial Cargo Vehicles					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206624M, 0708542M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	288.677	20.832	17.848	35.179	0.000	35.179	38.323	27.408	26.549	31.535	Continuing	Continuing
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	288.677	20.832	17.848	35.179	0.000	35.179	38.323	27.408	26.549	31.535	Continuing	Continuing
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	288.677	20.832	17.848	35.179	0.000	35.179	38.323	27.408	26.549	31.535	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-

Description:
Commercial Passenger Vehicles (CPV) - CPV is a centrally managed program for the procurement of commercially available vehicles, such as sedans, vans and buses of various sizes.

Emergency Response Vehicles (ERV) - Replaces firefighting apparatuses for maintaining the minimal installations ERV requirements for structural and airfield operations capabilities throughout the Marine Corps. The Emergency Response Vehicle (ERV) program ensures that fire trucks and ambulances are replaced as they reach their life expectancy. The vehicle replacement cycle ensures our vehicles meet new safety standards and National Fire Protection Standards enhancing firefighter safety. Additionally, the program supports DPRI requirements to outfit the new Government of Japan funded J-008 Fire Station for the future Marine Corps Base Guam. Specifically, this funding will procure the Command Vehicle, Aerial Ladder Truck, Fire Engine, HAZMAT Rescue Vehicle, and Water Tender.

Commercial Cargo Vehicles - The Commercial Cargo Vehicles program is a centrally managed program for procurement of commercially-available and general purpose vehicles such as heavy and light trucks, special purpose trucks, certain fire department trucks, refuse collection trucks, tanker trucks and all types of trailers. Additionally, the program supports Defense Policy Review Initiative (DPRI) requirements

Marine Security Guard Vehicles - Funds the procurement of commercial vehicles for the Marine Security Guard based on the requirements of the particular command and country embassies.

Garrison Transportation and Management - The Garrison Transportation and Management program is a centrally managed program that procures commercially-available, general purpose, and passenger vehicles such as heavy and light trucks, special purpose trucks, certain fire department trucks, refuse collection trucks, tanker trucks, and various types of trailers; as well as sedans, vans, and busses of various sizes. Starting in FY 2022, Garrison Transportation and Management encompasses Commercial Cargo and Commercial Passenger Vehicles under BLI 5006.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 1: Administrative Vehicles						P-1 Line Item Number / Title: 5006 / Commercial Cargo Vehicles				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M, 0708542M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Commercial Cargo Vehicles	P-5a			- / 288.677	- / 20.832	- / 17.848	- / 35.179	- / -	- / 35.179
P-40	Total Gross/Weapon System Cost				- / 288.677	- / 20.832	- / 17.848	- / 35.179	- / 0.000	- / 35.179
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Funding Request: \$35.179M Emergency Response Vehicles \$7.332M - Funds will procure trucks and equipment such as ambulances, fire trucks (pumpers/aerial), rescue trucks, as well as brush trucks and water extenders to maintain ranges, training areas and facilities on Marine Corps Installations. Funds in the amount of \$1.400M will support DPRI Okinawa for the purchase of an aerial ladder fire truck for Camp Hansen. The total increase of \$1.146M from FY 2022 to FY 2023 is due to DPRI Okinawa requirements. Marine Corps Embassy Security Group (MCESG) \$6.896M - Funding will replace existing, beyond service life, Commercial off the Shelf (COTS) armored and unarmored vehicles at the 186 Marine Security Guard (MSG) detachments around the world. MSG detachments are provided a dedicated armored or unarmored vehicle. The authorized number of vehicles at each post is determined by the official MSG vehicle table of equipment (T/E). MSG detachment vehicles are available 24-hours per day, seven days per week (24/7), to be utilized for official duties, training, and unit prescribed events. The vehicle remains in a location suitable for quick response and is equipped with communications into the emergency net. Detachment vehicles are purchased by the DOS with reimbursement from the USMC. The distribution and service life of vehicle assets are monitored jointly by the Marine Corps Embassy Security Group (MCESG) and Department of State (DoS), Diplomatic Security (DS), MSG Branch to ensure sufficient resources are available across the MSG program. The total increase of \$0.368M from FY 2021 to FY 2023 is due to inflation. Garrison Transportation and Management \$20.951M - Funding will replace existing, beyond service life, Commercial off the Shelf (COTS) vehicles and equipment across all Marine Corps Installations worldwide. Procured replacement vehicles will be safer, with minimized climate impact, zero emissions, and fuel efficient. The vehicles include (1) Bus, (421) Low Speed Vehicles, (24) Sedans/ST Wagons, (1) SUV, (73) Trailers, (57) Trucks, and (3) Vans. The replacement of over-aged vehicles will also decrease maintenance costs as well as increasing vehicle and equipment readiness. An increase of \$15.817M from FY 2022 to FY 2023 allows the program to increase replacement vehicles and brings the program closer to target replacement cycles. \$14.017M of that increase provides for climate funding to modernize the fleet through improved fuel efficiency and electrification in support of our mission. \$2.018M of the Garrison Transportation and Management funding supports Defense Policy Review Initiative (DPRI) Guam for the fourth, and final, R-11 aviation refueling vehicle for Marine Corps aircraft on Guam. Along with funding in the amount of \$0.300M supports DPRI Okinawa for the procurement of vehicles to support the construction management of Camps Schwab, Hansen, and Foster. The FY 2023 funding request was adjusted by \$3.306M to account for the availability of prior year execution balances.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 1						P-1 Line Item Number / Title: 5006 / Commercial Cargo Vehicles									Aggregated Items Title: Commercial Cargo Vehicles					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
1) Commercial Cargo Vehicles																				
1.1) Commercial Passenger Vehicles	A		-	-	16.862	-	-	1.796	-	-	-	-	-	-	-	-	-	-	-	-
1.2) Emergency Response Vehicles ⁽¹⁾	A		-	-	37.423	-	-	4.818	-	-	6.186	-	-	7.332	-	-	-	-	-	7.332
1.3) Commercial Cargo Vehicles	A		-	-	205.840	-	-	7.809	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Commercial Cargo Vehicles			-	-	260.125	-	-	14.423	-	-	6.186	-	-	7.332	-	-	-	-	-	7.332
2) Marine Security Guard																				
2.1) UnArmored ^(†)	A		0.064	206	13.115	0.096	32	3.068	0.050	26	1.306	0.048	29	1.379	-	-	-	0.048	29	1.379
2.2) Armored ^(†)	A		0.094	165	15.437	0.093	36	3.341	0.201	26	5.222	0.190	29	5.517	-	-	-	0.190	29	5.517
Subtotal: 2) Marine Security Guard			-	-	28.552	-	-	6.409	-	-	6.528	-	-	6.896	-	-	-	-	-	6.896
3) Garrison Transportation and Management																				
3.1) Garrison Transportation and Management ⁽²⁾	A		-	-	-	-	-	-	-	-	5.134	-	-	20.951	-	-	-	-	-	20.951
Subtotal: 3) Garrison Transportation and Management			-	-	0.000	-	-	-	-	-	5.134	-	-	20.951	-	-	-	-	-	20.951
Total			-	-	288.677	-	-	20.832	-	-	17.848	-	-	35.179	-	-	-	-	-	35.179
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
^(†) indicates the presence of a P-5a																				
Footnotes:																				
⁽¹⁾ The total increase of \$1.146M from FY 2022 to FY 2023 is due to DPRI Okinawa requirements.																				
⁽²⁾ An increase of \$15.817M from FY 2022 to FY 2023 allows the program to increase replacement vehicles and brings the program closer to target replacement cycles. \$14.017M of the increase provides for climate funding to modernize the fleet through improved fuel efficiency and electrification in support of our mission.																				

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 1				P-1 Line Item Number / Title: 5006 / Commercial Cargo Vehicles					Aggregated Items: Commercial Cargo Vehicles			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) Marine Security Guard												
2.1) UnArmored		2017	Various Vendors / Various	Various	Arlington VA	Jun 2017	Jun 2017	65	0.058	Y		
2.1) UnArmored		2018	Various Vendors / Various	Various	Arlington VA	Jun 2018	Jun 2018	56	0.056	Y		
2.1) UnArmored		2019	Various Vendors / Various	Various	Arlington VA	Jun 2019	Jun 2019	38	0.059	N	Oct 2018	
2.1) UnArmored		2020	Various Vendors / Various	Various	Arlington VA	Jun 2020	Jun 2020	47	0.085	N	Oct 2018	
2.1) UnArmored		2021	Various Vendors / Various	Various	Arlington VA	Jun 2021	Jun 2021	32	0.096	N		
2.1) UnArmored		2022	Various Vendors / Various	C / TBD	** NO PCO **	Oct 2021	Oct 2021	26	0.050	N		
2.1) UnArmored		2023	Various Vendors / Various	C / TBD	** NO PCO **	Jun 2023	Jun 2023	29	0.048	N		
2.2) Armored		2017	Various / Various	C / TBD	** NO PCO **	Jun 2017	Jun 2017	44	0.092	N		
2.2) Armored		2018	Various / Various	C / TBD	** NO PCO **	Jun 2018	Jun 2018	42	0.103	N		
2.2) Armored		2019	Various / Various	C / TBD	** NO PCO **	Jun 2019	Jun 2019	36	0.078	N		
2.2) Armored		2020	Various / Various	C / TBD	** NO PCO **	Jun 2020	Jun 2020	43	0.099	N		
2.2) Armored		2021	Various / Various	C / TBD	** NO PCO **	Jun 2021	Jun 2021	36	0.093	N		
2.2) Armored		2022	Various / Various	C / TBD	** NO PCO **	Jun 2022	Jun 2022	26	0.201	N		
2.2) Armored		2023	Various / Various	C / TBD	** NO PCO **	Jun 2023	Jun 2023	29	0.190	N		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles							P-1 Line Item Number / Title: 5050 / Motor Transport Modifications					
ID Code (A=Service Ready, B=Not Service Ready): B				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	282.786	26.922	17.647	17.807	0.000	17.807	17.673	28.696	30.744	31.318	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	282.786	26.922	17.647	17.807	0.000	17.807	17.673	28.696	30.744	31.318	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	282.786	26.922	17.647	17.807	0.000	17.807	17.673	28.696	30.744	31.318	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Motor Transport Modifications funds numerous essential modifications and initiatives that are required to address operational priorities, engineering change proposals (ECPs), safety concerns, support equipment inefficiencies, tool malfunctions, product quality deficiencies, and other issues that affect vehicle reliability, safety, availability, and readiness. A proactive and focused approach will ensure the equipment that supports Force Design and Marine Corps readiness is prepared to address Littoral Operations in Contested Environments (LOCs) and in the Indo-Pacific. Proper vehicle sustainment and life-cycle management will allow the Marine Corps to develop and implement improvements as needed to continue to prepare to respond to such operations as Air Defense systems, C2 Degraded environment systems, Close Combat lethality systems, and Expeditionary Advanced Base Operations (EABO). The Medium Tactical Vehicle Replacement (MTVR) is the Marine Corps medium ground lift capability supporting all elements of the Marine Air-Ground Task Force (MAGTF). With its 70% off-road mission profile and the addition of a highly survivable armor package, the MTVR is heavily used in contingency operations as well as missions supporting humanitarian operations. It has a payload of 7.1 tons off-road and 15 tons on-road, a high-performance suspension, traction control, central tire inflation system, and automatic transmission, to transport personnel, ammunition, bulk cargo, and/or bulk fuel and water in a variety of environments. The MTVR Family of Vehicles (FoV) includes a cargo variant (both standard and extended wheel base configurations), a dump truck, a wrecker, a tractor and a HIMARS Rocket Resupply System Vehicle. This program funds numerous product improvements to the MTVR via ECPs, resulting from post-production requirements in force protection, communications, on-board situational awareness, and improved fuel efficiency required across the range of military operations, as well as addressing product quality deficiencies and other issues that impact vehicle safety, reliability, availability and readiness. The requirements capability change to improve fuel efficiency for the MTVR is part of the program's initiatives to lower fuel consumption and extend the operational range of the vehicle, while lowering operating costs over the life of the MTVR. The Family of Logistics Vehicle System Replacement (LVSR) is the MAGTF Heavy Lift Capability system. The LVSR is built on the Oshkosh TAC-4 fully independent suspension, allowing it to traverse a variety of challenging terrain while carrying a payload of up to 22.5 tons. The LVSR accomplishes a variety of tactical logistics missions using armored and unarmored cargo, tractor, and recovery variants. Funding provides for modifications required for the LVSR fleet of vehicles, such as updated brackets and cables for warfighter systems (e.g., jammers) as they are upgraded. These modifications also include critical safety upgrades such as the transfer case heat sensor to prevent the LVSR from overheating and having a thermal event during operation. Finally, modifications include life cycle issues such as cab reconditioning, parts obsolescence, and life cycle cost reductions. Light Tactical Vehicle Modification (LTVM) - The Light Tactical Family of Vehicles Modification program funds numerous essential modifications and initiatives that are required to address operational priorities, engineering change proposals, safety concerns, support equipment inefficiencies, tool malfunctions, product quality deficiencies, and other issues that affect vehicle reliability, availability, and readiness. A												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles						P-1 Line Item Number / Title: 5050 / Motor Transport Modifications				
ID Code (A=Service Ready, B=Not Service Ready): B			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A										
proactive and focused approach ensures proper sustainment and life-cycle management of the light tactical vehicle fleet and allows the program office to develop and implement improvements, as needed, to respond to the evolving requirements of the Marine Corps.										
The Family of P-19 Replacement (P-19R) replaced the obsolete A/S32P-19A Crash Fire Rescue fleet in support of expeditionary airfield operations and the supporting establishment. The vehicle is outfitted with advanced fire suppression equipment. It provides rescue and aircraft fire fighting capabilities to permanent and expeditionary airfields throughout the Marine Corps. The P-19R may also be employed to fight structural fires in support of base camps and as firefighting support to other elements of the MAGTF, such as ammunition supply points, Petroleum, Oil, and Lubricant (POL) distribution points, or hazardous material storage facilities.										
The Mine Resistant Ambush Protected (MRAP) FoV provides Warfighters with a multi-mission platform capable of mitigating Improvised Explosive Devices (IEDs), underbody mines, and small arms fire threats. Multiple MRAP vehicle Categories (CATs) have been procured, fielded, and are now being sustained, with combat operations (OPS) in rural, mountainous, and urban terrain. MRAP CATs are Category I - Urban combat operations, ambulance; Category II - Multi-mission ops-convoy lead, troop transport, ambulance, utility vehicle; and Category III - Mine/IED clearance ops, explosive ordnance disposal. Funding includes required Government Furnished Equipment (GFE)/subsystems and ECP/Capability Insertion and Warfighter safety and survivability requirements.										
The Family of Medium/Heavy Tactical Trailers and Ancillary Equipment (FT&AE) encompasses equipment upgrades and changes made to fielded trailers. FT&AE primarily provides for the procurement and support of trailers in the medium and heavy fleet to enhance Marine Corps tactical vehicle mobility capability. This program primarily supports various medium and heavy trailers, to include the M1076 PLS (Palletized Load System) Trailer, the MK1077 Flatrack for the PLS Trailer and Logistics Vehicle System Replacement (LVSR); MK593 Medium Tactical Vehicle Replacement (MTVR) Trailer; M870 40/50 Ton Low Bed, MK970 Tactical Refueler, M149A2 400 Gallon Water Tank Trailer, MK38/M1095 High Mobility Artillery Rocket System (HIMARS) Re-Supply Trailer, MK970 5,000 Gallon Semitrailer, and the Flatrack Refueler Capability (FRC). In FY 2022, funding for the FT&AE program transitioned from BLI 5097 to BLI 5050. This consolidated tactical wheeled vehicle procurement efforts into a single project unit.										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.501	16.514	16.608	-	16.608	16.437	16.366	17.950	18.285
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.421	1.133	1.199	-	1.199	1.236	12.330	12.794	13.033
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.922	17.647	17.807	-	17.807	17.673	28.696	30.744	31.318

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles					P-1 Line Item Number / Title: 5050 / Motor Transport Modifications					
ID Code (A=Service Ready, B=Not Service Ready): B			Program Elements for Code B Items: N/A				Other Related Program Elements: 0206624M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*		Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Motor Transport Modifications					- / 282.786	- / 26.922	- / 17.647	- / 17.807	- / -
P-40	Total Gross/Weapon System Cost					- / 282.786	- / 26.922	- / 17.647	- / 17.807	- / 0.000
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$17.807M (\$16.608M Active; \$1.199M Reserve)

The Medium Tactical Vehicle Replacement (MTVR) Modification: \$8.662M Funding supports integration efforts in order to meet approved operational requirements that span across Marine Corps Expeditionary Forces (MEFs), for procuring and installing several types of modification kits. These modification upgrades improve the ability of the crew to "shoot, move, and communicate" by prioritizing the installation of the C4I (Command, Control, Communications, Computers, and Intelligence) systems, upgrading the weapons mount kit to enable the employment of heavy machine guns, as well as the front and rear cab axle mounts that are required due to the addition of heavy armor. C4I kits enable the platform to accept Radios, Intercoms, Jammers and Blue Force Situational Awareness capabilities. Additionally, installation of the Turret Gunner Restraint System (TGRS) provides rollover protection for the Marine in the turret using a full-body, six-point harness. Installation of Automatic Fire Extinguisher System (AFES) provide additional crew survivability. Installation costs account for over half the total cost of each ECP. These ECPs are part of a continual effort to upgrade the MTVR as the item exit date has been extended from 2024 to 2042. Fuel Efficiency (FE) upgrades will continue to be installed on the entire MTVR fleet of vehicles. FE upgrades provide reduced fuel consumption which will continue to lead to significant cost savings over the life of the MTVRs. Higher fuel economy will improve our warfighter's combat effectiveness by reducing the logistical footprint, increasing expeditionary capability and extending the operational range of fuel-powered equipment. The increase of \$0.755M from FY 2022 to FY 2023 is primarily the result of increased safety ECPs.

The Family of Logistics Vehicle System Replacement (LVSR): \$1.071M (\$0.827M Active; \$0.244M Reserve) Funding supports modified cabs, which increases the performance of corrosion protection and prevents dead-lining the vehicles due to corrosion as well as transfer case sensor safety upgrade to prevent thermal event to protect occupants and equipment. The increase of \$0.148M from FY 2022 to FY 2023 is due to transfer case sensor safety upgrade efforts.

Light Tactical Vehicle Modification (LTVM): \$3.495M Funding will provide for limited quality deficiency resolutions, safety initiatives, and environmental/state transportation mandated vehicle changes. Provides support for ECP integration to include changes such as addressing deficiencies of HMMWV vehicles due to up armoring and age degradation of the fleet, energy storage enhancements and other critical changes required to ensure the vehicles are a viable transportation capability for the Fleet Marine Force. Funding increase from FY 2022 to FY 2023 of \$1.509M is due to increased Engineering Change Orders to address potential safety upgrades as the platform ages well past its intended service life.

The Family of P-19 Replacement (P-19R): \$0.403M (\$0.196M Active; \$0.207M Reserve) Funding supports ECPs/modernization/upgrade kits. The increase of \$0.030M from FY 2022 to FY 2023 is to procure argon hoses/ECPs.

The Family of Mine Resistant Ambush Protected (MRAP) Family of Vehicles (FoV): \$0.991M Funding supports efforts to provide Primary Inventory Control Activity and International Programs support of upgrades/modifications for the enduring MRAP vehicle requirement. Continues ECP modifications to maintain force protection threats, and responding to operational needs. The decrease of \$0.182M from FY 2022 to FY 2023 is the result of the reduction in the number of vehicles estimated to require modifications.

The Family of Medium/Heavy Tactical Trailers and Ancillary Equipment (FT&AE): \$3.185M (\$2.437M Active; \$0.748 Reserve) Funding supports procurement and installation of safety and performance ECPs to modify the Medium and Heavy Tactical Trailer Fleets, including the Palletized Load System Trailer (PLST), M870 (40 & 50 ton trailers), MK1077 (Flatrack), MK970, MTVR MK593 Trailer and Flatrack Refueling Capability (FRC). Many of these trailer systems were procured prior to or separate of the MTVR and LVSR, do not match the off-road capabilities of those prime movers, but can be improved with modification.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles		P-1 Line Item Number / Title: 5050 / Motor Transport Modifications
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206624M
Line Item MDAP/MAIS Code: N/A		
Funding will also support procuring various ECPs, such as those addressing corrosion and safety changes by incorporating drain holes, corrosion resistant materials, and improved safety chains. The ECPs will address an identified capability gap and represents an alignment with the Commandant's Planning Guidance (CPG) for a more mobile Fleet Marine Force (FMF) with improved reliability. Modifications can span multiple years to outfit a fleet, such as the ECP for the M870, which began in FY 2019 and will take multiple years to complete upgrades to all M870 trailers. The M870 ECP reflects the Marine Corps' prioritized modification efforts and addresses ground clearance issues for the M870 Heavy Lift trailer by providing the M870 with improved off-road mobility and increased reliability. The Heavy Trailers ECP is specific to the M870A2-S 40-Ton trailer and the trailer's prime mover, the LVSR. The effort consists of a suspension upgrade ECP for the M870A2-S 40-Ton trailer and a corresponding LVSR controller/connecting link ECP, both of which allow the trailer to operate in an off-road environment with improved reliability. The M870 suspension upgrade ECP renders the trailer capable of operating in off-road environments and includes replacement of the entire trailer suspension system (installation of central tire inflation system, ride height control, replacement of wiring and harnesses, replacement of wheels and axles, and tire replacement) as well as other modifications required to accommodate off-road missions (replacement of rear loading ramps, strengthening of the trailer gooseneck and frame, and replacement of d-rings and equipment tie downs). The corresponding LVSR controller/connecting link ECP allows the prime mover to communicate with and control the systems on the upgraded M870 trailer. In FY 2022, funding for FT&AE transitioned from BLI 5097 to BLI 5050 in order to consolidate tactical wheeled vehicle procurement efforts into a single project unit. In FY 2023, the decrease in funding of \$2.100M from FY 2022 to FY 2023 is primarily due to a decrease in the number of Heavy Trailer ECPs to be procured for the M870 off-road mobility effort.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2									P-1 Line Item Number / Title: 5050 / Motor Transport Modifications						Aggregated Items Title: Motor Transport Modifications						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
1) Medium Tactical Vehicle Replacement (MTVR) Modifications																					
1.1) Vehicle Safety Modifications/ Upgrades Proc & Installs ⁽¹⁾	A		-	-	22.886	-	-	0.533	-	-	0.492	-	-	1.198	-	-	-	-	-	1.198	
1.2) Vehicle ECP Integration Equipment & Installs ⁽²⁾	A		-	-	58.035	-	-	16.103	-	-	0.380	-	-	0.272	-	-	-	-	-	0.272	
1.3) Energy Efficiency Initiatives/ECPs ⁽³⁾	B		-	-	20.849	-	-	5.716	-	-	5.788	-	-	5.881	-	-	-	-	-	5.881	
1.4) Energy Initiative Program Support ⁽⁴⁾	A		-	-	3.072	-	-	1.214	-	-	1.247	-	-	1.311	-	-	-	-	-	1.311	
1.5) Prior Years Cumulative Funding	A		-	-	10.042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) Medium Tactical Vehicle Replacement (MTVR) Modifications			-	-	114.884	-	-	23.566	-	-	7.907	-	-	8.662	-	-	-	-	-	8.662	
2) LVSR Mods																					
2.1) LVSR Systems Integrations Equip & Installs (GFE, TOCNET, etc)	A		-	-	24.458	-	-	0.583	-	-	-	-	-	-	-	-	-	-	-	-	
2.2) Vehicle Safety Mods/Upgrades	A		-	-	13.050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.3) LVSR Modification Kits (ECPs) ⁽⁵⁾	A		-	-	38.689	-	-	1.075	-	-	0.684	-	-	0.827	-	-	-	-	-	0.827	
2.4) LVSR Reserves (ECP, Safety & Integration) ⁽⁶⁾			-	-	4.356	-	-	0.235	-	-	0.239	-	-	0.244	-	-	-	-	-	0.244	
2.5) Prior Years Cumulative Funding	A		-	-	12.532	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 2) LVSR Mods			-	-	93.085	-	-	1.893	-	-	0.923	-	-	1.071	-	-	-	-	-	1.071	
3) Light Tactical Vehicle Modifications (LTVM)																					
3.1) Program Integration/Support ⁽⁷⁾	B		-	-	2.568	-	-	-	-	-	1.456	-	-	1.485	-	-	-	-	-	1.485	
3.2) Prior Year Cumulative Funding	A		-	-	0.445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3.3) Engineering Change Proposals/ Modifications ⁽⁸⁾	A		-	-	-	-	-	-	-	-	0.530	-	-	2.010	-	-	-	-	-	2.010	
Subtotal: 3) Light Tactical Vehicle Modifications (LTVM)			-	-	3.013	-	-	-	-	-	1.986	-	-	3.495	-	-	-	-	-	3.495	
4) P-19R																					

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2							P-1 Line Item Number / Title: 5050 / Motor Transport Modifications								Aggregated Items Title: Motor Transport Modifications					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
4.1) Engineering Change Proposals/ Modernization/ Upgrade Kits ⁽⁹⁾	A		-	-	2.039	-	-	0.181	-	-	0.186	-	-	0.196	-	-	-	-	-	0.196
4.2) Reserves Engineering Change Proposals/ Modernization/ Upgrade Kits ⁽¹⁰⁾	A		-	-	0.205	-	-	0.186	-	-	0.187	-	-	0.207	-	-	-	-	-	0.207
Subtotal: 4) P-19R			-	-	2.244	-	-	0.367	-	-	0.373	-	-	0.403	-	-	-	-	-	0.403
5) Mine Resistant Ambush Protected (MRAP)																				
5.1) Cougar Egress Installation	A		-	-	22.270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.2) ECP Upgrades ⁽¹¹⁾	A		-	-	0.436	-	-	1.096	-	-	1.173	-	-	0.991	-	-	-	-	-	0.991
Subtotal: 5) Mine Resistant Ambush Protected (MRAP)			-	-	22.706	-	-	1.096	-	-	1.173	-	-	0.991	-	-	-	-	-	0.991
6) Family of Medium/Heavy Tactical Trailers and Ancillary Equipment (FT&AE)																				
6.1) Heavy Trailer (ECP) ⁽¹²⁾	A		-	-	-	-	-	-	-	-	4.277	-	-	2.174	-	-	-	-	-	2.174
6.2) Medium Trailer (ECP) ⁽¹³⁾	A		-	-	-	-	-	-	-	-	0.301	-	-	0.263	-	-	-	-	-	0.263
6.3) Family of Tactical Trailer Modification-Reserves ⁽¹⁴⁾	A		-	-	-	-	-	-	-	-	0.707	-	-	0.748	-	-	-	-	-	0.748
6.4) Prior Year Cumulative Funding	A		-	-	46.854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) Family of Medium/ Heavy Tactical Trailers and Ancillary Equipment (FT&AE)			-	-	46.854	-	-	-	-	-	5.285	-	-	3.185	-	-	-	-	-	3.185
Total			-	-	282.786	-	-	26.922	-	-	17.647	-	-	17.807	-	-	-	-	-	17.807

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

- ⁽¹⁾ The increase of \$0.706M from FY22 to FY23 is due to increased number of MTRV Safety ECPs to be procured and installed in FY23.
- ⁽²⁾ The decrease of \$0.108M from FY22 to FY23 is due to procurement of fewer ECP kits for integration and installation in FY23.
- ⁽³⁾ The increase of \$0.093M from FY22 to FY23 is due to the procurement of additional equipment to support FE installations on various tactical vehicles in the fleet during FY23.
- ⁽⁴⁾ The increase of \$0.064M from FY22 to FY23 is due to additional support to process and analyze MTRV Fuel Efficiency data as upgrades to fleet are completed.
- ⁽⁵⁾ The increase of \$0.143M from FY22 to FY23 is due to procuring safety ECPs.
- ⁽⁶⁾ The increase of \$0.005M from FY22 to FY23 is due to inflation.
- ⁽⁷⁾ The increase of \$0.029M from FY22 to FY23 is due to inflation.

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2	P-1 Line Item Number / Title: 5050 / Motor Transport Modifications	Aggregated Items Title: Motor Transport Modifications
(8) The increase of \$1.480M from FY22 to FY23 is due to increased Engineering Change Orders to address potential safety upgrades as the platform ages well past its intended service life. (9) The increase of \$0.010M from FY22 to FY23 is due to inflation. (10) The increase of \$0.020M from FY22 to FY23 is due to ECP cost increase for the Reserves. (11) The decrease of \$0.182M from FY22 to FY23 is due to the reduction in the number of vehicles estimated to require modifications. (12) The decrease of \$2.103M from FY22 to FY23 is due to a decrease in the number of Heavy Trailer ECPs to be procured for the M870 off-road mobility effort. (13) The decrease of \$0.038M from FY22 to FY23 is due to a decrease in the number of Medium Trailer ECPs to be procured. (14) The increase of \$0.041M from FY22 to FY23 is due to procuring ECPs such as those for resolving trailer ground clearance deficiencies for M870 for Reserve units.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles							P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle					
ID Code (A=Service Ready, B=Not Service Ready): B				Program Elements for Code B Items: 0605812M, 0605813M				Other Related Program Elements: 0603635M, 0605812M, 0605813M				
Line Item MDAP/MAIS Code: 279												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	3,779	752	636	413	-	413	272	569	672	1,163	-	8,256
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,548.960	368.675	322.013	222.257	0.000	222.257	182.222	281.026	329.440	531.039	2,282.659	6,068.291
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,548.960	368.675	322.013	222.257	0.000	222.257	182.222	281.026	329.440	531.039	2,282.659	6,068.291
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,548.960	368.675	322.013	222.257	0.000	222.257	182.222	281.026	329.440	531.039	2,282.659	6,068.291
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	259,261.18	276,009.31	292,806.60	287,004.84	-	287,004.84	292,242.65	315,242.53	319,665.18	324,724.85	-	470,099.81
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	409,886.21	490,259.31	506,309.75	538,152.54	-	538,152.54	669,933.82	493,894.55	490,238.10	456,611.35	-	735,015.87
Description: This is a Marine Corps Force Design program. Joint Light Tactical Vehicle (JLTV) Family of Vehicles (FoV) is a joint U.S. Army and U.S. Marine Corps program, with the Army as lead service. JLTV is a FoV capable of performing multiple mission roles that provide protected, sustained, networked mobility for personnel and payloads across the full Range of Military Operations (ROMO). JLTV features include increased protection and performance over the current High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleet; minimizing ownership costs by maximizing commonality, fuel efficiency, and reliability. Commonality of components, maintenance procedures, training, and more, among vehicles are inherent in FoV solutions across mission variants to minimize total ownership costs. Unique service requirements have been minimized. The approved Full Rate Production (FRP) joint cost position incorporates validated requirements identified during the Multi-Service Operational Test and Evaluation (MOT&E) as well as other mission critical requirements identified by the warfighter and supported in the FY 2023 budget request. JLTV achieved a successful full rate production (FRP) decision in June 2019. Current contract options may be exercised through 30 November 2023 and a competitive contract award is anticipated in FY 2022. A split procurement will occur between the existing Oshkosh contract and the new competitively awarded contract based on the approved acquisition strategy. The Program Office continues to gather insight from industry partners to better understand their position to ensure strong competition for the follow on contract.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles						P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle				
ID Code (A=Service Ready, B=Not Service Ready): B			Program Elements for Code B Items: 0605812M, 0605813M			Other Related Program Elements: 0603635M, 0605812M, 0605813M				
Line Item MDAP/MAIS Code: 279										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Joint Light Tactical Vehicle	P-5a, P-21			3,779 / 1,548.960	752 / 368.675	636 / 322.013	413 / 222.257	- / 0.000	413 / 222.257
P-40	Total Gross/Weapon System Cost				3,779 / 1,548.960	752 / 368.675	636 / 322.013	413 / 222.257	- / 0.000	413 / 222.257
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$222.257M This is a Marine Corps Force Design program. \$222.257M supports the procurement of 413 vehicles to fulfill the protected mobility and enhanced maneuver line of effort for Force Design. The amount of each variant being procured has been tailored to provide the correct capability to the Fleet Marine Force in order to meet the pacing threat. The procurement will also include: JLTV companion trailers, various mission kits, trailer Initial Issue Provisioning (IIP), vehicle and trailer Total Package Fielding (TPF) which consists of travel and labor for multiple fielding teams to conduct concurrent fielding events at USMC bases and stations in Okinawa, Hawaii, North Carolina, Florida, and California. Funding also includes the procurement of required support equipment and initial spares. Funding is provided for First Destination Transportation (FDT); vehicle/trailer storage; Performance Verification Testing (PVT); System Technical Support (STS); Contractor Systems Engineering Program Management (SEPM); Engineering Change Orders (ECO); and Retrofits necessary to incorporate changes identified during testing and through user feedback of fielded vehicles and trailers. Lastly, funding covers Interim Contractor Support (ICS) which provides vendor support for maintenance and repair of JLTVs between initial fielding and the transition to organic sustainment of the JLTV fleet. Kits will consist of mission essential equipment specific to each vehicle and variant and provide the warfighter the ability to augment the vehicle's configuration to meet required vehicle capabilities such as fording, survivability, hot and cold weather operations, communications/Command, Control, Communications, Computers and Intelligence (C4I), and winches for vehicle recovery. Kit procurement includes Government Furnished Equipment (GFE kits) (turret rings), and Contractor Furnished Equipment (CFE) kits (density based and schedule based) which consist of approximately 75 individual kit options for each vehicle. Competitive follow on contract award anticipated in FY 2022. Split procurement will occur between the existing Oshkosh contract and the new competitively awarded contract based on the approved acquisition strategy. Funding decrease from FY 2022 to FY 2023 of \$99.756M is due to the reduction in total vehicle procurement quantities, the reduction of engineering change orders, and the reduction of density based vehicle kits; which are dependent on vehicle quantities.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2							P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle						Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				3,779			752			636			413			-			413		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1,548.960			368.675			322.013			222.257			0.000			222.257		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				1,548.960			368.675			322.013			222.257			0.000			222.257		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				1,548.960			368.675			322.013			222.257			0.000			222.257		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				409,886.21			490,259.31			506,309.75			538,152.54			-			538,152.54		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Flyaway - JLTVC Cost																					
Recurring Cost																					
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)	242,896.23	1,513	367.502	267,972.00	250	66.993	274,415.00	334	91.655	283,449.00	51	14.456	-	-	-	283,449.00	51	14.456			
1.1.2) Heavy Guns Carrier - Follow-on Contract ^(†)	-	-	-	-	-	-	-	-	-	319,013.00	5	1.595	-	-	-	319,013.00	5	1.595			
1.1.3) General Purpose - 1st Contract ^(†)	251,740.85	1,065	268.104	267,119.00	250	66.780	273,543.00	198	54.162	282,556.00	144	40.688	-	-	-	282,556.00	144	40.688			
1.1.4) General Purpose - Follow-on Contract ^(†)	-	-	-	-	-	-	-	-	-	317,236.00	21	6.662	-	-	-	317,236.00	21	6.662			
1.1.5) Close Combat Weapons Carrier - 1st Contract ^(†)	307,138.89	252	77.399	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.6) Utility - 1st Contract ^(†)	246,286.62	949	233.726	256,120.00	252	64.542	262,315.00	124	32.527	270,992.00	169	45.798	-	-	-	270,992.00	169	45.798			
1.1.7) Utility - Follow-on Contract ^(†)	-	-	-	-	-	-	-	-	-	308,200.00	15	4.623	-	-	-	308,200.00	15	4.623			
1.1.8) Engineering Change Orders (ECO) ⁽¹⁾	-	-	33.017	-	-	9.244	-	-	7.881	-	-	4.711	-	-	-	-	-	4.711			
Subtotal: Recurring Cost	-	-	979.748	-	-	207.559	-	-	186.225	-	-	118.533	-	-	-	-	-	118.533			

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2						P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle						Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
	Subtotal: Flyaway - JLTV Cost	-	-	979.748	-	-	207.559	-	-	186.225	-	-	118.533	-	-	-	-	-
Hardware Cost																		
Recurring Cost																		
2.1.1) Kits ⁽²⁾	-	-	304.963	-	-	66.446	-	-	44.915	-	-	18.114	-	-	-	-	-	18.114
2.1.2) Trailers - 1st Contract ^{(1) (3)}	43,826.09	115	5.040	45,946.00	74	3.400	49,271.00	247	12.170	52,394.00	132	6.916	-	-	-	52,394.00	132	6.916
2.1.3) Trailer - Follow-On Contract	-	-	-	-	-	-	-	-	-	52,394.00	111	5.816	-	-	-	52,394.00	111	5.816
Subtotal: Recurring Cost	-	-	310.003	-	-	69.846	-	-	57.085	-	-	30.846	-	-	-	-	-	30.846
Subtotal: Hardware Cost	-	-	310.003	-	-	69.846	-	-	57.085	-	-	30.846	-	-	-	-	-	30.846
Support - Support Costs Cost																		
3.1) Interim Contractor Support (ICS) ⁽⁴⁾	-	-	10.159	-	-	8.872	-	-	8.557	-	-	2.889	-	-	-	-	-	2.889
3.2) Program Management ⁽⁵⁾	-	-	46.857	-	-	9.949	-	-	10.509	-	-	10.569	-	-	-	-	-	10.569
3.3) Contractor SEPM ⁽⁶⁾	-	-	18.457	-	-	2.518	-	-	2.543	-	-	4.086	-	-	-	-	-	4.086
3.4) System Technical Support (STS) ⁽⁷⁾	-	-	28.692	-	-	11.762	-	-	17.450	-	-	15.418	-	-	-	-	-	15.418
3.5) Test Support ⁽⁸⁾	-	-	32.297	-	-	5.600	-	-	1.351	-	-	1.196	-	-	-	-	-	1.196
3.6) Publications/ Technical Data	-	-	1.000	-	-	-	-	-	-	-	-	1.207	-	-	-	-	-	1.207
3.7) Fielding ⁽⁹⁾	-	-	118.245	-	-	52.569	-	-	38.293	-	-	37.513	-	-	-	-	-	37.513
3.8) Training Aids, Devices, Simulators and Simulations (TADSS)	-	-	3.502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support - Support Costs Cost	-	-	259.209	-	-	91.270	-	-	78.703	-	-	72.878	-	-	-	-	-	72.878
Gross/Weapon System Cost	409,886.21	3,779	1,548.960	490,259.31	752	368.675	506,309.75	636	322.013	538,152.54	413	222.257	-	-	0.000	538,152.54	413	222.257
Remarks: [Flyaway/Recurring] The USMC FY 2023 submission cost elements and quantities have been updated to reflect increasing inflation indices.																		
Covers Cost Elements 1.1.1 through 1.1.7 (vehicle variants). The database P40 quantities are not current and will be updated at the next opportunity. Procurement totals by year: PY: 3,779, FY 2021: 752, FY 2022: 656, FY 2023: 405, FY 2024: 261, FY 2025: 543, FY 2026: 641, and FY 2027: 1,113. The correct quantities are reflected in the JLTV procurement exhibits (P-5 and P-21). The JLTV LRIP and FRP production contract was competitively awarded to Oshkosh Defense in FY 2015. The contract between the Government and Oshkosh includes priced option years through the end of the first contract period																		

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2	P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle	Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(Base plus 8 options). These contracted prices are not negotiable on a year to year basis. Vehicle and kit costs are based on the firm fixed price contract cost, quantity ranges, and option year. These ranges are dependent on total quantities procured across all Services based on both platform and variant. The unit costs are based on contract pricing of the manufacturers projected overhead and commodities forecast (i.e. raw materials, petroleum, and forward pricing rate agreements with labor unions) and are reflected in the contract. The Government agreed to these fixed and non-negotiable prices at the time of the competitively awarded JLTV production contract. The production rates provided in this exhibit are annual estimates. Oshkosh transitioned to a standalone JLTV production line in 2nd Quarter FY 2021. Competitive follow on contract award anticipated in FY 2023. Split vehicle procurements will occur in FY 2023 - FY 2024 between the existing Oshkosh contract and the new competitively awarded contract based on the approved acquisition strategy. Funding decrease for vehicles from FY 2022 to FY 2023 of \$64.522M is due to the reduction in total vehicle procurement in FY 2023. Vehicle variant mix and final quantities of all services will affect the unit cost based on range pricing, as well as approved changes to the base vehicle. (t) indicates the presence of a P-5a Footnotes: (1) Engineering Change Orders (ECOs) and retrofit of design changes to vehicles produced and delivered are based on results from observations during manufacture on the production line and through user feedback. The funding decrease from FY 2022 to FY 2023 of \$3.170M is due to the reduction in total vehicle procured in FY 2023. ECO costs are a percentage of the manufacturing costs which are affected by the reduction of vehicles going through the production line. (2) Kits consist of mission essential equipment specific to each vehicle and variant and are necessary for the various operational requirements. These kits include Government Furnished Equipment (GFE) kits (turret rings), and Contractor Furnished Equipment (CFE) kits (density based and schedule based). Density based kit procurements are dependent on vehicle quantity and variant mix. Scheduled based kits, to include turret rings, are fixed cost kits and are not tied to vehicle quantity/variant mix, therefore, cannot be included in the vehicle to kit unit cost calculation. Scheduled kits are estimated and procured outside of the Original Equipment Manufacturer (OEM) based on specific Marine Corps requirements. There are approximately 75 individual kit options for each individual vehicle. Kits may include, but are not limited to, armor kits required for force protection and survivability, tactical communications kits, which provide net-ready capabilities, and operational kits that complement base vehicle functionality to achieve requirements for tactical employment and mobility. Funding decrease from FY 2022 to FY 2023 of \$26.801M is due to the reduction in total vehicle procured in FY 2023 and fielding requirements of each individual unit. However, average kit cost per vehicle may fluctuate between years due to procurement of a higher priced variant/density mix, the estimated higher kit cost for some kits on the follow-on contract based on manufacturing actuals vice contract pricing used on the current contract, and inflation. (3) The JLTV companion trailer is purpose built to comply with JLTV requirements for mobility and payload. Infantry battalion expeditionary mobility and lift capabilities will be improved by pairing JLTV with its companion trailer, enabling the unit to increase payload and its lift capability while keeping pace with vehicle convoys/formations. Trailer cost includes associated kits, System Engineering & Program Management, and fielding. Funding increase from FY 2022 to FY 2023 (including both CEs 2.1.2 and 2.1.3) of \$0.562M is due to increased unit cost. Competitive follow on contract award anticipated in FY 2023. Split trailer procurements will occur in FY 2023 between the existing Oshkosh contract and the new competitively awarded contract based on the approved acquisition strategy. (4) Interim Contractor Support (ICS) provided vendor support for maintenance and repair of JLTVs between initial fielding and the transition of sustainment to an organic capability. Funding decreases from FY 2022 to FY 2023 by \$5.668M due to the ramp down of ICS support in FY 2023. (5) Program management includes the Government Systems Integration Laboratory operations in support of fielding requirements and the addition of liaison officers on-site at each MEF providing support for ongoing fielding efforts, MEF mission readiness, and the resolution of maintenance and supply related issues. The liaison officers coordinate efforts between the OPFORs, the JLTV program office, logistics managers and the vehicle manufacturer. Funding increase from FY 2022 to FY 2023 of \$0.060M is due to general inflation. (6) Contractor System Engineering Program Management (SEPM) funding increase from FY 2022 to FY 2023 of \$1.543M is due to the overlap of SEPM on the original manufacturing contract and the follow-on contract to ensure a smooth transition for manufacturing. (7) System Technical Support (STS) provides for all services and supplies requested to accomplish Engineering, Configuration Management, Quality Assurance, Integrated Product Support, training, and testing associated with Government-initiated changes and improvements to the production vehicles, logistics products, and fielding of the JLTV. Estimates are based on JLTV prior year actuals. The funding decrease from FY 2022 to FY 2023 of \$2.032M is due to projected decrease in Government-initiated studies and analysis associated with the vehicle changes and improvements.		

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2	P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle	Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
⁽⁸⁾ Production Verification Testing (PVT) which is limited reliability and performance testing conducted yearly to verify consistent design and manufacturing; testing related to ECP change to evaluate the successful integration on the vehicle and provide data for decision makers; Continued Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) testing necessary for the integration of various weapons platforms. Funding decrease from FY 2022 to FY 2023 of \$0.155M is due to the reduction of test vehicle refurbishment. ⁽⁹⁾ Total Package Fielding (TPF) of JLTVs to Fleet Marine Forces includes the First Destination Transportation (FDT) for vehicles and kits, and all ancillary equipment required to conduct initial fielding, training to receiving units, and travel/labor for three fielding teams to conduct concurrent fielding events at multiple USMC bases and stations around the globe. Also included is Regional Field Service Representative (FSR) support under the Original Equipment Manufacturer (OEM) for maintenance and repair of JLTVs between fielding and transition of sustainment to organic capability. Funding decrease from FY 2022 to FY 2023 of \$0.780M is due to the reduction in Field Level Maintenance New Equipment Training (FLMNET) and OPNET based on ramping down of courses required to train the target population of the FMFs.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2				P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle				Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2016	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Mar 2016	Jan 2017	61	268,837.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2017	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Dec 2016	Oct 2017	132	257,012.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2018	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Dec 2017	Oct 2018	92	254,978.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2019	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Nov 2018	Sep 2019	583	225,220.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2020	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Dec 2019	Oct 2020	645	251,808.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2021	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Nov 2020	Sep 2021	250	267,972.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2022	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / CPFF	TACOM	Nov 2021	Sep 2022	334	274,415.00	Y		
1.1.1) Heavy Guns Carrier - 1st Contract ^(†)		2023	Oshkosh Defense LLC ⁽¹⁰⁾ / Oshkosh WI	C / FFP	TACOM	Nov 2022	Sep 2023	51	283,449.00	Y		
1.1.2) Heavy Guns Carrier - Follow-on Contract ^(†)		2023	TBD ⁽¹¹⁾ / TBD	C / TBD	TACOM	Nov 2022	Sep 2023	5	319,013.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2015	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Jun 2015	Apr 2016	6	329,000.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2016	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Mar 2016	Jan 2017	28	267,714.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2017	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Dec 2016	Oct 2017	10	257,012.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2018	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Dec 2017	Oct 2018	184	256,626.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2019	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Nov 2018	Sep 2019	385	246,810.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2020	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Dec 2019	Oct 2020	452	251,821.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2021	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Nov 2020	Sep 2021	250	267,119.00	Y		
1.1.3) General Purpose - 1st Contract ^(†)		2022	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Nov 2021	Sep 2022	198	273,543.00	Y		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2				P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle				Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.3) General Purpose - 1st Contract ^(†)		2023	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Nov 2022	Sep 2023	144	282,556.00	Y		
1.1.4) General Purpose - Follow-on Contract ^(†)		2023	TBD / TBD	C / FFP	TACOM	Nov 2022	Sep 2023	21	317,236.00	Y		
1.1.5) Close Combat Weapons Carrier - 1st Contract ^(†)		2016	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Mar 2016	Jan 2017	23	285,304.00	Y		
1.1.5) Close Combat Weapons Carrier - 1st Contract ^(†)		2017	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2016	Oct 2017	24	261,109.05	Y		
1.1.5) Close Combat Weapons Carrier - 1st Contract ^(†)		2018	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2017	Oct 2018	56	258,250.00	Y		
1.1.5) Close Combat Weapons Carrier - 1st Contract ^(†)		2019	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Nov 2018	Sep 2019	149	255,220.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2016	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Mar 2016	Jan 2017	16	262,000.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2017	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2016	Oct 2017	46	248,652.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2018	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2017	Oct 2018	195	250,549.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2019	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Nov 2018	Sep 2019	525	242,493.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2020	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2019	Oct 2020	167	251,078.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2021	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Nov 2020	Sep 2021	252	256,120.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2022	Oshkosh Defense LLC / Oshkosh, WI	C / CPFF	TACOM	Nov 2021	Sep 2022	124	262,315.00	Y		
1.1.6) Utility - 1st Contract ^(†)		2023	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Nov 2022	Sep 2023	169	270,992.00	Y		
1.1.7) Utility - Follow-on Contract ^(†)		2023	TBD / TBD	C / FFP	TACOM	Nov 2022	Sep 2023	15	308,200.00	Y		
2.1.2) Trailers - 1st Contract ^(†)		2021	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Jun 2021	Apr 2022	74	45,946.00	Y		
2.1.2) Trailers - 1st Contract ^(†)		2022	Oshkosh Defense LLC / Oshkosh WI	C / FFP	TACOM	Nov 2021	Sep 2022	247	49,271.00	Y		
2.1.2) Trailers - 1st Contract ^(†)		2023 ⁽¹²⁾	TBD / TBD	C / TBD	TACOM	Nov 2022	Sep 2023	132	52,394.00	Y		

^(†) indicates the presence of a P-21

Footnotes:

⁽¹⁰⁾ Manufacturer's preferred MSR (not contractual) is 2,880 1-8-5 is 3,600. Max quantity per year is 7,200. Oshkosh transitioned to a standalone JLTV production line in 2nd Quarter FY 2021.

⁽¹¹⁾ Manufacturer's MSR TBD

⁽¹²⁾ Competitive follow on contract award is now scheduled for 1st Quarter FY 2023. Split trailer procurements will occur in FY 2023 between the existing Oshkosh contract and the new competitively awarded contract based on the approved acquisition strategy.

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																		
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle																		
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015										Fiscal Year 2016										B A L A N C E											
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2014	BAL DUE AS OF 1 OCT				Calendar Year 2015										Calendar Year 2016																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P							
1.1.1) Heavy Guns Carrier - 1st Contract																																						
	1	2016	NAVY	61	0	61																					A -	-	-	-	-	-	-	-	-	-	-	61
	1	2016	ARMY ^(‡)	69	0	69																					A -	-	-	-	-	-	-	-	-	-	-	69
	1	2016	Total	130	0	130																					-	-	-	-	-	-	-	-	-	-	-	130
	1	2017	NAVY	132	0	132																													132			
	1	2017	ARMY ^(‡)	279	0	279																													279			
	1	2017	Total	411	0	411																													411			
	1	2018	NAVY	92	0	92																													92			
	1	2018	ARMY ^(‡)	265	0	265																													265			
	1	2018	Total	357	0	357																													357			
	1	2019	NAVY	583	0	583																													583			
	1	2019	ARMY ^(‡)	780	0	780																													780			
	1	2019	Total	1,363	0	1,363																													1,363			
	1	2020	NAVY	645	0	645																													645			
	1	2020	ARMY ^(‡)	636	0	636																													636			
	1	2020	Total	1,281	0	1,281																													1,281			
	1	2021	NAVY	250	0	250																													250			
	1	2021	ARMY ^(‡)	808	0	808																													808			
	1	2021	Total	1,058	0	1,058																													1,058			
	1	2022	NAVY	334	0	334																													334			
	1	2022	ARMY ^(‡)	165	0	165																													165			
	1	2022	Total	499	0	499																													499			
	1	2023	NAVY	51	0	51																													51			
	1	2023	ARMY ^(‡)	178	0	178																													178			
	1	2023	Total	229	0	229																													229			
1.1.2) Heavy Guns Carrier - Follow-on Contract																																						
	2	2023	NAVY	5	0	5																													5			
	2	2023	ARMY ^(‡)	73	0	73																													73			
	2	2023	Total	78	0	78																													78			
1.1.3) General Purpose - 1st Contract																																						
	3	2015	NAVY	6	0	6											A -	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	0			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle														
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015												Fiscal Year 2016												B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT				Calendar Year 2015												Calendar Year 2016												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
	3	2015	ARMY ⁽⁺⁾	126	0	126								A -	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10	66				
	3	2015	Total	132	0	132								-	-	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	66			
	3	2016	NAVY	28	0	28																	A -	-	-	-	-	-	-	-	-	-	28	
	3	2016	ARMY ⁽⁺⁾	377	0	377																	A -	-	-	-	-	-	-	-	-	-	377	
	3	2016	Total	405	0	405																	-	-	-	-	-	-	-	-	-	-	-	405
	3	2017	NAVY	10	0	10																									10			
	3	2017	ARMY ⁽⁺⁾	607	0	607																									607			
	3	2017	Total	617	0	617																									617			
	3	2018	NAVY	184	0	184																									184			
	3	2018	ARMY ⁽⁺⁾	918	0	918																									918			
	3	2018	Total	1,102	0	1,102																									1,102			
	3	2019	NAVY	385	0	385																									385			
	3	2019	ARMY ⁽⁺⁾	2,184	0	2,184																									2,184			
	3	2019	Total	2,569	0	2,569																									2,569			
	3	2020	NAVY	452	0	452																									452			
	3	2020	ARMY ⁽⁺⁾	492	0	492																									492			
	3	2020	Total	944	0	944																									944			
	3	2021	NAVY	250	0	250																									250			
	3	2021	ARMY ⁽⁺⁾	660	0	660																									660			
	3	2021	Total	910	0	910																									910			
	3	2022	NAVY	198	0	198																									198			
	3	2022	ARMY ⁽⁺⁾	455	0	455																									455			
	3	2022	Total	653	0	653																									653			
	3	2023	NAVY	144	0	144																									144			
	3	2023	ARMY ⁽⁺⁾	411	0	411																									411			
	3	2023	Total	555	0	555																									555			
1.1.4) General Purpose - Follow-on Contract																																		
	4	2023	NAVY	21	0	21																									21			
	4	2023	ARMY ⁽⁺⁾	184	0	184																									184			
	4	2023	Total	205	0	205																									205			
1.1.5) Close Combat Weapons Carrier - 1st Contract																																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle											
Cost Elements (Units in Each)							Fiscal Year 2015										Fiscal Year 2016														B A L A N C E
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 4	BAL D U E A S O F 1 O C T	Calendar Year 2015										Calendar Year 2016														
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
	5	2016	NAVY	23	0	23																									23
	5	2016	ARMY (‡)	42	0	42																									42
	5	2016	Total	65	0	65																									65
	5	2017	NAVY	24	0	24																									24
	5	2017	ARMY (‡)	52	0	52																									52
	5	2017	Total	76	0	76																									76
	5	2018	NAVY	56	0	56																									56
	5	2019	NAVY	149	0	149																									149
1.1.6) Utility - 1st Contract																															
	6	2016	NAVY	16	0	16																									16
	6	2016	ARMY (‡)	165	0	165																									165
	6	2016	Total	181	0	181																									181
	6	2017	NAVY	46	0	46																									46
	6	2017	ARMY (‡)	649	0	649																									649
	6	2017	Total	695	0	695																									695
	6	2018	NAVY	195	0	195																									195
	6	2018	ARMY (‡)	803	0	803																									803
	6	2018	Total	998	0	998																									998
	6	2019	NAVY	525	0	525																									525
	6	2019	ARMY (‡)	612	0	612																									612
	6	2019	Total	1,137	0	1,137																									1,137
	6	2020	NAVY	167	0	167																									167
	6	2020	ARMY (‡)	1,188	0	1,188																									1,188
	6	2020	Total	1,355	0	1,355																									1,355
	6	2021	NAVY	252	0	252																									252
	6	2021	ARMY (‡)	504	0	504																									504
	6	2021	Total	756	0	756																									756
	6	2022	NAVY	124	0	124																									124
	6	2022	ARMY (‡)	570	0	570																									570
	6	2022	Total	694	0	694																									694
	6	2023	NAVY	169	0	169																									169
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015												Fiscal Year 2016												B A L A N C E				
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	Calendar Year 2015												Calendar Year 2016																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
	6	2023	ARMY (‡)	446	0	446																													446
	6	2023	Total	615	0	615																													615
1.1.7) Utility - Follow-on Contract																																			
	7	2023	NAVY	15	0	15																													15
	7	2023	ARMY (‡)	193	0	193																													193
	7	2023	Total	208	0	208																													208
2.1.2) Trailers - 1st Contract ⁽³⁾																																			
Prior Years Deliveries: 115																																			
	8	2021	NAVY	74	0	74																													74
	8	2022	NAVY	247	0	247																													247
	9	2023	NAVY	132	0	132																													132
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle													Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle														
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2017												Fiscal Year 2018												BALANCE						
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT				Calendar Year 2017												Calendar Year 2018															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
1.1.1) Heavy Guns Carrier - 1st Contract																																					
	1	2016	NAVY	61	0	61	-	-	-	5	5	5	5	5	5	6	5	5	5	5	5												0				
	1	2016	ARMY ⁽⁺⁾	69	0	69	-	-	-	5	5	5	6	6	6	6	6	6	6	6												0					
	1	2016	Total	130	0	130	-	-	-	10	10	10	11	11	11	12	11	11	11	11	11	-	-	-	-	-	-	-	-	-	-	0					
	1	2017	NAVY	132	0	132				A -	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11	11	11	0						
	1	2017	ARMY ⁽⁺⁾	279	0	279				A -	-	-	-	-	-	-	-	-	23	23	23	23	23	23	23	23	23	24	24	24	0						
	1	2017	Total	411	0	411				-	-	-	-	-	-	-	-	-	34	34	34	34	34	34	34	34	34	35	35	35	0						
	1	2018	NAVY	92	0	92																A -	-	-	-	-	-	-	-	-	-	-	-	-	92		
	1	2018	ARMY ⁽⁺⁾	265	0	265																A -	-	-	-	-	-	-	-	-	-	-	-	-	-	265	
	1	2018	Total	357	0	357																-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357
	1	2019	NAVY	583	0	583																											583				
	1	2019	ARMY ⁽⁺⁾	780	0	780																											780				
	1	2019	Total	1,363	0	1,363																											1,363				
	1	2020	NAVY	645	0	645																											645				
	1	2020	ARMY ⁽⁺⁾	636	0	636																											636				
	1	2020	Total	1,281	0	1,281																											1,281				
	1	2021	NAVY	250	0	250																											250				
	1	2021	ARMY ⁽⁺⁾	808	0	808																											808				
	1	2021	Total	1,058	0	1,058																											1,058				
	1	2022	NAVY	334	0	334																											334				
	1	2022	ARMY ⁽⁺⁾	165	0	165																											165				
	1	2022	Total	499	0	499																											499				
	1	2023	NAVY	51	0	51																											51				
	1	2023	ARMY ⁽⁺⁾	178	0	178																											178				
	1	2023	Total	229	0	229																											229				
1.1.2) Heavy Guns Carrier - Follow-on Contract																																					
	2	2023	NAVY	5	0	5																											5				
	2	2023	ARMY ⁽⁺⁾	73	0	73																											73				
	2	2023	Total	78	0	78																											78				
1.1.3) General Purpose - 1st Contract																																					
	3	2015	NAVY	6	6	0	-	-	-	-	-	-																					0				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2017										Fiscal Year 2018														BALANCE				
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT				Calendar Year 2017										Calendar Year 2018															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
	3	2015	ARMY ⁽⁺⁾	126	60	66	11	11	11	11	11	11															0								
	3	2015	Total	132	66	66	11	11	11	11	11	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0					
	3	2016	NAVY	28	0	28	-	-	-	1	2	2	2	2	3	3	3	3	2	2	3											0			
	3	2016	ARMY ⁽⁺⁾	377	0	377	-	-	-	31	31	31	31	31	31	32	32	32	32	32											0				
	3	2016	Total	405	0	405	-	-	-	32	33	33	33	33	34	34	35	35	34	34	35	-	-	-	-	-	-	-	-	0					
	3	2017	NAVY	10	0	10				A -	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	-	-	0						
	3	2017	ARMY ⁽⁺⁾	607	0	607				A -	-	-	-	-	-	-	-	50	50	50	50	50	51	51	51	51	51	51	0						
	3	2017	Total	617	0	617				-	-	-	-	-	-	-	-	51	51	51	51	51	52	52	52	52	52	51	51	0					
	3	2018	NAVY	184	0	184														A -	-	-	-	-	-	-	-	-	-	-	-	184			
	3	2018	ARMY ⁽⁺⁾	918	0	918														A -	-	-	-	-	-	-	-	-	-	-	-	918			
	3	2018	Total	1,102	0	1,102														-	-	-	-	-	-	-	-	-	-	-	-	1,102			
	3	2019	NAVY	385	0	385																													385
	3	2019	ARMY ⁽⁺⁾	2,184	0	2,184																													2,184
	3	2019	Total	2,569	0	2,569																													2,569
	3	2020	NAVY	452	0	452																													452
	3	2020	ARMY ⁽⁺⁾	492	0	492																													492
	3	2020	Total	944	0	944																													944
	3	2021	NAVY	250	0	250																													250
	3	2021	ARMY ⁽⁺⁾	660	0	660																													660
	3	2021	Total	910	0	910																													910
	3	2022	NAVY	198	0	198																													198
	3	2022	ARMY ⁽⁺⁾	455	0	455																													455
	3	2022	Total	653	0	653																													653
	3	2023	NAVY	144	0	144																													144
	3	2023	ARMY ⁽⁺⁾	411	0	411																													411
	3	2023	Total	555	0	555																													555
1.1.4) General Purpose - Follow-on Contract																																			
	4	2023	NAVY	21	0	21																											21		
	4	2023	ARMY ⁽⁺⁾	184	0	184																											184		
	4	2023	Total	205	0	205																											205		
1.1.5) Close Combat Weapons Carrier - 1st Contract																																			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2									P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle																
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2017											Fiscal Year 2018											B A L A N C E						
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 6	BAL DUE AS OF 1 OCT	Calendar Year 2017															Calendar Year 2018													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P				
	5	2016	NAVY	23	0	23	-	-	-	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0		
	5	2016	ARMY (‡)	42	0	42	-	-	-	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0			
	5	2016	Total	65	0	65	-	-	-	4	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0			
	5	2017	NAVY	24	0	24			A -	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0			
	5	2017	ARMY (‡)	52	0	52			A -	-	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4	4	5	5	5	5	0			
	5	2017	Total	76	0	76			-	-	-	-	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6	7	7	7	7	0			
	5	2018	NAVY	56	0	56													A -	-	-	-	-	-	-	-	-	-	-	-	-	56			
	5	2019	NAVY	149	0	149																										149			
1.1.6) Utility - 1st Contract																																			
	6	2016	NAVY	16	0	16	-	-	-	1	1	1	1	1	1	1	2	2	2	2												0			
	6	2016	ARMY (‡)	165	0	165	-	-	-	13	13	13	14	14	14	14	14	14	14	14												0			
	6	2016	Total	181	0	181	-	-	-	14	14	14	15	15	15	15	16	16	16	16	-	-	-	-	-	-	-	-	-	-	-	-	0		
	6	2017	NAVY	46	0	46			A -	-	-	-	-	-	-	-	-	3	3	4	4	4	4	4	4	4	4	4	4	4	4	0			
	6	2017	ARMY (‡)	649	0	649			A -	-	-	-	-	-	-	-	-	54	54	54	54	54	54	54	54	54	54	54	54	55	55	0			
	6	2017	Total	695	0	695			-	-	-	-	-	-	-	-	-	57	57	58	58	58	58	58	58	58	58	58	58	59	59	0			
	6	2018	NAVY	195	0	195														A -	-	-	-	-	-	-	-	-	-	-	-	195			
	6	2018	ARMY (‡)	803	0	803														A -	-	-	-	-	-	-	-	-	-	-	-	803			
	6	2018	Total	998	0	998														-	-	-	-	-	-	-	-	-	-	-	-	998			
	6	2019	NAVY	525	0	525																										525			
	6	2019	ARMY (‡)	612	0	612																										612			
	6	2019	Total	1,137	0	1,137																										1,137			
	6	2020	NAVY	167	0	167																										167			
	6	2020	ARMY (‡)	1,188	0	1,188																										1,188			
	6	2020	Total	1,355	0	1,355																										1,355			
	6	2021	NAVY	252	0	252																										252			
	6	2021	ARMY (‡)	504	0	504																										504			
	6	2021	Total	756	0	756																										756			
	6	2022	NAVY	124	0	124																										124			
	6	2022	ARMY (‡)	570	0	570																										570			
	6	2022	Total	694	0	694																										694			
	6	2023	NAVY	169	0	169																										169			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle																
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2017												Fiscal Year 2018												B A L A N C E					
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017												Calendar Year 2018																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P						
	6	2023	ARMY (‡)	446		0	446																													446
	6	2023	Total	615		0	615																													615
1.1.7) Utility - Follow-on Contract																																				
	7	2023	NAVY	15		0	15																													15
	7	2023	ARMY (‡)	193		0	193																													193
	7	2023	Total	208		0	208																													208
2.1.2) Trailers - 1st Contract ⁽³⁾																																				
Prior Years Deliveries: 115																																				
	8	2021	NAVY	74		0	74																													74
	8	2022	NAVY	247		0	247																													247
	9	2023	NAVY	132		0	132	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	132				

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle																
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2019										Fiscal Year 2020														BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT				Calendar Year 2019										Calendar Year 2020																
							OC T	NO V	DE C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	OC T	NO V	DE C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P						
1.1.1) Heavy Guns Carrier - 1st Contract																																				
	1	2016	NAVY	61	61	0																										0				
	1	2016	ARMY (‡)	69	69	0																										0				
	1	2016	Total	130	130	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	1	2017	NAVY	132	132	0																										0				
	1	2017	ARMY (‡)	279	279	0																										0				
	1	2017	Total	411	411	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0							
	1	2018	NAVY	92	0	92	8	8	8	8	8	8	8	7	7	7	7											0								
	1	2018	ARMY (‡)	265	0	265	22	22	22	22	22	22	22	22	22	23											0									
	1	2018	Total	357	0	357	30	30	30	30	30	30	30	29	29	30	30	-	-	-	-	-	-	-	-	-	-	-	-	0						
	1	2019	NAVY	583	0	583		A -	-	-	-	-	-	-	-	-	48	48	49	49	49	49	49	49	49	48	48	48		0						
	1	2019	ARMY (‡)	780	0	780		A -	-	-	-	-	-	-	-	-	65	65	65	65	65	65	65	65	65	65	65	65		0						
	1	2019	Total	1,363	0	1,363		-	-	-	-	-	-	-	-	-	113	113	114	114	114	114	114	114	113	113	113	-	0							
	1	2020	NAVY	645	0	645																	A -	-	-	-	-	-	-	-	-	-	-	-	645	
	1	2020	ARMY (‡)	636	0	636																	A -	-	-	-	-	-	-	-	-	-	-	-	-	636
	1	2020	Total	1,281	0	1,281																	-	-	-	-	-	-	-	-	-	-	-	-	-	1,281
	1	2021	NAVY	250	0	250																										250				
	1	2021	ARMY (‡)	808	0	808																										808				
	1	2021	Total	1,058	0	1,058																										1,058				
	1	2022	NAVY	334	0	334																										334				
	1	2022	ARMY (‡)	165	0	165																										165				
	1	2022	Total	499	0	499																										499				
	1	2023	NAVY	51	0	51																										51				
	1	2023	ARMY (‡)	178	0	178																										178				
	1	2023	Total	229	0	229																										229				
1.1.2) Heavy Guns Carrier - Follow-on Contract																																				
	2	2023	NAVY	5	0	5																										5				
	2	2023	ARMY (‡)	73	0	73																										73				
	2	2023	Total	78	0	78																										78				
1.1.3) General Purpose - 1st Contract																																				
	3	2015	NAVY	6	6	0																										0				
							OC T	NO V	DE C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	OC T	NO V	DE C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P						

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2							P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle												Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements (Units in Each)							Fiscal Year 2019												Fiscal Year 2020												B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019												Calendar Year 2020															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
	3	2015	ARMY (+)	126	126	0																											0	
	3	2015	Total	132	132	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	3	2016	NAVY	28	28	0																											0	
	3	2016	ARMY (+)	377	377	0																											0	
	3	2016	Total	405	405	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	3	2017	NAVY	10	10	0																											0	
	3	2017	ARMY (+)	607	607	0																											0	
	3	2017	Total	617	617	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	3	2018	NAVY	184	0	184	15	15	15	15	15	16	16	16	16	15	15	15															0	
	3	2018	ARMY (+)	918	0	918	76	76	76	76	76	76	77	77	77	77	77	77															0	
	3	2018	Total	1,102	0	1,102	91	91	91	91	91	92	93	93	93	92	92	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	3	2019	NAVY	385	0	385		A	-	-	-	-	-	-	-	-	-	32	32	32	32	32	32	32	32	32	32	32	32	33			0	
	3	2019	ARMY (+)	2,184	0	2,184		A	-	-	-	-	-	-	-	-	-	182	182	182	182	182	182	182	182	182	182	182	182	182			0	
	3	2019	Total	2,569	0	2,569		-	-	-	-	-	-	-	-	-	-	214	214	214	214	214	214	214	214	214	214	214	215	-		0		
	3	2020	NAVY	452	0	452															A	-	-	-	-	-	-	-	-	-	-		452	
	3	2020	ARMY (+)	492	0	492															A	-	-	-	-	-	-	-	-	-	-		492	
	3	2020	Total	944	0	944															-	-	-	-	-	-	-	-	-	-	-		944	
	3	2021	NAVY	250	0	250																											250	
	3	2021	ARMY (+)	660	0	660																											660	
	3	2021	Total	910	0	910																											910	
	3	2022	NAVY	198	0	198																											198	
	3	2022	ARMY (+)	455	0	455																											455	
	3	2022	Total	653	0	653																											653	
	3	2023	NAVY	144	0	144																											144	
	3	2023	ARMY (+)	411	0	411																											411	
	3	2023	Total	555	0	555																											555	
1.1.4) General Purpose - Follow-on Contract																																		
	4	2023	NAVY	21	0	21																											21	
	4	2023	ARMY (+)	184	0	184																											184	
	4	2023	Total	205	0	205																											205	
1.1.5) Close Combat Weapons Carrier - 1st Contract																																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2019										Fiscal Year 2020														BALANCE				
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT				Calendar Year 2019										Calendar Year 2020															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
	5	2016	NAVY	23	23	0																													0
	5	2016	ARMY (‡)	42	42	0																													0
	5	2016	Total	65	65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0					
	5	2017	NAVY	24	24	0																													0
	5	2017	ARMY (‡)	52	52	0																													0
	5	2017	Total	76	76	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0					
	5	2018	NAVY	56	0	56	5	5	5	5	5	5	5	5	4	4	4	4															0		
	5	2019	NAVY	149	0	149		A -	-	-	-	-	-	-	-	-	12	12	12	13	13	13	13	13	12	12	12	12		0					
1.1.6) Utility - 1st Contract																																			
	6	2016	NAVY	16	16	0																													0
	6	2016	ARMY (‡)	165	165	0																													0
	6	2016	Total	181	181	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0					
	6	2017	NAVY	46	46	0																													0
	6	2017	ARMY (‡)	649	649	0																													0
	6	2017	Total	695	695	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0					
	6	2018	NAVY	195	0	195	16	16	16	16	16	17	17	17	16	16	16	16															0		
	6	2018	ARMY (‡)	803	0	803	66	67	67	67	67	67	67	67	67	67	67	67															0		
	6	2018	Total	998	0	998	82	83	83	83	83	84	84	84	83	83	83	83	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2019	NAVY	525	0	525		A -	-	-	-	-	-	-	-	-	-	43	43	43	44	44	44	44	44	44	44	44		0					
	6	2019	ARMY (‡)	612	0	612		A -	-	-	-	-	-	-	-	-	-	51	51	51	51	51	51	51	51	51	51	51		0					
	6	2019	Total	1,137	0	1,137		-	-	-	-	-	-	-	-	-	-	94	94	94	95	95	95	95	95	95	95	95	-	0					
	6	2020	NAVY	167	0	167															A -	-	-	-	-	-	-	-	-	-	-	-	-	167	
	6	2020	ARMY (‡)	1,188	0	1,188															A -	-	-	-	-	-	-	-	-	-	-	-	-	1,188	
	6	2020	Total	1,355	0	1,355															-	-	-	-	-	-	-	-	-	-	-	-	-	1,355	
	6	2021	NAVY	252	0	252																													252
	6	2021	ARMY (‡)	504	0	504																													504
	6	2021	Total	756	0	756																													756
	6	2022	NAVY	124	0	124																													124
	6	2022	ARMY (‡)	570	0	570																													570
	6	2022	Total	694	0	694																													694
	6	2023	NAVY	169	0	169																													169
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2019												Fiscal Year 2020												B A L A N C E				
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019												Calendar Year 2020																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
	6	2023	ARMY (‡)	446	0	446																													446
	6	2023	Total	615	0	615																													615
1.1.7) Utility - Follow-on Contract																																			
	7	2023	NAVY	15	0	15																													15
	7	2023	ARMY (‡)	193	0	193																													193
	7	2023	Total	208	0	208																													208
2.1.2) Trailers - 1st Contract ⁽³⁾																																			
Prior Years Deliveries: 115																																			
	8	2021	NAVY	74	0	74																													74
	8	2022	NAVY	247	0	247																													247
	9	2023	NAVY	132	0	132																													132
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2							P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle												Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle													
Cost Elements (Units in Each)							Fiscal Year 2021										Fiscal Year 2022										BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP	
1.1.1) Heavy Guns Carrier - 1st Contract																																
	1	2016	NAVY	61	61	0																									0	
	1	2016	ARMY (‡)	69	69	0																									0	
	1	2016	Total	130	130	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2017	NAVY	132	132	0																									0	
	1	2017	ARMY (‡)	279	279	0																									0	
	1	2017	Total	411	411	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2018	NAVY	92	92	0																									0	
	1	2018	ARMY (‡)	265	265	0																									0	
	1	2018	Total	357	357	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2019	NAVY	583	583	0																									0	
	1	2019	ARMY (‡)	780	780	0																									0	
	1	2019	Total	1,363	1,363	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2020	NAVY	645	0	645	54	54	54	54	54	54	54	54	54	54	51														0	
	1	2020	ARMY (‡)	636	0	636	53	53	53	53	53	53	53	53	53	53	53														0	
	1	2020	Total	1,281	0	1,281	107	107	107	107	107	107	107	107	107	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2021	NAVY	250	0	250		A	-	-	-	-	-	-	-	-	21	21	21	21	21	21	21	21	21	21	20	20		0		
	1	2021	ARMY (‡)	808	0	808		A	-	-	-	-	-	-	-	-	67	67	67	67	67	67	67	67	68	68	68	68		0		
	1	2021	Total	1,058	0	1,058		-	-	-	-	-	-	-	-	-	88	88	88	88	88	88	88	88	89	89	88	88	-	0		
	1	2022	NAVY	334	0	334												A	-	-	-	-	-	-	-	-	-	-	-	-	27	307
	1	2022	ARMY (‡)	165	0	165												A	-	-	-	-	-	-	-	-	-	-	-	-	13	152
	1	2022	Total	499	0	499												-	-	-	-	-	-	-	-	-	-	-	-	-	40	459
	1	2023	NAVY	51	0	51																									51	
	1	2023	ARMY (‡)	178	0	178																									178	
	1	2023	Total	229	0	229																									229	
1.1.2) Heavy Guns Carrier - Follow-on Contract																																
	2	2023	NAVY	5	0	5																									5	
	2	2023	ARMY (‡)	73	0	73																									73	
	2	2023	Total	78	0	78																									78	
1.1.3) General Purpose - 1st Contract																																
	3	2015	NAVY	6	6	0																									0	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2							P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle												Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle														
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021										Fiscal Year 2022														B A L A N C E		
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 2 0	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			
3		2015	ARMY ^(‡)	126	126	0																											0
3		2015	Total	132	132	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3		2016	NAVY	28	28	0																											0
3		2016	ARMY ^(‡)	377	377	0																											0
3		2016	Total	405	405	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3		2017	NAVY	10	10	0																											0
3		2017	ARMY ^(‡)	607	607	0																											0
3		2017	Total	617	617	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3		2018	NAVY	184	184	0																											0
3		2018	ARMY ^(‡)	918	918	0																											0
3		2018	Total	1,102	1,102	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3		2019	NAVY	385	385	0																											0
3		2019	ARMY ^(‡)	2,184	2,184	0																											0
3		2019	Total	2,569	2,569	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3		2020	NAVY	452	0	452	38	38	38	38	38	38	38	38	37	37	37	37															0
3		2020	ARMY ^(‡)	492	0	492	41	41	41	41	41	41	41	41	41	41	41	41															0
3		2020	Total	944	0	944	79	79	79	79	79	79	79	79	78	78	78	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3		2021	NAVY	250	0	250		A -	-	-	-	-	-	-	-	-	-	21	21	21	21	21	21	21	21	21	21	20	20			0	
3		2021	ARMY ^(‡)	660	0	660		A -	-	-	-	-	-	-	-	-	-	55	55	55	55	55	55	55	55	55	55	55	55			0	
3		2021	Total	910	0	910		-	-	-	-	-	-	-	-	-	-	76	76	76	76	76	76	76	76	76	76	75	75	-		0	
3		2022	NAVY	198	0	198														A -	-	-	-	-	-	-	-	-	-	-	16	182	
3		2022	ARMY ^(‡)	455	0	455														A -	-	-	-	-	-	-	-	-	-	-	37	418	
3		2022	Total	653	0	653														-	-	-	-	-	-	-	-	-	-	53		600	
3		2023	NAVY	144	0	144																										144	
3		2023	ARMY ^(‡)	411	0	411																										411	
3		2023	Total	555	0	555																										555	
1.1.4) General Purpose - Follow-on Contract																																	
	4	2023	NAVY	21	0	21																										21	
	4	2023	ARMY ^(‡)	184	0	184																										184	
	4	2023	Total	205	0	205																										205	
1.1.5) Close Combat Weapons Carrier - 1st Contract																																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle																
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021										Fiscal Year 2022													BALANCE						
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT				Calendar Year 2021										Calendar Year 2022																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
	5	2016	NAVY	23	23	0																													0	
	5	2016	ARMY (‡)	42	42	0																													0	
	5	2016	Total	65	65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	5	2017	NAVY	24	24	0																													0	
	5	2017	ARMY (‡)	52	52	0																													0	
	5	2017	Total	76	76	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	5	2018	NAVY	56	56	0																													0	
	5	2019	NAVY	149	149	0																													0	
1.1.6) Utility - 1st Contract																																				
	6	2016	NAVY	16	16	0																													0	
	6	2016	ARMY (‡)	165	165	0																													0	
	6	2016	Total	181	181	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	6	2017	NAVY	46	46	0																													0	
	6	2017	ARMY (‡)	649	649	0																													0	
	6	2017	Total	695	695	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	6	2018	NAVY	195	195	0																													0	
	6	2018	ARMY (‡)	803	803	0																													0	
	6	2018	Total	998	998	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	6	2019	NAVY	525	525	0																													0	
	6	2019	ARMY (‡)	612	612	0																													0	
	6	2019	Total	1,137	1,137	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	6	2020	NAVY	167	0	167	14	14	14	14	14	14	14	14	14	13																0				
	6	2020	ARMY (‡)	1,188	0	1,188	99	99	99	99	99	99	99	99	99	99																0				
	6	2020	Total	1,355	0	1,355	113	113	113	113	113	113	113	113	113	112	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	6	2021	NAVY	252	0	252		A	-	-	-	-	-	-	-	-	21	21	21	21	21	21	21	21	21	21	21	21		0						
	6	2021	ARMY (‡)	504	0	504		A	-	-	-	-	-	-	-	-	42	42	42	42	42	42	42	42	42	42	42	42		0						
	6	2021	Total	756	0	756		-	-	-	-	-	-	-	-	-	63	63	63	63	63	63	63	63	63	63	63	63	-	0						
	6	2022	NAVY	124	0	124																A	-	-	-	-	-	-	-	-	-	-	-	10	114	
	6	2022	ARMY (‡)	570	0	570																A	-	-	-	-	-	-	-	-	-	-	-	-	47	523
	6	2022	Total	694	0	694																-	-	-	-	-	-	-	-	-	-	-	-	-	57	637
	6	2023	NAVY	169	0	169																													169	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2021										Fiscal Year 2022												B A L A N C E						
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P				
	6	2023	ARMY (‡)	446	0	446																													446
	6	2023	Total	615	0	615																													615
1.1.7) Utility - Follow-on Contract																																			
	7	2023	NAVY	15	0	15																													15
	7	2023	ARMY (‡)	193	0	193																													193
	7	2023	Total	208	0	208																													208
2.1.2) Trailers - 1st Contract ⁽³⁾																																			
Prior Years Deliveries: 115																																			
	8	2021	NAVY	74	0	74											A -	-	-	-	-	-	-	-	-	-	6	6	6	6	6	6	38		
	8	2022	NAVY	247	0	247																A -	-	-	-	-	-	-	-	-	-	-	-	20	227
	9	2023	NAVY	132	0	132																													132
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024														BALANCE		
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT				Calendar Year 2023										Calendar Year 2024													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.1) Heavy Guns Carrier - 1st Contract																																	
	1	2016	NAVY	61	61	0																											0
	1	2016	ARMY ^(†)	69	69	0																											0
	1	2016	Total	130	130	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2017	NAVY	132	132	0																											0
	1	2017	ARMY ^(†)	279	279	0																											0
	1	2017	Total	411	411	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2018	NAVY	92	92	0																											0
	1	2018	ARMY ^(†)	265	265	0																											0
	1	2018	Total	357	357	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2019	NAVY	583	583	0																											0
	1	2019	ARMY ^(†)	780	780	0																											0
	1	2019	Total	1,363	1,363	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2020	NAVY	645	645	0																											0
	1	2020	ARMY ^(†)	636	636	0																											0
	1	2020	Total	1,281	1,281	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2021	NAVY	250	250	0																											0
	1	2021	ARMY ^(†)	808	808	0																											0
	1	2021	Total	1,058	1,058	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2022	NAVY	334	27	307	27	28	28	28	28	28	28	28	28	28																	0
	1	2022	ARMY ^(†)	165	13	152	13	13	14	14	14	14	14	14	14	14																	0
	1	2022	Total	499	40	459	40	41	42	42	42	42	42	42	42	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0		
	1	2023	NAVY	51	0	51		A -	-	-	-	-	-	-	-	-	4	4	4	4	4	4	5	5	5	4	4	4			0		
	1	2023	ARMY ^(†)	178	0	178		A -	-	-	-	-	-	-	-	-	14	14	15	15	15	15	15	15	15	15	15	15			0		
	1	2023	Total	229	0	229		-	-	-	-	-	-	-	-	-	18	18	19	19	19	19	20	20	20	19	19	19	-		0		
1.1.2) Heavy Guns Carrier - Follow-on Contract																																	
	2	2023	NAVY	5	0	5		A -	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	-	1	-	-	-	-		0		
	2	2023	ARMY ^(†)	73	0	73		A -	-	-	-	-	-	-	-	-	6	6	6	6	6	6	6	6	6	6	7			0			
	2	2023	Total	78	0	78		-	-	-	-	-	-	-	-	-	7	6	7	6	7	6	7	6	7	6	6	7	-		0		
1.1.3) General Purpose - 1st Contract																																	
	3	2015	NAVY	6	6	0																											0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024														BALANCE				
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT				Calendar Year 2023										Calendar Year 2024															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
	3	2015	ARMY (+)	126	126	0																													0
	3	2015	Total	132	132	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2016	NAVY	28	28	0																													0
	3	2016	ARMY (+)	377	377	0																													0
	3	2016	Total	405	405	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2017	NAVY	10	10	0																													0
	3	2017	ARMY (+)	607	607	0																													0
	3	2017	Total	617	617	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2018	NAVY	184	184	0																													0
	3	2018	ARMY (+)	918	918	0																													0
	3	2018	Total	1,102	1,102	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2019	NAVY	385	385	0																													0
	3	2019	ARMY (+)	2,184	2,184	0																													0
	3	2019	Total	2,569	2,569	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2020	NAVY	452	452	0																													0
	3	2020	ARMY (+)	492	492	0																													0
	3	2020	Total	944	944	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2021	NAVY	250	250	0																													0
	3	2021	ARMY (+)	660	660	0																													0
	3	2021	Total	910	910	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2022	NAVY	198	16	182	16	16	16	16	17	17	17	17	17	17												0							
	3	2022	ARMY (+)	455	37	418	38	38	38	38	38	38	38	38	38	38												0							
	3	2022	Total	653	53	600	54	54	54	54	54	55	55	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	3	2023	NAVY	144	0	144		A	-	-	-	-	-	-	-	-	11	11	12	12	12	12	12	12	12	12	12	13	13		0				
	3	2023	ARMY (+)	411	0	411		A	-	-	-	-	-	-	-	-	34	34	34	34	34	34	34	34	34	34	35	35	35		0				
	3	2023	Total	555	0	555		-	-	-	-	-	-	-	-	-	45	45	46	46	46	46	46	46	46	46	47	48	48	-	0				
1.1.4) General Purpose - Follow-on Contract																																			
	4	2023	NAVY	21	0	21		A	-	-	-	-	-	-	-	-	1	1	1	2	2	2	2	2	2	2	2	2	2		0				
	4	2023	ARMY (+)	184	0	184		A	-	-	-	-	-	-	-	-	15	15	15	15	15	15	15	15	16	16	16	16		0					
	4	2023	Total	205	0	205		-	-	-	-	-	-	-	-	-	16	16	16	17	17	17	17	17	18	18	18	18	-	0					
1.1.5) Close Combat Weapons Carrier - 1st Contract																																			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle										Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023										Fiscal Year 2024														BALANCE				
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT				Calendar Year 2023										Calendar Year 2024															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
	5	2016	NAVY	23	23	0																													0
	5	2016	ARMY (+)	42	42	0																													0
	5	2016	Total	65	65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	5	2017	NAVY	24	24	0																													0
	5	2017	ARMY (+)	52	52	0																													0
	5	2017	Total	76	76	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	5	2018	NAVY	56	56	0																													0
	5	2019	NAVY	149	149	0																													0
1.1.6) Utility - 1st Contract																																			
	6	2016	NAVY	16	16	0																													0
	6	2016	ARMY (+)	165	165	0																													0
	6	2016	Total	181	181	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2017	NAVY	46	46	0																													0
	6	2017	ARMY (+)	649	649	0																													0
	6	2017	Total	695	695	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2018	NAVY	195	195	0																													0
	6	2018	ARMY (+)	803	803	0																													0
	6	2018	Total	998	998	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2019	NAVY	525	525	0																													0
	6	2019	ARMY (+)	612	612	0																													0
	6	2019	Total	1,137	1,137	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2020	NAVY	167	167	0																													0
	6	2020	ARMY (+)	1,188	1,188	0																													0
	6	2020	Total	1,355	1,355	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2021	NAVY	252	252	0																													0
	6	2021	ARMY (+)	504	504	0																													0
	6	2021	Total	756	756	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
	6	2022	NAVY	124	10	114	10	10	10	10	10	11	11	11	11																		0		
	6	2022	ARMY (+)	570	47	523	47	47	47	47	47	48	48	48	48	48																		0	
	6	2022	Total	694	57	637	57	57	57	57	57	58	58	59	59	59	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0			
	6	2023	NAVY	169		169		A	-	-	-	-	-	-	-	-	-	14	14	14	14	14	14	14	14	14	14	14	15		0				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle													Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle									
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2023												Fiscal Year 2024													BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023												Calendar Year 2024													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
	6	2023	ARMY ^(‡)	446	0	446		A -	-	-	-	-	-	-	-	-	37	37	37	37	37	37	37	37	37	37	38	38		0		
	6	2023	Total	615	0	615		-	-	-	-	-	-	-	-	-	51	51	51	51	51	51	51	51	51	51	52	53	-	0		
1.1.7) Utility - Follow-on Contract																																
	7	2023	NAVY	15	0	15		A -	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	2	2	2		0	
	7	2023	ARMY ^(‡)	193	0	193		A -	-	-	-	-	-	-	-	-	16	16	16	16	16	16	16	16	16	16	16	17		0		
	7	2023	Total	208	0	208		-	-	-	-	-	-	-	-	-	17	17	17	17	17	17	17	17	17	18	18	19	-	0		
2.1.2) Trailers - 1st Contract ⁽³⁾																																
Prior Years Deliveries: 115																																
	8	2021	NAVY	74	36	38	6	6	6	6	7	7																				0
	8	2022	NAVY	247	20	227	20	20	20	20	21	21	21	21	21	21																0
	9	2023	NAVY	132	0	132		A -	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	11	11	11		0		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy								Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2					P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle				Item Number / Title [DODIC]: 1 / Joint Light Tactical Vehicle		

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Oshkosh Defense LLC ⁽¹⁰⁾ - Oshkosh WI	720	900	1,800	0	10	10	20	0	2	10	12
2	TBD ⁽¹¹⁾ - TBD	720	900	1,800	1	0	10	10	0	3	10	13
3	Oshkosh Defense LLC - Oshkosh WI	720	900	1,800	0	10	10	20	0	2	10	12
4	TBD - TBD	720	900	1,800	1	0	10	10	0	3	10	13
5	Oshkosh Defense LLC - Oshkosh, WI	720	900	1,800	0	10	10	20	0	3	10	13
6	Oshkosh Defense LLC - Oshkosh, WI	720	900	1,800	0	10	10	20	0	2	10	12
7	TBD - TBD	720	900	1,800	1	0	10	10	0	3	10	13
8	Oshkosh Defense LLC - Oshkosh WI	720	900	1,800	0	10	10	20	0	2	10	12
9	TBD - TBD	720	900	1,800	1	0	10	10	0	3	10	13

(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽¹⁰⁾ Manufacturer's preferred MSR (not contractual) is 2,880 1-8-5 is 3,600. Max quantity per year is 7,200. Oshkosh transitioned to a standalone JLTV production line in 2nd Quarter FY 2021.

⁽¹¹⁾ Manufacturer's MSR TBD

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles							P-1 Line Item Number / Title: 5097 / Family of Tactical Trailers					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	156.510	2.963	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	156.510	2.963	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	156.510	2.963	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Family of Medium/Heavy Tactical Trailers and Ancillary Equipment (FT&AE) encompasses equipment upgrades and changes made to fielded trailers. FT&AE primarily provides for the procurement and support of trailers in the medium and heavy fleet to enhance Marine Corps tactical vehicle mobility capability as a direct enabler to Force Design 2030, EABO, and the Marine Littoral Regiment. This program primarily supports various medium and heavy trailers, to include the M1076 PLS (Palletized Load System) Trailer, the MK1077 Flatrack for the PLS Trailer and Logistics Vehicle System Replacement (LVSR); MK593 Medium Tactical Vehicle Replacement (MTVR) Trailer; M870 40/50 Ton Low Bed, MK970 Tactical Refueler, M149A2 400 Gallon Water Tank Trailer, MK38 High Mobility Artillery Rocket System (HIMARS) Re-Supply Trailer, MK970 5,000 Gallon Semitrailer, and the Flatrack Refueler Capability (FRC). In FY 2022, funding for the FT&AE program transitioned from BLI 5097 into BLI 5050 in order to consolidate tactical wheeled vehicle procurement efforts into a single project unit.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	2.265	-	-	-	-	-	-	-	-		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.698	-	-	-	-	-	-	-	-		
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	2.963	-	-	-	-	-	-	-	-		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles					P-1 Line Item Number / Title: 5097 / Family of Tactical Trailers					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Family of Tactical Trailers				- / 156.510	- / 2.963	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost				- / 156.510	- / 2.963	- / 0.000	- / 0.000	- / 0.000	- / 0.000
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2						P-1 Line Item Number / Title: 5097 / Family of Tactical Trailers						Aggregated Items Title: Family of Tactical Trailers								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Family of Tactical Trailers (FTT)																				
1.1) Heavy Trailer (ECP)			-	-	7.792	-	-	1.573	-	-	-	-	-	-	-	-	-	-	-	-
1.2) Medium Trailer (ECP)			-	-	3.036	-	-	0.692	-	-	-	-	-	-	-	-	-	-	-	-
1.3) Family of Tactical Trailer Modification-Reserves	A		-	-	3.921	-	-	0.698	-	-	-	-	-	-	-	-	-	-	-	-
1.4) Prior Year Cum Funding	A		-	-	46.854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Family of Tactical Trailers (FTT)			-	-	61.603	-	-	2.963	-	-	-	-	-	-	-	-	-	-	-	-
2) MTRV Trailer																				
2.1) Prior Year Cum Funding	A		-	-	94.907	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) MTRV Trailer			-	-	94.907	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	156.510	-	-	2.963	-	-	-	-	-	-	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles						P-1 Line Item Number / Title: 5132 / Trailers						
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	22.000	0.000	9.876	2.721	0.000	2.721	2.034	0.000	0.000	0.000	-	36.631
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	22.000	0.000	9.876	2.721	0.000	2.721	2.034	0.000	0.000	0.000	-	36.631
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	22.000	0.000	9.876	2.721	0.000	2.721	2.034	0.000	0.000	0.000	-	36.631
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding will facilitate an interim solution for facilities that meet security requirements that will ensure the successful implementation of key capabilities of the Marine Corps' Force Design 2030. The trailers line is made up of temporary facilities (interim relocatable trailers) that fill key facilities roles required to field, plan, and operate critical Force Design capabilities while complying with required security classification levels. These temporary facilities will provide the Marine Corps with the ability to maintain security while fielding key capabilities in accordance with the Force Design 2030 timeline until permanent facilities are established.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles						P-1 Line Item Number / Title: 5132 / Trailers				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Trailers	P-5a, P-21			- / 22.000	- / -	- / 9.876	- / 2.721	- / -	- / 2.721
P-40	Total Gross/Weapon System Cost				- / 22.000	- / 0.000	- / 9.876	- / 2.721	- / 0.000	- / 2.721
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 funding of \$2.721M funds temporary facilities. This funding is required for the Marine Corps to properly plan and field capabilities to maintain the Force Design 2030 timeline due to a lack of existing facilities operating at these higher security levels. These facilities are critical to integrate and carry future force design infrastructure capabilities through the requirements and development process, then effectively and securely operationalize them with Joint Force. Decrease of \$7.155M from FY 2022 to FY 2023 due to the planned phasing of the requirement for temporary facilities in FY 2023.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2							P-1 Line Item Number / Title: 5132 / Trailers							Aggregated Items Title: Trailers						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Trailers																				
1.1) Temporary Facilities ⁽¹⁾	A		-	-	-	-	-	-	-	-	9.876	-	-	2.721	-	-	-	-	-	2.721
1.2) Sprung Shelter ^(†)	A		22,000K	1	22.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Trailers			-	-	22.000	-	-	-	-	-	9.876	-	-	2.721	-	-	-	-	-	2.721
Total			-	-	22.000	-	-	-	-	-	9.876	-	-	2.721	-	-	-	-	-	2.721

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) The trailers line is made up of temporary facilities (interim relocatable trailers) that fill key facilities roles required to field, plan, and operate critical Force Design capabilities while complying with required security classification levels.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2				P-1 Line Item Number / Title: 5132 / Trailers					Aggregated Items: Trailers			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) Trailers												
1.2) Sprung Shelter ^(†)		2020	BIG TOP / Perry, FL	C / TBD	DLA, Philadelphia, PA	Apr 2020	Aug 2020	1	22,000K	N		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2										P-1 Line Item Number / Title: 5132 / Trailers										Aggregated Items: Trailers														
Items (Units in Each)							Fiscal Year 2020										Fiscal Year 2021										BALANCE							
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020										Calendar Year 2021																	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP			
1) Trailers																																		
1.2) Sprung Shelter																																		
	40	2020	NAVY		1	0	1							A	-	-	-	-	1															0
								OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 05 / 2					P-1 Line Item Number / Title: 5132 / Trailers					Aggregated Items: Trailers			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)								
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder				
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
1	BIG TOP - Perry, FL			1	0	0	4	4	0	0	0	0	

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy **Date:** April 2022

Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment	P-1 Line Item Number / Title: 6054 / Env Cntrl Equip Assorted

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206624M

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	90.475	0.455	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	90.930
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	90.475	0.455	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	90.930
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	90.475	0.455	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	90.930
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Environmental Control Equipment:

The Family of Environmental Control Equipment (ECE) consists of Environmental Control Units (ECU), Field Refrigeration Systems (FRS), and Cooling and Refrigeration Expeditionary Tool Kits (CREK). These systems provide required heating, cooling, storage, and servicing for systems throughout the Marine Corps. Current efforts seek to replace all legacy ECE with systems of higher reliability and higher efficiency using Environmental Protection Agency (EPA) approved refrigerants, which offer more energy efficiency, enhanced mobility, are easier to repair, and quieter than their predecessors. With environmental control systems consuming 50-70% of tactical electric power in theater, these savings will be a significant contribution to reducing the USMC fuel demand, and lightening the Marine Air-Ground Task Force (MAGTF). The Warfighter benefit includes a decreased logistics footprint, less reliance on petroleum-derived fuels, increased local energy security, and reduced tanker losses (fewer on the road). The operational imperative to reduce fuel usage will consequently reduce refueling operations and exposing Marines to hazardous fuel convoy operations.

Efforts include the procurement of the following principal end items and ancillary equipment:

(1) Additional 60,000 BTU/hr ECUs to sustain Authorized Acquisition Objective (AAO) due to the disposition of ECU variants utilizing R-22 refrigerant, which has been banned by the EPA.

(2) Small Field Refrigeration Systems (SFRS) replacement. This effort seeks to replace legacy SFRSs to comply with restricting EPA regulations while increasing efficiency, thus reducing overall power requirements/demands.

Inflatable Maritime Structures:

A fuel bladder designed for autonomous movement under the water's surface that will increase operational persistence and flexibility for distributed operations in contested and uncertain environments, while increasing sustainability, survivability, and maneuverability.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						P-1 Line Item Number / Title: 6054 / Env Cntrl Equip Assorted				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Env Cntrl Equip Assorted	P-5a, P-21			- / 90.475	- / 0.455	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	Total Gross/Weapon System Cost				- / 90.475	- / 0.455	- / 0.000	- / 0.000	- / 0.000	- / 0.000
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$0.000M Starting in FY 2022, Environmental Control Equipment BLI 6054 merges with Family of Mobile Power Systems BLI 6366. This will enable acquisition strategies and funding to be more responsive to rapid technological advances in the areas of power and environmental control and field advanced capabilities quicker.										

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1							P-1 Line Item Number / Title: 6054 / Env Cntrl Equip Assorted						Item Number / Title [DODIC]: 1 / Env Cntrl Equip Assorted								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				90.475			0.455			0.000			0.000			0.000			0.000		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				90.475			0.455			0.000			0.000			0.000			0.000		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				90.475			0.455			0.000			0.000			0.000			0.000		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Flyaway Cost																					
Recurring Cost																					
1.1.1) 5-Ton Environmental Control Units (ECUs) ^(†)	20,475.86	145	2.969	22,747.68	20	0.455	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.2) 5-Ton Environmental Control Units (ECUs) Reserves ^(†)	19,666.67	6	0.118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Recurring Cost	-	-	3.087	-	-	0.455	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Flyaway Cost	-	-	3.087	-	-	0.455	-	-	-	-	-	-	-	-	-	-	-	-			
Support Cost																					
2.1) Warranties, ILS/CLS Support	-	-	7.673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2.2) Environmental Control Equipment Assorted Reserves	-	-	9.569	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2.3) Prior Year Cum Funding	-	-	70.146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Support Cost	-	-	87.388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Gross/Weapon System Cost	-	-	90.475	-	-	0.455	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000			
†) indicates the presence of a P-5a																					

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1				P-1 Line Item Number / Title: 6054 / Env Cntrl Equip Assorted				Item Number / Title [DODIC]: 1 / Env Cntrl Equip Assorted				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) 5-Ton Environmental Control Units (ECUs) ^(†)		2021	HDT Expeditionary Systems, Inc. / Solon, OH	SS / BPA	Quantico, VA	Feb 2021	Aug 2021	20	22,747.68	Y		
1.1.2) 5-Ton Environmental Control Units (ECUs) Reserves ^(†)		2020	HDT Expeditionary Systems, Inc. / Solon, OH	SS / BPA	Quantico, VA	Feb 2020	Aug 2020	6	19,666.67	Y		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6054 / Env Cntrl Equip Assorted													Item Number / Title [DODIC]: 1 / Env Cntrl Equip Assorted																	
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2020												Fiscal Year 2021												BALANCE									
OCO	MFR#	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020												Calendar Year 2021																					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										
1.1.1) 5-Ton Environmental Control Units (ECUs)																																								
Prior Years Deliveries: 145																																								
	1	2021	NAVY	20	0	20													A - - - - - - 20												0									
1.1.2) 5-Ton Environmental Control Units (ECUs) Reserves																																								
	2	2020	NAVY	6	0	6													A -	-	-	-	-	-	-	2	4													0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1					P-1 Line Item Number / Title: 6054 / Env Cntrl Equip Assorted				Item Number / Title [DODIC]: 1 / Env Cntrl Equip Assorted			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	HDT Expeditionary Systems, Inc. - Solon, OH			60	0	0	6	6	0	0	6	6
2	HDT Expeditionary Systems, Inc. - Solon, OH			TBD	0	0	6	6	0	0	6	6

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	336.687	0.501	2.161	7.854	0.000	7.854	16.102	28.631	29.430	30.010	-	451.376
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	336.687	0.501	2.161	7.854	0.000	7.854	16.102	28.631	29.430	30.010	-	451.376
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	336.687	0.501	2.161	7.854	0.000	7.854	16.102	28.631	29.430	30.010	-	451.376
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Family of Expeditionary Fuel Systems (FEFS) Program provides the full spectrum of fuel capabilities to support Expeditionary Advanced Base Operations (EABO) and the future force. It consists of principal end items and components that perform receipt, storage, analysis, distribution and dispensing of fuel to ground and aviation assets. These systems can be organized to meet specific fuel capabilities based on mission requirements. The program provides materiel solutions for the following needs: - Enables fuel foraging capabilities through the procurement of the Expeditionary Mobile Fuel Additive Capability (EMFAC), providing the ability to inject additives in commercial fuel to improve quality to military specifications, which increases the resiliency of the fuel supply chain. - Modernizes fuel-testing capabilities through the consolidation of multiple testing kits into a portable Petroleum Enhanced Analysis Kit (PEAK), enhancing the future force's ability to conduct comprehensive fuel quality surveillance in support of distributed operations. -Enables support to distributed operations by disaggregating and modernizing existing large Tactical Fuel Systems into tailored Expeditionary Fuel Dispensing Systems (EFDS)and expedient refueling capabilities. These modernization efforts include the ability to track fuel data near real time providing the future force the ability to manage and track fuel consumption more comprehensively and packaging to reduce storage size, improve accountability, and reduce maintenance time. - Enables aviation ground support to the future force by outfitting Fleet units with the Tactical Aviation Ground Refueling System (TAGRS), enhancing the ability to conduct Forward Arming and Refueling Points (FARPs) in support of EABO. - Enables testing and verification of alternative options for over the shore fuel distribution in support of distributed operations and the layout of future forces, to include pursuing investment in Low Profile Distribution System(LPDS). Additionally, procurement supports centrally managed items with lifecycles, preplanned product improvements, and obsolescence mitigation via newer components and subsystems supported by industry. Procurement also supports repacking current systems capabilities into smaller, modular configurations for scalability and mission tailoring, which may require additional subsystems for certain packages to complete modernization, as new program TAMCNs and tables of allowances are authorized.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Tactical Fuel Systems	P-5a, P-21			- / 336.687	- / 0.501	- / 2.161	- / 7.854	- / 0.000	- / 7.854
P-40	Total Gross/Weapon System Cost				- / 336.687	- / 0.501	- / 2.161	- / 7.854	- / 0.000	- / 7.854
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:
 FY 2023 Funding Request: \$7.854M

The increase from FY 2022 to FY 2023 of \$5.693M is to continue the procurement of Tactical Aviation Ground Refueling Systems (TAGRS), and initiate low rate initial production for procurement of the Petroleum Expeditionary Analysis Kit (PEAK) systems and associated PEAK Product Verification Testing and logistics support costs. It also funds In-Service Engineering Agent support and the cost for program contract support for the procurement of Fuel Systems.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1							P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems						Item Number / Title [DODIC]: 1 / Tactical Fuel Systems								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				336.687			0.501			2.161			7.854			0.000			7.854		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				336.687			0.501			2.161			7.854			0.000			7.854		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				336.687			0.501			2.161			7.854			0.000			7.854		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total					
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)			
Flyaway Cost																					
Recurring Cost																					
1.1.1) Fuel System Supply, Support & Components Equipment (ACTIVE) ⁽¹⁾	-	-	0.729	-	-	0.501	-	-	-	-	-	1.128	-	-	-	-	-	1.128			
1.1.2) Tactical Aviation Ground Refueling System (TAGRS) ^{(†) (2)}	-	-	-	-	-	-	-	-	1.695	139,558.82	44	6.141	-	-	-	139,558.82	44	6.141			
1.1.4) Petroleum Expeditionary Analysis Kit (PEAK) ⁽³⁾	-	-	-	-	-	-	-	-	-	65,000.00	9	0.585	-	-	-	65,000.00	9	0.585			
1.1.5) Expeditionary Mobile Fuel Additive Capabilit (EMFAC) ⁽⁴⁾	-	-	-	-	-	-	-	-	0.466	-	-	-	-	-	-	-	-	-			
1.1.6) Prior Years Cumulative Funding	-	-	335.958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Recurring Cost	-	-	336.687	-	-	0.501	-	-	2.161	-	-	7.854	-	-	-	-	-	7.854			
Subtotal: Flyaway Cost	-	-	336.687	-	-	0.501	-	-	2.161	-	-	7.854	-	-	-	-	-	7.854			
Gross/Weapon System Cost	-	-	336.687	-	-	0.501	-	-	2.161	-	-	7.854	-	-	0.000	-	-	7.854			
(†) indicates the presence of a P-5a																					

^(t) indicates the presence of a P-5a

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1	P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems	Item Number / Title [DODIC]: 1 / Tactical Fuel Systems
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
Footnotes: ⁽¹⁾ The increase from FY 2022 to FY 2023 of \$1.128M is to fund Product Verification Testing of the PEAK LRIP systems, refurbishment of the LRIP systems, and logistics support and PEAK Interactive Multimedia Instruction development. It also funds In-Service Engineering Agent support and the cost for program contract support for the procurement of Fuel systems. ⁽²⁾ The increase from FY 2022 to FY 2023 of \$4.446M is to continue the procurement of TAGRS. Based upon the priced CLIN structuring of the pending contract award, the updated unit cost estimate (\$139,558.82) is now reflected in FY 2023, increased to include all the direct cost elements for TAGRS less the cost for Product Verification Testing already captured in FY 2022. TAGRS direct cost elements include program management support, logistics support, training support, transportation costs, refurbishment of tested units, fielding support, and profits and fees. In FY 2022 the planned estimate for the PVT testing was refined, and is now less than noted at the time of FY 2022 submission which afforded the continued procurement of Qty 4 TAGRS despite the increased Unit Cost estimate. ⁽³⁾ The increase from FY 2022 to FY 2023 of \$0.585M is to initiate procurement of Qty 9 low rate initial production (LRIP) Petroleum Expeditionary Analysis Kit (PEAK) systems. ⁽⁴⁾ The decrease from FY 2022 to FY 2023 of \$0.466M reflects no FY23 PMC costs associated to the EMFAC program in FY 2023 to include the reduction of EMFAC In-Service Engineering Agent support; however, the LRIP systems will still be undergoing Product Verification Testing into 2nd Quarter utilizing funding from FY 2022.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1				P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems					Item Number / Title [DODIC]: 1 / Tactical Fuel Systems			
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.2) Tactical Aviation Ground Refueling System (TAGRS) ^(†)		2023 ⁽⁵⁾	New MFG - Name / New MFG - Loc	C / FFP	GVSC/CCDC Warren, MI	Aug 2023	Nov 2023	44	139,558.82	Y		Nov 2021

^(†) indicates the presence of a P-21

Footnotes:
⁽⁵⁾ Program delay is forecast MFG Production Lead Time

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022																
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1							P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems													Item Number / Title [DODIC]: 1 / Tactical Fuel Systems																
Cost Elements (Units in Each)							Fiscal Year 2023													Fiscal Year 2024													BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023													Calendar Year 2024																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1.1.2) Tactical Aviation Ground Refueling System (TAGRS) ⁽²⁾																																				
	1	2023	NAVY	44	0	44														A	-	-	-	9	9	9	9	8								0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1					P-1 Line Item Number / Title: 6277 / Tactical Fuel Systems				Item Number / Title [DODIC]: 1 / Tactical Fuel Systems			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	New MFG - Name - New MFG - Loc			TBD	0	0	0	0	0	0	0	0

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							P-1 Line Item Number / Title: 6366 / Power Equipment Assorted					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	445.741	20.381	16.040	5.841	0.000	5.841	28.890	29.487	30.046	30.617	-	607.043
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	445.741	20.381	16.040	5.841	0.000	5.841	28.890	29.487	30.046	30.617	-	607.043
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	445.741	20.381	16.040	5.841	0.000	5.841	28.890	29.487	30.046	30.617	-	607.043
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Family of Mobile Power Systems is vital for Expeditionary Advanced Base Operations (EABO) and austere base establishment in Littoral Operations in Contested Environments (LOCE), and in the Indo-Pacific. The Family of Mobile Power Systems (MPS) consists of a wide range of current and emerging technologies for mobile power generation, storage, and distribution systems and environmental control equipment necessary to provide continuous, uninterrupted electrical power and climate control in austere environments. MPS enables the functionality of critical Force Design systems such as air defense systems, C2 Degraded environmental systems, close combat lethality systems, and information warfare, and life support capabilities required to conduct sea-based forward presence and crisis response at advanced naval based and advanced base sites. Starting in FY 2022, Environmental Control Equipment from BLI 6054 and Advanced Power Sources merge with Family of Mobile Power Systems BLI 6366. This will enable acquisition strategies and funding to be more responsive to rapid technological advances in the areas of power and environmental control and field advanced capabilities faster.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	20.381	11.191	0.366	-	0.366	23.716	24.207	24.664	25.132		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	-	4.849	5.475	-	5.475	5.174	5.280	5.382	5.485		
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	20.381	16.040	5.841	-	5.841	28.890	29.487	30.046	30.617		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						P-1 Line Item Number / Title: 6366 / Power Equipment Assorted				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Power Equipment Assorted	P-5a, P-21			- / 445.741	- / 20.381	- / 16.040	- / 5.841	- / 0.000	- / 5.841
P-40	Total Gross/Weapon System Cost				- / 445.741	- / 20.381	- / 16.040	- / 5.841	- / 0.000	- / 5.841
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Funding Request: \$5.841M (Active: \$0.366M/Reserve: \$5.475M)

Family of Mobile Power Systems: \$5.841M (Active: \$0.366M/Reserve: \$5.475M) - This funding supports the continuation of Mobile Electric Hybrid Power Systems (MEHPS) Product Verification Testing, and Small Unit Power-Portable Power Scavenging System (P2S2) formerly known as Squad Power Manager (SPM) procurement. The decrease in Family of Mobile Power Systems funding of \$10.199M from FY 2022 to FY 2023 is due to the suspension of the Intelligent Power Distribution (IPD) capability requirement under the Intelligent Power Management System (IPMS) program of record which would provide the Marines with microgrid capabilities. However, the transition of the Marine Corps generator fleet to Advanced Medium Mobile Power Source (AMMPS) generators, with the Advanced Digital Control System (ADCS), effectively provides Fleet Marine Forces with a basic capability to build and monitor microgrids. IPD's requirement suspension avoids the duplication of resources and effort.

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1						P-1 Line Item Number / Title: 6366 / Power Equipment Assorted							Item Number / Title [DODIC]: 1 / Power Equipment Assorted								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				445.741			20.381			16.040			5.841			0.000			5.841		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				445.741			20.381			16.040			5.841			0.000			5.841		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				445.741			20.381			16.040			5.841			0.000			5.841		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-			-			-			-			-			-		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements		Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total				
		Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)		
Hardware - Family of Mobile Power Systems Cost																					
Recurring Cost																					
1.1.1) Advanced Medium Mobile Power Systems (AMMPS)		-	-	175.597	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1.1.2) Micro-grid ADCS (MADCS) ^(†) ⁽¹⁾		5,227.12	3,474	18.159	7,397.00	1,447	10.703	7,401.32	608	4.500	-	-	-	-	-	-	-	-	-		
1.1.3) IPMS Intelligent Power Distribution (IPD)		-	-	0.829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1.1.4) IPMS - Metering & Monitoring		-	-	0.190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1.1.6) Mobile Electric Hybrid Power System (MEHPS) ^(†)		-	-	-	454,146.00	16	7.266	-	-	-	-	-	-	-	-	-	-	-	-		
1.1.8) Advanced Battery Chargers (ABC)		-	-	15.536	-	-	0.649	-	-	-	-	-	-	-	-	-	-	-	-		
1.1.9) Large/Small Field Refrigeration System (L/SFRS) Replacements ⁽²⁾		-	-	-	-	-	-	-	-	0.011	-	-	-	-	-	-	-	-	-		
1.1.10) L/SFRS Replacements (Reserves) ⁽³⁾		-	-	-	-	-	-	-	-	2.902	-	-	-	-	-	-	-	-	-		

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1						P-1 Line Item Number / Title: 6366 / Power Equipment Assorted							Item Number / Title [DODIC]: 1 / Power Equipment Assorted					
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1.1.11) Flood Light Replacements ⁽⁴⁾	-	-	-	-	-	-	-	-	1.380	-	-	-	-	-	-	-	-	-
1.1.13) Squad Power Manager (Portable Power Scavenging System) ⁽⁵⁾	-	-	-	-	-	-	-	-	3.800	-	-	0.333	-	-	-	-	-	0.333
1.1.14) Squad Power Manager (Portable Power Scavenging System) (Reserves) ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-	-	2.969	-	-	-	-	-	2.969
1.1.16) Advanced Power Sources (APS)	-	-	130.458	-	-	0.183	-	-	-	-	-	-	-	-	-	-	-	-
1.1.17) Advanced Power Sources (APS) Reserves	-	-	13.142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	353.911	-	-	18.801	-	-	12.593	-	-	3.302	-	-	-	-	-	3.302
Subtotal: Hardware - Family of Mobile Power Systems Cost	-	-	353.911	-	-	18.801	-	-	12.593	-	-	3.302	-	-	-	-	-	3.302
Support Cost																		
2.1) Prior Year Cumulative Funding	-	-	91.830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) MEHPS Product Verification Testing ⁽⁷⁾	-	-	-	-	-	0.912	-	-	-	-	-	0.033	-	-	-	-	-	0.033
2.3) MEHPS Product Verification Testing (Reserves) ⁽⁸⁾	-	-	-	-	-	-	-	-	1.947	-	-	2.506	-	-	-	-	-	2.506
2.5) Initial Training and Fielding Support ⁽⁹⁾	-	-	-	-	-	0.668	-	-	1.500	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	91.830	-	-	1.580	-	-	3.447	-	-	2.539	-	-	-	-	-	2.539
Gross/Weapon System Cost	-	-	445.741	-	-	20.381	-	-	16.040	-	-	5.841	-	-	0.000	-	-	5.841

^(†) indicates the presence of a P-5a

Footnotes:

⁽¹⁾ Micro-grid ADCS (MADCS): FY22 reflects availability of funds due to the suspension of the IPMS program. Decrease of \$4.500M from FY22 to FY23 reflects completion of Advanced Digital Control System procurement.

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Exhibit P-5, Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1	P-1 Line Item Number / Title: 6366 / Power Equipment Assorted	Item Number / Title [DODIC]: 1 / Power Equipment Assorted
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
(2) L/SFRS Replacements: the Decrease of \$0.011M from FY22 to FY23 reflects completion of the 60,000 BTU/hr Environmental Control Unit (ECU) procurement replacement and fielding support due to the disposition of ECU variants utilizing R-22 refrigerant, which have been banned by the EPA. (3) L/SFRS Replacements (Reserves): Decrease of \$2.902M from FY22 to FY23 reflects completion of the 60,000 BTU/hr Environmental Control Unit (ECU) procurement replacement and fielding support due to the disposition of ECU variants utilizing R-22 refrigerant, which have been banned by the EPA. (4) Flood Light Replacements: FY22 reflects availability of funds due to the suspension of the LFPS program. The decrease of \$1.380M from FY22 to FY23 supports the prioritization of EABO capabilities (Squad Power Manager). (5) FY22 reflects availability of funds due to the IPMS program. The decrease of \$3.467M from FY22 to FY23 aligns with the completion of product verification testing in FY22. The Portable Power Scavenging System (P2S2) formerly known as Squad Power Manager (SPM) is an enhanced replacement for Solar Portable Alternative Communication Energy Systems (SPACES) and will provide increased flexibility, smaller footprint, and reduced weight. The SPACES program was based on solar energy as a primary source for supporting communication equipment. SPM will focus on harvesting/scavenging energy from various sources. SPM will use solar panel, batteries, Host Nation power and have the ability to connect other renewable energy sources as they become available. SPM will also be able to scavenge power form partially discharged batteries found on the battlefield. (6) The increase of \$2.969M from FY22 to FY23 supports the prioritization of EABO capabilities. The Portable Power Scavenging System (P2S2) formerly known as Squad Power Manager (SPM) is an enhanced replacement for Solar Portable Alternative Communication Energy Systems (SPACES) and will provide increased flexibility, smaller footprint, and reduced weight. The SPACES program was based on solar energy as a primary source for supporting communication equipment. SPM will focus on harvesting/scavenging energy from various sources. SPM will use solar panel, batteries, Host Nation power and have the ability to connect other renewable energy sources as they become available. SPM will also be able to scavenge power form partially discharged batteries found on the battlefield. (7) MEHPS product verification testing support costs are being separated from hardware costs to enhance cost transparency as a result of contract award in 2QFY21. (8) MEHPS Product Verification Testing (PVT): Increase of \$0.559M from FY22 to FY23 is consistent with PVT completion in FY23. (9) Initial Training and Fielding Support: Decrease of \$1.500M from FY22 to FY23 is due to the completion of ADCS New Equipment Training in FY22.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1			P-1 Line Item Number / Title: 6366 / Power Equipment Assorted					Item Number / Title [DODIC]: 1 / Power Equipment Assorted				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.2) Micro-grid ADCS (MADCS)		2021	Cummins Power Generation, Inc. / Minneapolis, MN	C / FFP	Ft. Belvoir, VA	Oct 2020	Apr 2021	1,447	7,397.00	Y		
1.1.2) Micro-grid ADCS (MADCS)		2022	Cummins Power Generation, Inc. / Minneapolis, MN	C / FFP	Ft. Belvoir, VA	Oct 2021	Apr 2022	608	7,401.32	Y		
1.1.6) Mobile Electric Hybrid Power System (MEHPS) ^(†)		2021	Cummins Power Generation, Inc. ⁽¹⁰⁾ / Minneapolis, MN	C / FFP	Quantico, VA	Feb 2021	Dec 2022	16	454,146.00	Y		May 2020

^(†) indicates the presence of a P-21

Footnotes:

⁽¹⁰⁾ Due to calendar year FY21 supply chain issues the LRIP delivery dates were rescheduled from March 2022 to December 2022 thereby increasing the Mfg PLT After Award to 21 months.

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6366 / Power Equipment Assorted										Item Number / Title [DODIC]: 1 / Power Equipment Assorted												
Cost Elements (Units in Each)							Fiscal Year 2021										Fiscal Year 2022													BALANCE		
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	Calendar Year 2021										Calendar Year 2022															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	
1.1.6) Mobile Electric Hybrid Power System (MEHPS)																																
	1	2021	NAVY	16	0	16					A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6366 / Power Equipment Assorted													Item Number / Title [DODIC]: 1 / Power Equipment Assorted										
Cost Elements (Units in Each)							Fiscal Year 2023													Fiscal Year 2024													BALANCE
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	Calendar Year 2023													Calendar Year 2024													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1.1.6) Mobile Electric Hybrid Power System (MEHPS)																																	
	1	2021	NAVY	16	0	16	-	-	3	-	-	13																				0	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy							Date: April 2022	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1				P-1 Line Item Number / Title: 6366 / Power Equipment Assorted				Item Number / Title [DODIC]: 1 / Power Equipment Assorted

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Cummins Power Generation, Inc. ⁽¹⁰⁾ - Minneapolis, MN		84	2,400	0	4	21	25	0	0	12	12

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:

⁽¹⁰⁾ Due to calendar year FY21 supply chain issues the LRIP delivery dates were rescheduled from March 2022 to December 2022 thereby increasing the Mfg PLT After Award to 21 months.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment						
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	199.382	5.752	12.319	38.120	0.000	38.120	22.469	16.117	15.561	15.848	-	325.568
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	199.382	5.752	12.319	38.120	0.000	38.120	22.469	16.117	15.561	15.848	-	325.568
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	199.382	5.752	12.319	38.120	0.000	38.120	22.469	16.117	15.561	15.848	-	325.568
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Amphibious Support Equipment supports multiple capabilities, enhancements, life cycle replacements, and personnel equipment shortfalls when required and as needed by reconnaissance units throughout operating forces for airborne and parachuting programs, and amphibious surface and subsurface reconnaissance capability programs. Airborne Reconnaissance Equipment (ARE) includes multiple specialized raid projects, such as parachuting equipment used for reconnaissance in support of Marine Air Ground Task Force (MAGTF) operations. Aerial Delivery and Autonomous Distribution (A2D2) Family of Systems, formerly Joint Precision Air Drop System (JPADS), provides capability for increased air carrier survivability, ground accuracy, standoff delivery, and improved effectiveness and assessment feedback for airdrop missions with procurement of parachute delivery systems consisting of a decelerator guided by an Autonomous Guidance Unit attached to a Container Delivery System that interfaces with cargo aircraft for autonomous delivery of airborne cargo from high altitudes and lateral separation to predetermined small drop zones. A2D2 Tactical Resupply Unmanned Aircraft System (TRUAS), formerly known as Small Unmanned Logistics Systems-Air provides autonomous, organic logistics capability via distribution of critical supplies in the last tactical mile, which enables the critical need to lighten the load on ground forces. Amphibious Reconnaissance Capability program, formerly Underwater Reconnaissance Capability (URC), is an overarching Family of Systems which sustains, enhances, and supports capabilities of current and future combatant diving systems and small craft as needed and when required by the fleet such as Enhanced Combat Rubber Reconnaissance Craft (ECRRC), Sub-Surface Hydrographic Amphibious Reconnaissance Craft (SHARC), Underwater Breathing Apparatus (UBA), Combatant Diver Full Face Mask (CDFFM), Combatant Diver Vest (CDV), Expeditionary Hyperbaric Chamber System (EHCS), Transportable Recompression Chamber System (TRCS), Combat Dry Diver Suit (CDDS), Maritime Operations Suit (MOS), Portable Compressor Diesel Driven (PCDD), Rapid Deployable Oxygen Transfer Pump System (RDOTPS), Non-gasoline Burning Outboard Engine (NBOE), Diver Reconnaissance Vehicle (DRV), Diver Propulsion Device (DPD), Enhanced Diver Propulsion Device (E-DPD), Marine Individual Assault Kit (MIAK), Marine Assault Breacher's Kit (MABK)in support of MAGTF expeditionary operations, and Open Water Safety Craft (OWSC)/Assault Amphibious Safety Boat (AASB). OSWC/AASB is a non-tactical, non-deployable, safety and rescue craft used by trained personnel, medical staff, and equipment to conduct open water rescue, conduct open water rescue during amphibious operations as required while supporting Marine Corps waterborne training operations.												
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	5.544	12.112	37.898	-	37.898	22.247	15.888	15.328	15.610		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.208	0.207	0.222	-	0.222	0.222	0.229	0.233	0.238		
Total:	Quantity	-	-	-	-	-	-	-	-	-		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment					P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Secondary Distribution	Total Obligation Authority	5.752	12.319	38.120	-	38.120	22.469	16.117	15.561	15.848

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Amphibious Support Equipment	P-5a, P-21			- / 199.382	- / 5.752	- / 12.319	- / 38.120	- / -	- / 38.120
P-40	Total Gross/Weapon System Cost				- / 199.382	- / 5.752	- / 12.319	- / 38.120	- / 0.000	- / 38.120
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$38.120 (Active - \$37.898M, Reserves - \$0.222M) Airborne and Recon Equipment (ARE): \$2.936M (Active - \$2.714M, Reserves - \$0.222M) - Funding procures 30 Enhanced Multi Mission Parachute Systems (E-MMPS) Active, 9 E-MMPS for Reserves and 200 Oxygen Masks. The Oxygen Masks replace the legacy oxygen mask system while providing enhanced capabilities. Aerial Delivery and Autonomous Distribution (A2D2)/Advanced Cargo Parachute Release System (ACPRS): \$2.370M - Increase of \$2.370M procures JPADS Block Upgrades and multiple aerial delivery parachutes. Amphibious Reconnaissance Capability: \$22.972M - Supports the procurement of the Enhanced Combat Rubber Reconnaissance Craft (ECRRC) and Open Water Safety Craft/Assault Amphibious Safety Boat (OWSC/AASB). The ECRRC is replacing the Combat Rubber Reconnaissance Craft (CRRC), which was originally fielded in 1979 and has reached the end of its service life. The ECRRC provides increased capability through transportation of more personnel and equipment across greater distances and in higher sea states, with less shock forces to personnel. Funding procures 88 ECRRCs. In addition, the OWSC/AASB is being procured and fielded in response to Urgent Statement of Need (USON). The USON identifies an unusual and compelling need for an AASB capability to support Marines conducting Assault Amphibious training; both assault amphibian platforms training in the Fleet Marine Forces and at the Assault Amphibian School. Funding increase from FY 2022 to FY 2023 of \$20.551M procures 23 additional ECRRCs and 23 OWSC/AASB. Tactical Resupply Unmanned Aerial System (TRUAS): \$9.842M - Funding procures TRUAS, formerly known as Small-Unmanned Logistics System-Air (ULS-A), which is in support of aerial resupply requirements. TRUAS is a materiel solution to the critical need for unmanned logistics systems for tactical resupply and distribution operations within Expeditionary Advanced Base Operations (EABO) in the Littorals. Funding increase from FY 2022 to FY 2023 of \$2.906M is due to the unit cost increase as a result of NDAA compliance changes, upgraded mesh net radios, and safety corrections documented in the Field User Capability Assessment completed in previous years.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1								P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment							Aggregated Items Title: Amphibious Support Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Airborne and Recon Equipement (ARE)																				
1.1) Enhanced Multi-Mission Parachute System (EMMPS) (1)(f)	A		137,197.18	426	58.446	23,100.00	121	2.795	23,400.00	117	2.738	23,700.00	30	0.711	-	-	-	23,700.00	30	0.711
1.2) EMMPS (PS2) Support	A		-	-	0.024	-	-	0.013	-	-	0.017	-	-	0.012	-	-	-	-	-	0.012
1.3) EMMPS (Reserves) (f)	A		48,142.86	28	1.348	23,100.00	9	0.208	23,400.00	8	0.187	23,700.00	9	0.213	-	-	-	23,700.00	9	0.213
1.4) EMMPS (Reserves) Support	A		-	-	0.049	-	-	-	-	-	0.020	-	-	0.009	-	-	-	-	-	0.009
1.5) Oxygen Masks and Bottles (2)(f)	A		-	-	-	-	-	-	-	-	-	9,900.00	200	1.980	-	-	-	9,900.00	200	1.980
1.6) O2 Masks/Bottles Support	A		-	-	-	-	-	-	-	-	-	-	-	0.011	-	-	-	-	-	0.011
Subtotal: 1) Airborne and Recon Equipement (ARE)			-	-	59.867	-	-	3.016	-	-	2.962	-	-	2.936	-	-	-	-	-	2.936
2) A2D2/Advanced Cargo Parachute Release System																				
2.1) A2D2/Advanced Cargo Parachute Release System	A		-	-	0.487	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) JPADS Block Upgrades (3)	A		-	-	0.992	-	-	-	-	-	-	-	-	2.170	-	-	-	-	-	2.170
2.3) G-15 Parachute	A		-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
Subtotal: 2) A2D2/Advanced Cargo Parachute Release System			-	-	1.479	-	-	-	-	-	-	-	-	2.370	-	-	-	-	-	2.370
3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)																				
3.1) Enhanced - Combat Rubber Reconnaissance Craft (4)(f)	A		-	-	-	37,479.45	73	2.736	37,246.15	65	2.421	37,181.82	88	3.272	-	-	-	37,181.82	88	3.272
3.2) OWSC/AASB (5)(f)	A		-	-	-	-	-	-	-	-	-	809,521.00	23	18.619	-	-	-	809,521.00	23	18.619
3.3) OWSC/AASB Support (6)	A		-	-	-	-	-	-	-	-	-	-	-	1.081	-	-	-	-	-	1.081
Subtotal: 3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)			-	-	0.000	-	-	2.736	-	-	2.421	-	-	22.972	-	-	-	-	-	22.972
4) Tactical Resupply Unmanned Aerial System																				
4.1) TRUAS (7)(f)	A		-	-	-	-	-	-	192,672.54	35	6.744	309,966.67	30	9.299	-	-	-	309,966.67	30	9.299
4.2) TRUAS Support	A		-	-	-	-	-	-	-	-	0.192	-	-	0.543	-	-	-	-	-	0.543

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1						P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment									Aggregated Items Title: Amphibious Support Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 4) Tactical Resupply Unmanned Aerial System			-	-	0.000	-	-	-	-	-	6.936	-	-	9.842	-	-	-	-	-	9.842
5) Prior Years Cumulative Funding																				
5.1) Prior Years Cumulative Funding		A		-	-	138.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) Prior Years Cumulative Funding			-	-	138.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	199.382	-	-	5.752	-	-	12.319	-	-	38.120	-	-	-	-	-	38.120

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

- (1) FY23 funding will complete the procurement for the EMMPS AAO.
- (2) The increase of \$1.980M procures 200 Oxygen Masks and Bottles.
- (3) The increase of \$2.170M procures JPADS Block Upgrades and multiple aerial delivery parachutes.
- (4) The increase of \$0.851M reflects procurement of additional ECRRCs.
- (5) The increase of \$18.619M procures 23 OWSC/AASBs. The OWSC/AASB is being procured and fielded in response to an Urgent Statement of Need (USON). The USON identifies an unusual and compelling need for an AASB capability to support Marines conducting Assault Amphibious training both in the Fleet Marine Forces and at the Assault Amphibian School.
- (6) The increase of \$1.081M procures OWSV/AASB support equipment.
- (7) The Unit Cost increase (\$0.117M) from FY22 to FY23 is due to NDAA compliance changes, upgraded mesh net radios, and safety corrections documented in the Field User Capability Assessment completed in previous years.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1				P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment					Aggregated Items: Amphibious Support Equipment			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) Airborne and Recon Equipement (ARE)												
1.1) Enhanced Multi-Mission Parachute System (EMMPS) ⁽¹⁾		2018	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2018	Apr 2018	157	22,064.00	Y	Apr 2018	
1.1) Enhanced Multi-Mission Parachute System (EMMPS) ⁽¹⁾		2019	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2019	Apr 2019	151	22,500.00	Y	Apr 2019	
1.1) Enhanced Multi-Mission Parachute System (EMMPS) ⁽¹⁾		2020	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2020	Apr 2020	118	22,900.00	Y	Apr 2020	
1.1) Enhanced Multi-Mission Parachute System (EMMPS) ⁽¹⁾		2021	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2021	Apr 2021	121	23,100.00	Y	Apr 2021	
1.1) Enhanced Multi-Mission Parachute System (EMMPS) ⁽¹⁾		2022	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2022	Apr 2022	117	23,400.00	Y	Apr 2021	
1.1) Enhanced Multi-Mission Parachute System (EMMPS) ⁽¹⁾		2023	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2023	Apr 2023	30	23,700.00	N	Apr 2021	
1.3) EMMPS (Reserves)		2018	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2018	Apr 2018	12	22,064.00	Y	Apr 2018	
1.3) EMMPS (Reserves)		2019	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2019	Apr 2019	8	22,500.00	Y	Apr 2019	
1.3) EMMPS (Reserves)		2020	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2020	Apr 2020	8	22,900.00	Y	Apr 2020	
1.3) EMMPS (Reserves)		2021	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2021	Apr 2021	9	23,100.00	Y	Apr 2021	
1.3) EMMPS (Reserves)		2022	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2022	Apr 2022	8	23,400.00	Y	Apr 2022	
1.3) EMMPS (Reserves)		2023	Airborne Systems / Pennsauken, NJ	C / FFP	MCSC	Jan 2023	Apr 2023	9	23,700.00	N	Apr 2022	
1.5) Oxygen Masks and Bottles ⁽²⁾		2023	New MFG - Name / New MFG - Loc	C / TBD	TBD	Mar 2023	Jun 2023	200	9,900.00	N	Apr 2023	
3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)												
3.1) Enhanced - Combat Rubber Reconnaissance Craft ⁽⁴⁾		2021	Wing Inflatables, Inc. / Arcata, CA	C / FFP	MCSC	Aug 2021	Oct 2021	73	37,479.45	N	Jul 2021	Nov 2020
3.1) Enhanced - Combat Rubber Reconnaissance Craft ⁽⁴⁾		2022	Wing Inflatables, Inc. / Arcata, CA	C / FFP	MCSC	May 2022	Jul 2022	65	37,246.15	N	Jul 2022	Nov 2020
3.1) Enhanced - Combat Rubber Reconnaissance Craft ⁽⁴⁾		2023	Wing Inflatables, Inc. / Arcata, CA	C / TBD	MCSC	May 2023	Jul 2023	88	37,181.82	N	Jul 2023	Nov 2020
3.2) OWSC/AASB ^{(5)(†)}		2023	Silverships LLC / Theodore, Ala	C / FPIF	NAVSEA	Feb 2023	Oct 2023	23	809,521.00	N	Feb 2023	May 2022
4) Tactical Resupply Unmanned Aerial System												
4.1) TRUAS ^{(7)(†)}		2022	SURVICE Engineering / Aberdeen, MD	SS / FFP	Aberdeen, MD	Aug 2022	Feb 2023	35	192,672.54	N	Mar 2022	Mar 2022
4.1) TRUAS ^{(7)(†)}		2023	SURVICE Engineering / Aberdeen, MD	SS / CS	Aberdeen, MD	Mar 2023	Jun 2023	30	309,966.67	N	Mar 2022	Jan 2023
^(†) indicates the presence of a P-21												

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1	P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment	Aggregated Items: Amphibious Support Equipment

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment													Aggregated Items: Amphibious Support Equipment									
Items <i>(Units in Each)</i>							Fiscal Year 2018												Fiscal Year 2019												BALANCE	
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	Calendar Year 2018												Calendar Year 2019													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)																																
3.2) OWSC/AASB ⁽⁵⁾																																
	41	2023	NAVY		23	0	23																								23	
4) Tactical Resupply Unmanned Aerial System																																
4.1) TRUAS ⁽⁷⁾																																
	42	2022	NAVY		35	0	35																								35	
	42	2023	NAVY		30	0	30	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	30

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022										
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment													Aggregated Items: Amphibious Support Equipment										
Items <i>(Units in Each)</i>							Fiscal Year 2020												Fiscal Year 2021												BALANCE		
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020												Calendar Year 2021														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)																																	
3.2) OWSC/AASB ⁽⁵⁾																																	
	41	2023	NAVY		23	0	23																										23
4) Tactical Resupply Unmanned Aerial System																																	
4.1) TRUAS ⁽⁷⁾																																	
	42	2022	NAVY		35	0	35																										35
	42	2023	NAVY		30	0	30	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	30	

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Exhibit P-21, Production Schedule: PB 2023 Navy																							Date: April 2022											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment													Aggregated Items: Amphibious Support Equipment											
Items <i>(Units in Each)</i>							Fiscal Year 2022												Fiscal Year 2023												BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023															
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)																																		
3.2) OWSC/AASB ⁽⁵⁾																																		
	41	2023	NAVY		23	0	23													A -	-	-	-	-	-	-	-	-	-	-	-	-	23	
4) Tactical Resupply Unmanned Aerial System																																		
4.1) TRUAS ⁽⁷⁾																																		
	42	2022	NAVY		35	0	35													A -	-	-	-	-	-	-	3	3	3	3	3	3	3	11
	42	2023	NAVY		30	0	30													A -				-	-	5	5	5	5					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1										P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment										Aggregated Items: Amphibious Support Equipment													
Items <i>(Units in Each)</i>								Fiscal Year 2024										Fiscal Year 2025												BALANCE			
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024										Calendar Year 2025																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP		
3) Amphibious Reconnaissance Capability - formerly Underwater Reconnaissance Capability (URC)																																	
3.2) OWSC/AASB ⁽⁵⁾																																	
	41	2023	NAVY	23	0	23	1	2	2	2	2	2	2	2	2	2	2															0	
4) Tactical Resupply Unmanned Aerial System																																	
4.1) TRUAS ⁽⁷⁾																																	
	42	2022	NAVY	35	24	11	3	3	3	2																						0	
	42	2023	NAVY	30	20	10	5	5																									0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1					P-1 Line Item Number / Title: 6518 / Amphibious Support Equipment				Aggregated Items: Amphibious Support Equipment			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Silverships LLC - Theodore, Ala	2	3	23	1	1	1	2	1	1	1	2
2	SURVICE Engineering - Aberdeen, MD	6	50	50	0	0	3	3	0	0	6	6

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							P-1 Line Item Number / Title: 6520 / EOD Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	6,938.663	17.349	94.472	201.047	0.000	201.047	259.860	270.557	113.069	111.064	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	6,938.663	17.349	94.472	201.047	0.000	201.047	259.860	270.557	113.069	111.064	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	6,938.663	17.349	94.472	201.047	0.000	201.047	259.860	270.557	113.069	111.064	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Marine Air Ground Task Force (MAGTF) Electronic Warfare (EW) Ground Family of Systems (MEGFoS) is a critical Force Design program. It enables the Expeditionary Advanced Base Operations (EABO) construct and facilitates ground-based EW in support of Force Design 2030. MEGFoS is the future team portable, vehicle mounted and dismounted advanced tactical electronic warfare capability supporting the Marine Corps Electromagnetic Spectrum Operations (EMSO) concept in the future operating environment. MEGFoS will provide interconnected EW systems developed using the C4ISR/EW Modular Open Suite of Standards (CMOSS) and Sensor Open Systems Architecture (SOSA) standards (which are also in use or under consideration by the Army, Navy, and Air Force) that will operate across a range of frequencies in order to provide the Marine Corps the ability to maneuver efficiently inside the electromagnetic spectrum. MEGFoS provides the ability to protect friendly use of spectrum, sense all spectrum usage in an area of responsibility, and to target adversaries' spectrum with the intent to deny, delay, or degrade an adversary's decision making cycle. MEGFoS replaces existing stove-piped, proprietary EW systems and increase EW capabilities, providing relevant/superior capabilities in peer to peer engagements and as part of a robust capability necessary to maintain advantage in the information environment. Marine Corps EW has evolved from a single function Counter Radio-Controlled improvised Explosive Device (RCIED) Electronic Warfare (CREW) mission to an advanced multi-function electronic warfare (MFEW) mission focused on supporting the future operating environment. The USMC is divesting from legacy CREW systems in favor of MFEW systems and future MEGFOS systems. Concurrently, legacy CREW and MFEW systems are being deployed to meet threats in multiple theaters of operation and are fielded to selected Marine Expeditionary Units (MEU)/ Marine Expeditionary Forces (MEF) in support of worldwide deployments. To continue to support the various worldwide missions, each legacy CREW and MFEW unit receives customized programming (loadsets) to counter that area's RCIED and other spectrum threats. The testing, programming development, and product improvement research are funded from RDTE funds and are prioritized to meet the growing demand for all deployed Marine units. MFEW consists of the Modi II dismounted system and the Modi Vehicle Power Adapter (MVPA) II mounted system and are designed to be used by non-EW trained incidental operators. MFEW combines the capabilities to conduct the existing CREW mission, with additional capabilities for Electronic Support (ES), electronic attack (EA), Counter-Unmanned Aircraft System (CUAS), and Networking to facilitate cooperative engagement, de-confliction, and command and control. Beginning FY 2021, USMC CREW/MFEW funding was realigned into the MEGFoS funding profile. FAMILY OF EOD EQUIPMENT (FEOD) is comprised of over forty Table of Authorized Material Control Numbers (TAMCNs) providing the required tools and capabilities to detect, locate, access, identify, triage, diagnose, stabilize, render safe, neutralize, recover, exploit, and dispose of unexploded explosive ordnance (UXO), improvised explosive devices (IED), and weapons of mass destruction (WMD). The portfolio includes specialized diagnostic equipment, robotics and energetically actuated tools, which enable EOD to provide the Marine air-ground task force (MAGTF) and Marine Special Operations Forces with critical enabling capabilities that deliver responsive, scalable, strategic depth for special operations, crisis response, and littoral access. EXPLOSIVE HAZARD DEFEAT SYSTEMS (EHDS) provides capabilities not found in the current Joint land force structure to defeat explosive hazards and protect Marines and equipment while conducting route and area clearance operations. The EHDS will enable Commanders to deliberately operate in explosive hazards environments by detecting and marking explosive hazards, enabling the Commanders to make												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment		P-1 Line Item Number / Title: 6520 / EOD Systems
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M
Line Item MDAP/MAIS Code: N/A		
timely and informed decisions to avoid the explosive hazards, or, if necessary, neutralize explosive hazards that impede their missions. Multiple detection and marking capabilities will detect a broader spectrum of explosive hazards and achieve higher overall effectiveness rates. Standoff and remote-controlled detection and marking capabilities will remove Joint forces from direct contact with explosive hazards and enhance force protection and the vehicles' system survivability. Operational speeds and rates will increase and better support the operational tempo (OPTEMPO) of the current and future force. ENFIRE is a digital surveying kit designed to collect and disseminate engineer-related information while minimizing exposure to enemy observation.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						P-1 Line Item Number / Title: 6520 / EOD Systems					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M			
Line Item MDAP/MAIS Code: N/A											
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	
P-40a	EOD Systems	P-5a, P-21			- / 6,938.663	- / 17.349	- / 94.472	- / 201.047	- / -	- / 201.047	
P-40	Total Gross/Weapon System Cost				- / 6,938.663	- / 17.349	- / 94.472	- / 201.047	- / 0.000	- / 201.047	
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.											
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.											
Justification: FY 2023 Base Appropriation Request: \$201.047M											
MARINE AIR GROUND TASK FORCE (MAGTF) ELECTRONIC WARFARE (EW) GROUND FAMILY OF SYSTEMS (MEGFoS): (\$160.248M) Increased funding of \$88.177M from FY 2022 to FY 2023 supports procurement of (Qty 235) Multifunction Electronic Warfare (MFEW) dismounted systems, (Qty 150) MFEW mounted systems, as well as engineering change proposals to retrofit currently fielded systems with advanced networking capabilities and an enhanced graphical user interface. Additionally, funds will support initial procurement of MEGFoS systems. This system will provide a Sensors Open Systems Architecture (SOSA) hardware infrastructure and Enabling Dynamic Operational Radio Frequency Operating Systems (ENDOR OS) using Electronic Warfare Operating Kit (EWOK) applications. MEGFoS will operate across a range of spectrum in order to provide the Marine Corps the ability to maneuver effectively inside the electromagnetic spectrum in a peer to peer environment. This investment addresses critical shortfalls in electronic warfare and disruptive and non-lethal capabilities appropriate for countering malign activity by actors pursuing adversary "gray zone" strategies. The additional MFEW systems will fully equip all 7 Marine Expeditionary Units with modern EW systems in support of service operational requirements. MFEW provides enhanced Electromagnetic Support (ES) and Electromagnetic Attack (EA) capabilities to deny, degrade, and delay adversary actions in the electromagnetic spectrum (EMS). Funding of the MEGFoS family of systems, to include MFEW, provides capability and capacity for the Marine Corps in the EMS against current and future threats, and supports Electromagnetic Spectrum Operations (EMSO) which are a key enabler of Force Design IOC. MFEW resources were aligned under the MEGFoS family of systems beginning FY 2021 and was previously funded with overseas contingency operations funds prior to FY 2022.											
FAMILY OF EOD EQUIPMENT: (\$15.488M) Funding supports various tool kits and the following items: Littoral Explosive Ordnance Neutralization (LEON) is a Family of Systems consisting of five increments (Remotely Operated Vehicle, Unmanned Underwater Vehicle, Unmanned Surface Vessel, Amphibious Unmanned Ground Vehicle, and Dive Gear/Neutralization Tools). LEON capabilities enable the Explosive Ordnance Disposal (EOD) section to detect, locate, reacquire, render safe/neutralize, recover, exploit, and dispose of underwater explosive ordnance. This full-spectrum capability is achieved by manned and unmanned teaming (MUMT) that exhaust semi-autonomous and remote means before the execution of manual techniques by the individual EOD technician. Although detection and avoidance of naval mines or waterborne improvised explosive devices is preferred, LEON provides commanders with multiple precision options that achieve a range of optimal desired effects. Small Unmanned Ground Vehicle (SUGV-310) is a tracked robotic system that enables operators to safely identify, inspect, interrogate, and render safe or neutralize explosive hazards at a safe stand-off distance, greatly reducing the loss of life or limb to Explosive Ordnance Disposal Technicians and Combat Engineers. These robotic platforms allow ensured mobility for operational forces engaged in operations throughout the competition continuum. Heavy robots provide enhanced capabilities to detect, identify, access, render safe, exploit, and achieve final disposition of heavy Explosive Ordnance (EO) to include Improvised Explosive Devices (IEDs), Vehicle Borne IEDs (VBIEDs), and Weapons of Mass Destruction (WMDs) at safe standoff. The robot replaces the aged, legacy Remote Ordnance Neutralization System (RONS) heavy robots currently fielded to EOD technicians which are now outdated, unsustainable, and unable to maintain overmatch with current and emerging threats. The robot will be fielded with the following native payloads: cameras (to include a pan, tilt, zoom (PTZ) camera), secure radios, one radio relay to extend operational range in urban and complex terrain, a robust manipulator arm, a cargo carrier rack, and an Operator Control Unit (OCU). Ordnance Exploitation Modernization is used by Explosive Ordnance Disposal Technicians during disassembly, exploitation, and inerting (rendering an item free of explosives) operations. The current Remote Fuze Disassembly System (RFDS) used by EOD technicians suffers from performance, transportability, and reliability and maintainability issues. The original equipment manufacturer no longer support the system. The Ordnance Exploitation Modernization effort will provide a replacement for the current RFDS while addressing the performance, transportability and reliability and maintainability issues through a modified commercial off-the-shelf solution. Additionally this effort will address the size and weight of the previous system to be more expeditionary for the future fight. Ordnance Exploitation Modernization will enable Commanders to select the right exploitation level required as EOD Marines support Littoral Operations in a Contested Environment (LOCE) and Expeditionary Advanced Base Operations (EABO). PM Engineer Systems engineering, cybersecurity, logistics, fielding, and acquisition support. Decrease of \$6.913M from FY 2022 to FY 2023 is due to procurement of LEON Unmanned Service Vehicle (USV) Autonomous											

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment		P-1 Line Item Number / Title: 6520 / EOD Systems
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M
Line Item MDAP/MAIS Code: N/A		
Micro Yacht (AMY) robot. LEON, identified in a Rapid Statement of Need in December 2019 which provides EOD Marines the ability to detect and mitigate explosive hazards in the Very Shallow Water, Surf Zone, and Beach Zone enabling littoral maneuver and increasing force protection during exercises and operations across the Competition Continuum. LEON requires engineering, cybersecurity, logistics, fielding, and acquisition support to develop program documentation for the five separate increments of this required capability. EXPLOSIVE HAZARD DEFEAT SYSTEMS (EHDS): (\$25.311M) Funding supports items such as; Full Force Design Enhancements and the procurement of Small Unmanned Ground Vehicle (SUGV-310), a tracked robotic system that enables operators to safely identify, inspect, interrogate, and render safe or neutralize explosive hazards at a safe stand-off distance, greatly reducing the loss of life or limb to Explosive Ordnance Disposal Technicians and Combat Engineers. These robotic platforms allow ensured mobility for operational forces engaged in operations throughout the competition continuum. Heavy robots provide enhanced capabilities to detect, identify, access, render safe, exploit, and achieve final disposition of heavy Explosive Ordnance (EO) to include Improvised Explosive Devices (IEDs), Vehicle Borne IEDs (VBIEDs), and Weapons of Mass Destruction (WMDs) at safe standoff. The robot replaces the aged, legacy Remote Ordnance Neutralization System (RONS) heavy robots currently fielded to EOD technicians which are now outdated, unsustainable, and unable to maintain overmatch with current and emerging threats. The robot will be fielded with the following native payloads: cameras (to include a pan, tilt, zoom (PTZ) camera), secure radios, one radio relay to extend operational range in urban and complex terrain, a robust manipulator arm, a cargo carrier rack, and an Operator Control Unit (OCU). Upon receipt of a capabilities requirement change the SUGV-310 AAO will increase to 378 creating a deficiency of 113, FY 2023 funding will be used to fulfill that deficiency through DLA. Funding also supports the remaining ENFIRE AAO procurement as well as the equipment/software upgrade from version 8.0 to 9.0. Increase of \$25.311M from FY 2022 to FY 2023 is due to procurement of SUGV-310 robots and ENFIRE systems.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1								P-1 Line Item Number / Title: 6520 / EOD Systems							Aggregated Items Title: EOD Systems					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) MARINE AIR GROUND TASK FORCE (MAGTF) ELECTRONIC WARFARE (EW) GROUND FAMILY OF SYSTEMS (MEG)																				
1.1) Multi-Function Electronic Warfare (MFEW) Mounted Systems ^(†)	A		-	-	-	-	-	-	317,000.00	150	47.550	317,000.00	150	47.550	-	-	-	317,000.00	150	47.550
1.2) Multi-Function Electronic Warfare (MFEW) Dismounted Systems ^{(1)(†)}	A		-	-	-	-	-	-	-	-	-	210,000.00	235	49.350	-	-	-	210,000.00	235	49.350
1.3) Multi-Function Electronic Warfare (MFEW) ECP 1 Retro Fit ⁽²⁾	A		-	-	-	-	-	-	-	-	24.521	-	-	26.554	-	-	-	-	-	26.554
1.4) MEGFoS ⁽³⁾	A		-	-	-	-	-	-	-	-	-	-	-	36.794	-	-	-	-	-	36.794
Subtotal: 1) MARINE AIR GROUND TASK FORCE (MAGTF) ELECTRONIC WARFARE (EW) GROUND FAMILY OF SYSTEMS (MEG)			-	-	0.000	-	-	-	-	-	72.071	-	-	160.248	-	-	-	-	-	160.248
2) Family of EOD Systems																				
2.1) EOD Specialized Equipment and Tool Kits ⁽⁴⁾	A		-	-	283.670	-	-	16.435	-	-	21.487	-	-	14.574	-	-	-	-	-	14.574
2.2) PM ES Acquisition Support	A		-	-	2.085	-	-	0.914	-	-	0.914	-	-	0.914	-	-	-	-	-	0.914
Subtotal: 2) Family of EOD Systems			-	-	285.755	-	-	17.349	-	-	22.401	-	-	15.488	-	-	-	-	-	15.488
3) Explosive Hazard Defeat Systems (EHDS) ⁽⁵⁾																				
3.1) Small Unmanned Ground Vehicle 310 Robot ⁽⁶⁾	A		-	-	-	-	-	-	-	-	-	-	-	19.911	-	-	-	-	-	19.911
3.2) Counter Improvised Explosive Device (C-IED) ⁽⁷⁾	A		-	-	13.561	-	-	-	-	-	-	-	-	5.400	-	-	-	-	-	5.400
Subtotal: 3) Explosive Hazard Defeat Systems (EHDS)			-	-	13.561	-	-	-	-	-	-	-	-	25.311	-	-	-	-	-	25.311
4) Prior Years Cumulative Funding																				
4.1) Other Prior Year	A		-	-	6,639.347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Prior Years Cumulative Funding			-	-	6,639.347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	6,938.663	-	-	17.349	-	-	94.472	-	-	201.047	-	-	-	-	-	201.047
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
^(†) indicates the presence of a P-5a																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1	P-1 Line Item Number / Title: 6520 / EOD Systems	Aggregated Items Title: EOD Systems
Footnotes: ⁽¹⁾ Multi-Function Electronic Warfare (MFEW) Dismounted Systems: Increase of \$49.350M from FY2022 to FY2023 reflects procurement of Qty 235 MFEW dismounted systems. ⁽²⁾ Multi-Function Electronic Warfare (MFEW) ECP 1 Retro Fit: Increase of \$2.033M from FY2022 to FY2023 reflects procurement of additional MFEW ECP 1 Retro Fit sets. ⁽³⁾ MEGFoS: Increase of \$36.794M from FY2022 to FY2023 reflects initial procurement of the MAGTF Electronic Warfare Ground Family of Systems (MEGFoS), the future Electronic Warfare system for team portable, mounted, and dismounted, to address critical capability gaps. This system will provide a Sensors Open Systems Architecture (SOSA) hardware infrastructure and Enabling Dynamic Operational Radio Frequency Operating Systems (ENDOR OS) using Electronic Warfare Operating Kit (EWOK) applications. MEGFoS will operate across a range of spectrum in order to provide the Marine Corps the ability to maneuver effectively inside the electromagnetic spectrum in a peer to peer environment. ⁽⁴⁾ Decrease of \$6.913M from FY22 to FY23 is due to the completed procurement of the LEON Unmanned Surface Vehicle (USV) Autonomous Micro Yacht (AMY) robot. ⁽⁵⁾ Program name change from Family of Counter-Improvised Explosive Device (C-IED) Capabilities. ⁽⁶⁾ FY23 funds of \$19.911M supports procurement of SUGV-310 robots for Combat Engineers (qty 113). ⁽⁷⁾ FY23 funds of \$5.400M supports procurement of remaining ENFIRE AAO and equipment/software upgrades from version 8.0 to 9.0.		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1				P-1 Line Item Number / Title: 6520 / EOD Systems					Aggregated Items: EOD Systems			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) MARINE AIR GROUND TASK FORCE (MAGTF) ELECTRONIC WARFARE (EW) GROUND FAMILY OF SYSTEMS (MEG												
1.1) Multi-Function Electronic Warfare (MFEW) Mounted Systems ^(†)		2022	Sierra Nevada Corporation / Sparks, NV	SS / IDIQ	Sparks, NV	May 2022	Jan 2024	150	317,000.00	Y		
1.1) Multi-Function Electronic Warfare (MFEW) Mounted Systems ^(†)		2023	Sierra Nevada Corporation / Sparks, NV	SS / IDIQ	Sparks, NV	Nov 2022	Jul 2024	150	317,000.00	Y		
1.2) Multi-Function Electronic Warfare (MFEW) Dismounted Systems ^{(1)(†)}		2023	Sierra Nevada Corporation / Sparks, NV	SS / IDIQ	Sparks, NV	Nov 2022	Jul 2024	235	210,000.00	N	Nov 2022	

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 1					P-1 Line Item Number / Title: 6520 / EOD Systems				Aggregated Items: EOD Systems			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Sierra Nevada Corporation - Sparks, NV			TBD	0	0	20	20	0	0	8	8
2	Sierra Nevada Corporation - Sparks, NV			TBD	0	0	20	20	0	0	8	8

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 2: Materials Handling Equipment							P-1 Line Item Number / Title: 6438 / Physical Security Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206315M, 0206211M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	347.719	23.063	87.120	69.967	0.000	69.967	53.748	64.145	46.263	48.066	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	347.719	23.063	87.120	69.967	0.000	69.967	53.748	64.145	46.263	48.066	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	347.719	23.063	87.120	69.967	0.000	69.967	53.748	64.145	46.263	48.066	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Installation Physical Security provides precise, uniform technological solutions to manpower intensive security requirements. Systems used at bases and stations protect our most critical assets vital to operations - people, flight lines, classified information, Arms, Ammunition, and Explosives (AA&E), shorelines, open desert areas, critical assets and infrastructure as well as provide constant, vigilant capabilities that control and restrict access and provide notification of actual and attempted unauthorized intrusion. The Mass Notification System (MNS) provides immediate notice and warning to personnel living and working aboard our bases and stations via interior and exterior speaker systems, telephones, and computers in the event of security breaches, natural disasters, terrorist activities, weather emergencies, or other events requiring immediate guidance to ensure the safety and security of personnel. These systems upgrade and replace antiquated individually purchased systems that are costly to maintain and may not meet prescribed requirements for securing U.S. assets. The Marine Corps Electronic Security System (MCESS) Program provides a comprehensive electronic security system suite that supports collateral equipment-- including intrusion detection, surveillance (IDS), installation, and facility automated access control and tracking capabilities. These systems increase efficiency and effectiveness of available security manpower and improve security and safety of the installation perimeter, flight line, restricted areas, facility entry points and is now expanding to meet installation access control requirements. Ground-based radars support surveillance of the vast regions aboard Marine Corps installations such as expansive waterways, open airfields, and desert areas; they also improve assessment at long distances and allow for greater defensive posture and response capabilities. Collateral Equipment (CE) funds the one-time, initial outfitting of equipment not defined as built-in for new Military Construction (MILCON) facilities, newly renovated/refurbished facilities, and Host Nation funded construction projects. The one-time procurement includes equipment such as Mass Notification Systems, Intrusion Detection Systems, Closed Circuit TVs, information technology switches and routers, Passive Optical Networks, Internal Grounding Systems, Voice Over Internet Protocol (VOIP), Audio Visual(AV), Video Teleconferencing Systems (VTC) and other industrial equipment such as recycling and pulping systems, warehouse conveyor systems, and heavy maintenance equipment. Highs and lows in the funding profile are directly related to what type of facilities and how many are scheduled for completion each year. Command Support Equipment (CSE) funds life cycle replacement of industrial equipment and systems with unit cost of \$250K or greater to support the operations and mission of United States Marine Corps ground bases, air stations, and districts. Examples include equipment such as open water spill equipment, warehouse conveyor systems, power generators, and recycling systems. Facilities Related Control Systems (FRCS) funds the one-time, initial purchase of industrial control systems (ICS) and Operational Technology Equipment (OTE) as well as the accompanying cybersecurity. ICS are devices that manage, command, direct or regulate the behavior of other devices such as Heating, Ventilation, and Air Conditioning (HVAC), electrical, and wastewater treatment systems. ICS include Airfield Control Systems, Electronic Security Control Systems, Fire and Life Safety Control Systems, and others. OTE include servers, computers, software, and monitoring devices to secure and operate Facility-Related Control Systems.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 2: Materials Handling Equipment						P-1 Line Item Number / Title: 6438 / Physical Security Equipment				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206315M, 0206211M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Physical Security Equipment				- / 347.719	- / 23.063	- / 87.120	- / 69.967	- / -	- / 69.967
P-40	Total Gross/Weapon System Cost				- / 347.719	- / 23.063	- / 87.120	- / 69.967	- / 0.000	- / 69.967
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: \$69.967M Collateral Equipment \$64.861M: The increase in funding of \$4.868M from FY 2022 to FY 2023 reflects the number and type of facilities that will be supported for outfitting in FY 2023. The list of projects includes projects such as Wargaming Center (phase two procurement), I MEF Consolidated Communications Building, Wastewater Treatment Plant, 1ST Marine Division Operations Complex, II MEF Operations Center, 2nd Marine Division/2nd MLG Operations Center, 10th Marines High Mobility Artillery Complex, Legal Services Center, 2nd Marine Corps Advisor Battalion Headquarters, Military Working Dog Kennel Facility, and Bachelor Enlisted Quarters. Construction schedules drive the need for equipment, based on current schedules the funding for all of above mentioned facilities is needed in FY 2023 and considers procurement lead times of 6 months or more prior to the beneficial occupancy date. Installation Physical Security \$4.550M: Funds will be used to install automated access control systems (AACS), intrusion detection systems (IDS), closed circuit television systems (CCTV), classified material storage, and early warning detection systems (EWD), and mass notification systems (MNS) at various USMC installations located worldwide. These systems are being installed in accordance with USMC policy for protection of assets, property, and life safety. Funding in the amount of \$0.498M supports Defense Policy Review Initiatives (DPRI) at Okinawa Consolidation and Futenma Replacement Facility for the procurement and installation of physical security systems at three activations. The total decrease for Installation Physical Security from FY 2022 to FY 2023 is \$22.069M, this is to due a one time FY 2022 congressional increase of \$21.3M for multi-domain counter intrusion systems and a reduction in support of DRPI for Okinawa Consolidation and Futenma Replacement Facility for FY 2023. Command Support Equipment \$0.556M: Funds will procure Relocatable Modular Storage System for 1st Maintenance Battalion, 1st Marine Logistics Group. The \$0.048M increase from FY 2022 to FY 2023 is a result of annual inflation.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 2							P-1 Line Item Number / Title: 6438 / Physical Security Equipment							Aggregated Items Title: Physical Security Equipment						
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Collateral Equipment																				
1.1) Collateral Equipment ⁽¹⁾	A		-	-	203.034	-	-	18.230	-	-	59.993	-	-	64.861	-	-	-	-	-	64.861
Subtotal: 1) Collateral Equipment			-	-	203.034	-	-	18.230	-	-	59.993	-	-	64.861	-	-	-	-	-	64.861
2) Installation Physical Security																				
2.1) Installation Physical Security ⁽²⁾	A		-	-	144.231	-	-	4.333	-	-	26.619	-	-	4.550	-	-	-	-	-	4.550
Subtotal: 2) Installation Physical Security			-	-	144.231	-	-	4.333	-	-	26.619	-	-	4.550	-	-	-	-	-	4.550
3) Facility-Related Control Systems																				
3.1) Facility-Related Control Systems	A		-	-	0.454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Facility-Related Control Systems			-	-	0.454	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4) Command Support Equipment																				
4.1) Command Support Equipment ⁽³⁾	A		-	-	-	-	-	0.500	-	-	0.508	-	-	0.556	-	-	-	-	-	0.556
Subtotal: 4) Command Support Equipment			-	-	0.000	-	-	0.500	-	-	0.508	-	-	0.556	-	-	-	-	-	0.556
Total			-	-	347.719	-	-	23.063	-	-	87.120	-	-	69.967	-	-	-	-	-	69.967

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

⁽¹⁾ The increase in funding of \$4.868M from FY 2022 to FY 2023 reflects the number and type of facilities (MILCON) that will be supported for outfitting in FY 2023.

⁽²⁾ The decrease from FY 2022 to FY 2023 of \$22.069M is to due a one time FY 2022 congressional increase of \$21.3M for multi-domain counter intrusion systems and a reduction in support of DRPI for Okinawa Consolidation and Futenma Replacement Facility for FY23.

⁽³⁾ The \$0.048M increase from FY 2022 to FY 2023 is a result of annual inflation.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							P-1 Line Item Number / Title: 6522 / Field Medical Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	36.621	4.187	8.105	21.780	0.000	21.780	5.451	10.968	50.562	51.562	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	36.621	4.187	8.105	21.780	0.000	21.780	5.451	10.968	50.562	51.562	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	36.621	4.187	8.105	21.780	0.000	21.780	5.451	10.968	50.562	51.562	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Family of Field Medical Equipment (FFME) is the sole organic medical capability for the Marine Corps, and is comprised of multiple and modular capabilities that provide the full spectrum of healthcare and life saving equipment on the battlefield. FFME provides medical equipment and supplies to the Fleet Marine Force. This program's objective is to plan for lifecycle replacements and upgrades while also modernizing equipment in order to provide the most effective medical care for Marine and Sailors in any mission. Some items will replace current line items within the Authorized Medical Allowance Lists (AMAL) and provide increases in performance characteristics, and other items represent new, emerging technology not currently included in fielded capabilities which will provide improved clinical outcomes. Family of Field Medical Equipment (FFME) is comprised of items such as: The Authorized Medical Allowance List (AMAL) modernization and bi-annual Inventory Stock Level (ISL) increases are comprised of numerous assemblages and Medical Kits required to support current standards of care and treatment protocols while enhancing capabilities for battlefield casualties such as but not limited to: The Small Oxygen Concentration Module (SOCM), The Expeditionary Medical Refrigeration Unit (EMRU), Portable Ruggedized Energy Efficient Medical Sterilizer (PREEMS), Patient Active Warming System (PAWS), Foldable High-G Resistant Patient Litter (FHGRPL), Intranasal Cooling for Encephalopathy Prevention, Expeditionary Portable Oxygen Generation System (EPOGS), Individual First Aid Kits (IFAKs), Corpsman Assault Systems (CAS) and Combat Lifesaver System (CLS). The Forward Resuscitative Surgery System (FRSS) provides Level I and II Health Service Support (HSS). The FRSS is a highly mobile, rapidly deployable, trauma surgical unit that provides emergency surgical interventions to stabilize casualties that might otherwise die or lose limbs before reaching treatment. The FRSS is the lightest and most mobile of the Marine Corps HSS elements capable of providing trauma surgical care. The FRSS is modular, rapidly transportable and deployable by air or surface means. Included in the FRSS are medical materials and ancillary equipment supported by shelters and mobile electric power from the host unit. The Battalion Aid Station (BAS) AMAL provides the equipment necessary to support a BAS manned by a Medical Officer, a Physician Assistant and the Hospital Corpsman assigned to a Battalion or Squadron. One BAS AMAL provides initial resuscitative and stabilizing care for 50 surgical patients with major wounds. The BAS AMAL is scalable, expeditionary and employed to provide immediate pre-surgical resuscitation and stabilization of patients with battle injuries prior to transport to higher echelons of care. The BAS AMAL is rugged enough to survive rough handling and austere environments. Equipment and material contained in the BAS AMAL is similar to that used in garrison medical clinics and in FFME kits organic to supported units.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy			Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		P-1 Line Item Number / Title: 6522 / Field Medical Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A		Other Related Program Elements: 0206623M
Line Item MDAP/MAIS Code: N/A			
The Sick Call AMAL provides medical personnel with 30 days of equipment to treat 300 deployed Marines and Sailors for Disease and Non-Battle Injuries (DNBI). The Sick Call AMAL can be deployed independently or used to augment the BAS. The Sick Call AMAL is light, mobile, and capable of providing Level One Health Service Support (HSS) and it is ruggedized to survive rough handling and austere environments. Equipment and material contained in the Sick Call AMAL is similar to that used in garrison medical clinics and in FFME kits organic to supported units. The Shock Trauma Platoon (STP) AMAL provides equipment to perform initial resuscitative care for 50 non-surgical combat casualties for 30 days and establish 10 post trauma care patient holding litters for up to 48 hours. When co-located with the Forward Resuscitative Surgery System AMAL 645, the STP becomes a triage center and pre/postoperative care ward. STPs provide patient medical support for Surgical Companies deployed in its Area of Responsibility (AOR) or can be deployed independently to provide trauma resuscitation capabilities beyond that of the BAS. The AMALs are staffed by a mix of Emergency Medicine, Family Practice and support staff and the capabilities are scalable, rugged, easily transported and operate reliably in expeditionary environments. The En Route Care System (ERCS) provides equipment for the care of two critically injured/ill, but stabilized casualties in a theater operations for up to a two hour medical evacuation (MEDEVAC) flight from a field treatment facility to the next higher echelon of medical care. The ERCS is a modular system that includes medical equipment, medical treatment protocols and supplies. The Acute Care Ward AMAL provides the equipment necessary to support six cots and four critical care beds for up to 72 hours for each patient or 50-bed days total. The AMAL is scalable, rugged and operates reliably in expeditionary environments, provide medical equipment and supplies to perform clinical procedures for patient conditions for the Acute Care Ward for the first 30 days of deployment. The Acute Care Ward AMAL is employed within the Surgical Company and represents the primary patient holding capacity within the USMC medical capability portfolio. It is expected that the demand for this capability may increase in AORs that require distributed operations, have long evacuation distances, and have denied air space. Preventive Medicine (PrevMed) AMALs contain the equipment necessary to provide technical preventive medicine advice, inspect food service operations, waste disposal, water potability vector control and surveillance, field sanitation, heat/cold injury prevention and disease surveillance and control measures for communicable diseases for 30 days. This AMAL is deployed with the Preventive Medicine Technician, Environmental Officer, or Industrial Hygiene Officer and is critical to the combat effectiveness in austere environments where personnel can be exceptionally susceptible to diseases and illnesses endemic to areas US forces are not frequently located. Digital Radiography Equipment (Digital X-Ray) program (AMAL 627) provides radiological capability to surgical trauma platoons to diagnose injuries and medical abnormalities. AMAL 627 contains equipment to support one x-ray machine and develop x-rays. The x-ray unit is a compact, mobile and lightweight system that enables all imaging functions to be performed at the point of patient care. The unit is comprised of a low capacity x-ray and a digitally computed radiographic (CR) reader, which scans the x-ray plates and displays the images on a laptop computer. The unit can be broken down into components for transportation and storage. It is operable and maintainable under all conditions of altitude, climate and terrain. The Laboratory AMAL provides the equipment to perform hematology, blood chemistry, urinalysis, blood banking, microbiology, and other miscellaneous laboratory tests essential to support a field medical facility treating casualties requiring surgery and trauma resuscitation. Laboratory AMALs are also used for the identification of non-battle related diseases which historically have claimed as many or more lives than combat itself and also has the potential to render troops non-combat effective due to illness. Further, it provides the capability to establish a blood bank for immediate supply of blood products to treat combat casualties during mass-casualty events. The Short Range Casualty Evacuation (CASEVAC) AMAL provides the Marine Corps with the capability to provide medical treatment during the air or ground evacuation of injured/ill personnel from the point of injury to a Surgical Company. The system provides the equipment and supplies necessary to provide care for up to eight patients, one critically injured/ill casualty, five other litter patients and two ambulatory patients for up to two hours flight time. The Field Dental Operatory Authorized Dental Allowance List (ADAL) provides dental services to the Marine Expeditionary Force (MEF). In an operational environment, the Dental Battalion's primary mission is to provide dental health maintenance with a focus on emergency care. ADALs contain equipment required by dentists and their technicians to perform dental procedures on Marines in an expeditionary environment and can be broken down into component sets or scaled down to fit the size and mission of the deploying unit. The ADAL is primarily designed for standalone dental treatment, but can be used in conjunction with other AMALs.			

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property						P-1 Line Item Number / Title: 6522 / Field Medical Equipment				
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M			
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Field Medical Equipment				- / 36.621	- / 4.187	- / 8.105	- / 21.780	- / -	- / 21.780
P-40	Total Gross/Weapon System Cost				- / 36.621	- / 4.187	- / 8.105	- / 21.780	- / 0.000	- / 21.780
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation: \$21.780M procures improved and modernized medical and surgical equipment and supplies for Authorized Medical Allowance Lists (AMAL) assemblages and medical kits such as the En Route Care System (ERCS), Battalion Aid Station (BAS); Corpsman Assault System (CAS), Sick Call; Laboratory, Individual First Aid Kits (IFAK) and Combat Lifesaver System (CLS). Medical and surgical materiel (equipment and consumables) procurements for these AMAL assemblages and medical kits will increase performance (reliability, survivability transportability and reduce weight and size), reduce power requirements, and promote new supporting technologies and joint interoperability of operational medical equipment in support of Force Design 2030, Littoral Operation in a Contested Environment and Expeditionary Advanced Base Operations. Additionally, AMAL medical and surgical materiel will require replacement due to unforeseen medical equipment/supply manufactures recall and obsolescent related issues. Funding will also allow initial issue and delivery of new groundbreaking medical and surgical technology such as the Expeditionary Medical Refrigeration Unit (EMRU), Portable Ruggedized Energy Efficient Medical Sterilizer (PREEMS), and Foldable High-G Resistant Patient Litter (FHGRPL) to transition to procurement and delivery. The aforementioned AMALs, medical kits and transitioning equipment provide USMC Health Service Support Forces with medical/surgical equipment materiel required to support OPLAN requirements, treat patients in a contested field environment and supports a Range of Military Operations (ROMO). Increase of \$13.675M from FY 2022 to FY 2023 reflects Force Design 2030 driven modernization efforts consisting of (1) ERCS AMAL upgrades and (2) initial procurement and fielding of the EMRU. Increase also includes completion of planned FY 2022 AMAL Modernization procurements for the FRSS, Digital X-Ray and PrevMed in FY 2022 and the STP in FY 2023. FY 2023 funding aligns with the scheduled AMAL review cycle and will support Joint/USMC ROMO.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3									P-1 Line Item Number / Title: 6522 / Field Medical Equipment						Aggregated Items Title: Field Medical Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Family of Field Medical Equipment																				
1.1) Authorized Medical Allowance List (AMAL) - Equipment ⁽¹⁾	A		-	-	17.203	-	-	1.965	-	-	2.580	-	-	1.940	-	-	-	-	-	1.940
1.2) Acute Care Ward Equipment	A		-	-	1.514	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) Laboratory - Equipment ⁽²⁾	A		-	-	1.249	-	-	-	-	-	-	-	-	2.131	-	-	-	-	-	2.131
1.4) En Route Care System (ERCS) - Equipment ⁽³⁾	A		-	-	7.500	-	-	-	-	-	-	-	-	12.205	-	-	-	-	-	12.205
1.5) Field Dental Operator - ADAL Equipment	A		-	-	0.564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) Short Range Casualty Evacuation (CASEVAC) - Equipment	A		-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.7) Forward Resuscitative Surgery System (FRSS) - Equipment ⁽⁴⁾	A		-	-	6.500	-	-	2.222	-	-	1.060	-	-	1.167	-	-	-	-	-	1.167
1.8) Shock Trauma Platoon (STP) - Equipment ⁽⁵⁾	A		-	-	1.591	-	-	-	-	-	3.565	-	-	2.747	-	-	-	-	-	2.747
1.9) Preventative Medicine - Equipment ⁽⁶⁾	A		-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	-	-	-	-
1.10) Battalion Aid Station (BAS) - Equipment ⁽⁷⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.971	-	-	-	-	-	0.971
1.11) Sick Call AMAL- Equipment ⁽⁸⁾	A		-	-	-	-	-	-	-	-	-	-	-	0.619	-	-	-	-	-	0.619
1.12) Digital Radiography Equipment ⁽⁹⁾	A		-	-	-	-	-	-	-	-	0.700	-	-	-	-	-	-	-	-	-
Subtotal: 1) Family of Field Medical Equipment			-	-	36.621	-	-	4.187	-	-	8.105	-	-	21.780	-	-	-	-	-	21.780
Total			-	-	36.621	-	-	4.187	-	-	8.105	-	-	21.780	-	-	-	-	-	21.780
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
Footnotes:																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3	P-1 Line Item Number / Title: 6522 / Field Medical Equipment	Aggregated Items Title: Field Medical Equipment
⁽¹⁾ Decrease in funding of \$0.640 from FY22 to FY23 aligns with quantity and cost for the Force Design 2030 delivery of the newly developed light-weight and energy efficient EMRU which will replace the current outdated legacy refrigeration unit (AccuTemp HemaCool), Decrease also aligns with the scheduled Authorized Medical Allowance List (AMAL) Review cycle. ⁽²⁾ Increase in funding of \$2.131M from FY222 to FY23 aligns with the Force Design 2030 delivery of the newly developed light-weight and energy efficient EMRU which will replace the current outdated legacy refrigeration unit (AccuTemp HemaCool). Funding increase also aligns with the scheduled FY23 Authorized Medical Allowance List (AMAL) review cycle for Laboratory Equipment. ⁽³⁾ FY23 funding increase of \$12.205M aligns with Force Design 2030 modernization of the ERCS AMAL, upgrading to the new more capable version of the integrated portable ICU (Portable Patient Transport Life Support System (PPTLSS)/ Mobile Oxygen Ventilation Exchange System (MOVES SLC)). ⁽⁴⁾ Increase in funding of \$0.107M from FY22 to FY23 aligns with Force Design 2030 delivery of the newly developed light-weight and energy efficient EMRU which will replace the current outdated legacy refrigeration unit (AccuTemp HemaCool) in the FRSS AMAL. ⁽⁵⁾ Decrease in funding of \$0.818M from FY22 to FY23 aligns with quantity and cost for the Force Design 2030 delivery of the newly developed light-weight and energy efficient EMRU which will replace the current outdated legacy refrigeration unit (AccuTemp HemaCool) and to finalize the Shock Trauma Platoon (STP) modernization. ⁽⁶⁾ Decrease in funding of \$0.200M from FY22 to FY23 aligns with the Preventative Medicine AMAL Review cycle with next modernization to be procured in FY26 and FY27. ⁽⁷⁾ Increase in funding of \$0.971M from FY22 to FY23 aligns with the scheduled FY23 Authorized Medical Allowance List (AMAL) review cycle for the Battalion Aid Station (BAS). ⁽⁸⁾ Increase in funding of \$0.619M from FY22 to FY23 aligns with the scheduled FY23 Authorized Medical Allowance List (AMAL) review cycle for the Sick Call. ⁽⁹⁾ Decrease in funding of \$0.700M from FY22 to FY23 aligns with the Digital Radiography Review cycle with next modernization to be procured in FY27.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							P-1 Line Item Number / Title: 6532 / Training Devices					
ID Code (A=Service Ready, B=Not Service Ready): B				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,186.679	82.367	31.638	86.272	0.000	86.272	90.183	95.984	88.306	67.142	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,186.679	82.367	31.638	86.272	0.000	86.272	90.183	95.984	88.306	67.142	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	1,186.679	82.367	31.638	86.272	0.000	86.272	90.183	95.984	88.306	67.142	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Combined Arms Command and Control Trainer Upgrade System (CACCTUS) is a constructive training system providing a scenario driven, simulated environment in which Marines can practice the teamwork required to command, control and coordinate the use of supporting arms. CACCTUS supports training of Combined Arms Techniques, Tactics and Procedures (TTPs) for all elements of the Marine Air Ground Task Force (MAGTF), from individual Fire Support Team (FiST) up to and including the Marine Expeditionary Brigade (MEB). This immersive environment integrates deployed C4I systems, provides 2D and 3D visuals, communication elements and After Action Review (AAR) capability. CACCTUS is composed of Government off-the shelf (GOTS), Commercial off-the shelf (COTS), and Non-Developmental Item (NDI) hardware and software. Procurement activities include new technology insertion/updates or refresh, system fielding's and installation service.

Command and Control Training and Education Center of Excellence (C2 TECOE) supports the five (5) MAGTF Integrated Systems Training Centers (MISTCs). The MISTCs, under the operational control of the Command and Control (C2) Training and Education Center of Excellence (TECOE), are the primary C2 training venues for the Marine Corps operating forces for both individual and collective C2 systems sustainment training. The yearly funding is for equipment refresh and procurement of new training systems. A portion of the C2 computer systems are replaced each year to provide current systems for classroom and combat operation training in battle staff training for commanders and unit personnel.

Deployable Virtual Training Environment (DVTE) is a laptop PC based simulation system capable of emulating organic and supporting Infantry Battalion weapons systems and training scenarios to facilitate Training and Readiness (T&R) based training, currently being fielded at the Battalion level. Its portable configuration allows Marines to train when they otherwise could not; aboard ship, at remote reserve locations and deployed. DVTE conducts multiple types of training such as language and culture training, platoon and squad level tactics, employment of supporting arms, and various Recognition of Combatants (ROC) packages. DVTE is part of a Commander's "training toolkit" contributing to the building block approach to standards based training focusing on achieving an improved level of combat readiness. Funding supports hardware refresh and integration/interoperability capabilities with operational forces' systems.

Force on Force Training Systems (FoFTS) provides realistic, non-live fire capabilities to perform Force on Force training using Personnel, Combat Vehicle, and Weapons Surrogates devices as part of a suite of tactical engagement capabilities that enhance training around the world and across the range of military operations. The program includes tactical training systems such as the Special Effects Small Arms Marking System (SESAMS) and advanced, instrumented, laser-based tactical engagement systems such as the FoFTS-Next that provide realistic weapons effects, position locating, and enhanced After Action Review (AAR) capability to support Live-Virtual-Constructive (LVC) events in the MAGTF Training Program curriculum. Aligning with two of the Priority Focus Areas of the Commandant's Planning Guidance (CPG): Force Design and Education and Training, this program is critical to enabling Marines to train in a realistic Force on Force environment in lieu of live-fire training and allows for training against a peer/ near peer threat in a more authentic, multisensory environment. Additionally, improvement of training realism through Force on Force training capabilities is a Line of Effort in the Marine Corps Range Training Area Management Campaign Plan, developed by the Marine Corps Combat Development Command (MCCDC) to address the specific challenges articulated in the CPG. To that end, the program's production

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		P-1 Line Item Number / Title: 6532 / Training Devices
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206623M
Line Item MDAP/MAIS Code: N/A		
and fielding of the FoFTS-Next Marine Corps Tactical Instrumentation System - Personnel (MCTIS-P) comprises a complete replacement and increased capability of the in-service I-TESS II system. Additionally, through integration of combat vehicle (MCTIS-V) and weapons surrogates (MCTIS-WS) capabilities, the FoFTS-Next program will field an entirely new realistic and immersive Force on Force training capability. Funding supports procurement of FoFTS-Next MCTIS-P, MCTIS-V, and enhanced networking capability to provide a more robust and comprehensive AAR. The program is on schedule to achieve initial operational capability (IOC) by FY 2024 and FOC by FY 2026. Family of Combat Vehicle Training System (FCVTS) consists of the active duty Marine Corps' Combat Convoy Simulator (CCS) and the Combat Vehicle Training Systems (CVTS) which include the Advanced Gunnery Training System (AGTS) for the Light Armored Vehicle-25 (LAV-25) and the Amphibious Assault Vehicle Turret Trainer (AAV-TT). The CCS provides an immersive training environment in which Marines exercise combat skills including tactics, techniques and procedures for vehicle convoy operations in a variety of simulated road, terrain, weather, visibility and operational conditions. Tactical scenarios include weapons usage, target engagement, driver evasive action, vehicle coordination command and control procedures, Improvised Explosive Device (IED) defeat, and calls for fire, close air support and medical evacuation. The CVTS provides full-fidelity, computer-based training systems for the Light Armored Vehicle (LAV) 25 and the Amphibious Assault Vehicle (AAV) vehicles. It provides full crew training without the need for fuel, ammuniton, training areas and ranges. Training systems can be linked together allowing for section and platoon level training. Procurement funding supports technology refresh. Family of Egress Trainers (FET) is comprised of Underwater Egress Training (UET) and Dry Rollover Egress Training (DRET). UET consists of the Modular Amphibious Egress Trainer (MAET), a modular training device designed to train Marines to egress a downed aircraft; the Submerged Vehicle Egress Trainer (SVET), designed to train egress from ground tactical vehicles; and the Shallow Water Egress Trainer (SWET), a procedural trainer used prior to SVET and MAET. The trainers and associated training programs are contractor conducted. The program is directed toward non-air crew passengers aboard these vehicles. DRET is comprised of the HMMWV Egress Trainer (HEAT), MRAP Egress Trainer (MET) and JLTV Egress Trainer (JET). All of these devices have the ability to train egress principles that can be applied to increase survivability during a catastrophic event. This type of training can only be conducted by the use of simulation. Indoor Simulated Marksmanship Trainer (ISMT) is a three dimensional simulation based trainer for indoor use, capable of instructing in basic and advanced marksmanship, shoot/no-shoot judgment, combat marksmanship, and weapons employment tactics. The ISMT is used for remedial, virtual instruction to augment live fire upon simulated targets with an indication of the rounds fired. The ISMT systems are used both within the continental United States (CONUS) and Outside CONUS (OCONUS). The system has five (5) firing positions and is capable of operating simulated weapons such as AT4, M2 .50 Cal, M9, M16A4, M16A2 Fully Sensored, M240B, M203, MK19, M249 SAW, M870 12 gauge shotgun, SMAW, M224 60mm Mortar, M252 81mm Mortar, M4A1, Joint Services Combat Shotgun (JSCS), M27 Infantry Automatic Rifle (IAR), M32 Multi-shot Grenade Launcher, and the M72 Light Anti-Armor Weapon (LAW). Marine Air Ground Task Force (MAGTF) Tactical Warfare Simulation (MTWS) is the Marine Corps' only constructive, aggregate-level simulation system used to support the training of Marine commanders and their battle staffs in MAGTF war-fighting principles/concepts and associated command and control procedures. Using complex computer-simulated behavior models, MTWS provides an interactive, decision-based, real-time, war game representing the six war-fighting functional areas of fires, command and control, force protection, logistics, maneuver, and intelligence. It's modeling breadth and flexibility enables users to represent and exercise a wide variety of combat scenarios to prepare leaders to face the military challenges of today's world. MTWS is designed to support the training of commanders and their staffs in exercises involving live and simulated land, air, and naval forces at all operational command levels. The system supports all levels of command throughout the MEF and Joint Task Force (JTF). MTWS can be used as a multi-sided war game, including red, blue, civilian, and non-aligned sides. The system can also be used to validate specific operational plans against a variety of enemy and environmental situations. Thus command personnel may examine alternative tactical solutions on a "what if" basis. Marine Corps Distance Learning (MCDL) program provides the MarineNet E-Learning Infrastructure that enables Marines to receive training and education via interactive media, when and where training is needed. Distance Learning contributes to the Marine Corps' operational readiness by providing Marines with access to required Military Occupational Specialty (MOS), common skills training, and Professional Military Education (PME) training at 40 Learning Resource Centers (LRCs) located at Marine Corps bases and stations both CONUS and OCONUS. Ranges and Training Area Management (RTAM) modernizes major USMC base and station live training ranges to provide enhanced after action review with ground truth feedback, realistic representation of Opposing Forces (OPFOR) and enhanced range and exercise command and control capabilities. Integrating live and simulated training technologies, the fielded capabilities enhance live-fire, force-on-target, GUAM initiatives, and force-on-force training. Major system components of modernization include Combat Training Environment (CTE) facilities, Tactical Video Capture System (TVCS), inter-active targeting, battlefield effects simulators, individual and vehicle tracking systems, aviation tracking systems, Tactical Engagement Simulation Systems, simulated munitions, integrated simulation, and range control and exercise control information processing and situational awareness displays. Training is required to support the complexities of command and control, and live-fire coordination in support of maneuver of units at and above company level. Deploying operational units need access to instrumented, non live-fire and live-fire capable CTE training facilities, urban sniper training capabilities, convoy operation/reaction course		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		P-1 Line Item Number / Title: 6532 / Training Devices
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206623M
Line Item MDAP/MAIS Code: N/A		
capability, Urban Close Air Support (CAS) ranges, and IED/EOD training capability in order to accomplish this training and bring the Marine Corps into the 21st century, to include a fully Immersive Infantry Trainer (IIT). These capabilities give deploying units the opportunity to better meet training requirements before exercising as a MAGTF and deploying to the combat theaters. Additionally lessons learned from current operations are driving the need for new training systems supporting a seamless training environment allowing crucial core capabilities to be available for all Marines at all sites at once. Supporting Arms Virtual Trainer (SAVT) will advance the training capability, operational readiness, and tactical proficiency of USMC Joint Terminal Attack Controllers (JTACS), Forward Observers (FOs), and Forward Air Controllers (FACs). The personnel will use training scenarios that require the placement of simulated tactical ordnance on selected targets using Joint Close Air Support (JCAS) procedures and observed fire procedures for Naval Surface Fire Support (NSFS), artillery and mortar fire to perform destruction, neutralization, suppression, illumination/coordinated illumination, interdiction and harassment fire missions. Immersive Training Range Support (ITRS) will provide II Marine Expeditionary Force (MEF) an outdoor Infantry Immersion Trainer (IIT) that will consist of small unit training ranges with urban structures finished and decorated to replicate geo-specific locations paired with integrated direct fire training systems, virtual simulation screens, and video instrumentation for after action review. The outdoor training environments closely replicate current operational threats by stimulating all senses to stress small unit actions and the small unit leader's tactical, moral, and ethical decision making within the context of operational culture. IIT provides the capability for small-unit rehearsal training and squad leader decision making for assessment and measurement. The immersive training environment seeks to suspend disbelief by closely replicating the actual operating environment, including realistic battlefield friendly and enemy effects to the level of fidelity that the perceived difference between the actual operational environment and immersive training environment is nearly indistinguishable to the training audience. This high-level of battlefield realism provides training exposure to operational complexities, mental and physical stressors, and tactical and ethical decision-making in a culturally accurate, threat accurate, and interactive environment. Training Simulation Support (TSS) supports Live, Virtual, Constructive (LVC) Training Environment (TE) is a software intensive system that will provide enterprise services to execute a persistent, consistent, collective training capability by the connections/interoperability of legacy Marine Corps training systems. LVC-TE supports training exercises from Company through Marine Expeditionary Forces (MEF). Enterprise services and data will be configured and managed by the LVC-TE program. These services include: Exercise Design Tool (EDT), Exercise Control Tool (ECT), After Action Review (AAR) Tool, Cross Domain Solution (CDS) (where appropriate), Data Repository and Simulation Infrastructure Translation Services. Other efforts include leader focused decision games and Enterprise Ground Maintenance Training Systems. Procurement activities include system fielding's and installation services. United States Marine Corps Operator Driver Simulator (USMC ODS) is a computer based operator driving simulator used to provide entry and sustainment level driver training for Protected Mobility/ Enhanced Maneuver and Close Combat Lethality, and FY 2020 Budget Priority to Modernize in the Land Domain. In keeping with modernizing the Land Domain, Marine Common Driver Trainers (MCDT) are being procured to replace the obsolete ODS simulators that will be out of service, leaving MCDT as the only driver simulator in the Marine Corps. This effort affects over 11,100 students annually and their ability to get mandated driving time during their instruction plus more than 60,000 incidental and professional drivers throughout the USMC. This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the details above.		

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Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property					P-1 Line Item Number / Title: 6532 / Training Devices					
ID Code (A=Service Ready, B=Not Service Ready): B			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Training Devices				- / 1,186.679	- / 82.367	- / 31.638	- / 86.272	- / -	- / 86.272
P-40	Total Gross/Weapon System Cost				- / 1,186.679	- / 82.367	- / 31.638	- / 86.272	- / 0.000	- / 86.272
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$86.272M

Combined Arms Command and Control Trainer Upgrade System (CACCTUS): \$0.000M. The decrease of \$1.754M from FY 2022 to FY 2023 is due to reprioritization in support of higher priority Marine Corps requirements.

Command and Control Training and Education Center of Excellence (C2 TECOE): \$0.399M will provide the procurement funding support for equipment refresh and procurement of new training systems at the C2 TECOE and its five MAGTF Integrated Systems Training Centers (MISTCs). Decrease of \$0.068M from FY 2022 to FY 2023 due to a reduced requirement for equipment refresh.

Deployable Virtual Training Environment (DVTE): \$1.791M will provide procurement funding support for the new cycle phase of the technology hardware refresh of DVTE suites which will be accomplished over the next three years (2023 to 2025). Increase of \$1.091M from FY 2022 to FY 2023 is due to requirement to procure computer hardware for scheduled technology refresh.

Force on Force Training Systems (FoFTS)-Next: \$36.1286M - Increase of \$36.128M from FY 2022 to FY 2023 supports the procurement of FOFTS-Next Approved Acquisition Objective (AAO) across major Marine Corps installations including MAGTF-TC, Camp Pendleton, Camp Lejeune, Hawaii, Okinawa, and Quantico. This new capability will provide an improved, realistic and immersive Force on Force training solution to Marines and units as they execute service-level training events and enable individual and unit combat readiness in preparation for deployments.

Indoor Simulated Marksmanship Trainer (ISMT): \$1.964M procure the hardware refresh of simulated weapons to reflect concurrency of operational weapons to include AT4, M2 .50 Cal, M9,M16A4, M16A2 Fully Sensored, M240B, M203, MK19, M249 SAW, M870 12 gauge shotgun, SMAW, M224 60mm Mortar, M252 81mm Mortar, M4A1, Joint Services Combat Shotgun (JSCS), M27 Infantry Automatic Rifle (IAR), M32 Multi-Shot Grenade Launcher, M320 Grenade Launcher, M72 Light Anti-Armor Weapon (LAW), M3A1 Multi-Role Anti-Armor Anti-Personnel Weapons System (MAAWS), and Advanced Small Arms Lethality Trainer (ASALT). A decrease of \$0.942M from FY 2022 to FY 2023 is due to reduction in the number of simulated weapons requiring refresh.

Marine Air Ground Task Force (MAGTF) Tactical Warfare Simulation (MTWS): \$0.120M provides hardware refresh in accordance with component refresh cycle. Increase of \$0.003M from FY 2022 to FY 2023 is due to inflation.

Marine Corps Distance Learning (MCDL): \$0.299M will provide for updated testing and development equipment. The equipment provided allows the Digital Content Developer (DCD), the Professional Military Education (PME) program, and the E-Learning Ecosystem personnel to test on likely encountered equipment and develop on the latest platform to ensure features remain relevant.

Ranges and Training Area Management (RTAM): \$30.650M will provide Ranges and Training Area Management funding for continued Range Position Location Information (RPLI) System re-capitalization. Funds will allow for the procurement of training systems and devices that support multiple ranges at various locations such as inter-active targeting, CTE systems, battlefield effects simulators, individual and vehicle tracking systems, and aviation tracking systems for live fire and non-live fire training ranges at the MAGTFTC and home station commands, which is based on priorities established by Training & Education Command Range & Training Area Management division. Increase of \$26.310M from FY 2022 to FY 2023 is for range recapitalization efforts at multiple Marine Corps installations.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		P-1 Line Item Number / Title: 6532 / Training Devices
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206623M
Line Item MDAP/MAIS Code: N/A		
Immersive Training Range Support (ITRS): \$1.535M - Increase of \$1.535M from FY 2022 to FY 2023 allows for procurement of the Computer Generated Forces (CGF) solution currently in development. This Immersive Training Environment (ITE) capability is being designed to meet contemporary and future training requirements that adapt as changes occur in the operational environment with hardware and software CGF technology that will enable the USMC infantry team leader to reinforce decision-making skills and After Action Reporting for Commanders. The anticipated CGF solution will be able to create high fidelity simulations primarily Shoot no Shoot scenarios with the purpose to train Marines for the ever-changing realities of the 21st century. The anticipated CGF solution will also provide the building blocks for creating tactical simulations requiring more than one entity. The CGF is one of the Family of Systems (FoS) that provides realism within the ITE. This feature is a Key Performance Parameter for the ITE. CGF allows unites to conduct essential tasks in a replicated contemporary operating environment. A realistic environment sets the conditions to create both tactical and ethical dilemmas for the Marines. A realistic environment (live, augmented or virtual) and associated scenarios are integral to the successful creation of an ITE. Training Simulation Support (TSS): \$13.248M provides for the procurement of assets, fielding, installation services to support the training community at large and to provide enterprise services to execute a persistent, consistent, collective training capability by the connections/interoperability of legacy Marine Corps training systems. FY 2023 procurements include computer hardware, procurement of virtual software licenses, and auxiliary equipment in support of a minimum viable capability release (MVCR). Supporting procurements include hardware purchases for constituent systems to be interoperable. Increase of \$7.181M from FY 2022 to FY 2023 provides new technology updates to systems fielded in FY 2023 and procures initial systems for remaining locations. United States Marine Corps Operator Driver Simulator (USMC ODS): \$0.138M will provide technology hardware refresh. Decrease of \$15.149M from FY 2022 to FY 2023 is due to completion of Marine Common Driver Trainers (MCDT) replacement of the obsolete ODS simulators. The FY 2023 funding request was adjusted by \$20.986M to account for the availability of prior year execution balances.		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3						P-1 Line Item Number / Title: 6532 / Training Devices									Aggregated Items Title: Training Devices					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) CACCTUS																				
1.1) CACCTUS Lab Equipment/Hardware (1)	A		-	-	48.543	-	-	-	-	-	1.754	-	-	-	-	-	-	-	-	-
1.2) CACCTUS Peripherals	A		-	-	0.150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) CACCTUS Software Licenses	A		-	-	0.250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) CACCTUS Hardware Support Services			-	-	0.740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) CACCTUS NAVAIR Database Correlation	A		-	-	0.248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) CACCTUS			-	-	49.931	-	-	-	-	-	1.754	-	-	-	-	-	-	-	-	-
2) C2TECOE																				
2.1) C2TECOE - Lab Equipment			-	-	3.982	-	-	0.376	-	-	0.367	-	-	0.344	-	-	-	-	-	0.344
2.2) C2TECOE - Training Systems			-	-	1.181	-	-	0.100	-	-	0.100	-	-	0.055	-	-	-	-	-	0.055
Subtotal: 2) C2TECOE			-	-	5.163	-	-	0.476	-	-	0.467	-	-	0.399	-	-	-	-	-	0.399
3) DVTE																				
3.1) DVTE Phase III Hardware Refresh	A		-	-	1.270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2) DVTE Technical Refresh (2)			-	-	7.461	-	-	4.479	-	-	0.700	-	-	1.791	-	-	-	-	-	1.791
Subtotal: 3) DVTE			-	-	8.731	-	-	4.479	-	-	0.700	-	-	1.791	-	-	-	-	-	1.791
4) FoFTS																				
4.2) FoFTS-Next MCTIS-P Training Systems (3)	A		-	-	82.210	-	-	15.299	-	-	-	-	-	23.494	-	-	-	-	-	23.494
4.3) Barrel Kits (SESAMS/UTM Bolt)	A		-	-	1.155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.5) FoFTS-Next MCTIS-V Training System (4)	A		-	-	-	-	-	-	-	-	-	-	-	12.634	-	-	-	-	-	12.634
4.6) FoFTS ITESS	A		-	-	17.480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) FoFTS			-	-	100.845	-	-	15.299	-	-	-	-	-	36.128	-	-	-	-	-	36.128
5) Family of Combat Vehicle Training Sys (FCVTS)																				
5.1) CVTS Technical Refresh	A		-	-	21.000	-	-	18.758	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3						P-1 Line Item Number / Title: 6532 / Training Devices						Aggregated Items Title: Training Devices									
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
Subtotal: 5) Family of Combat Vehicle Training Sys (FCVTS)			-	-	21.000	-	-	18.758	-	-	-	-	-	-	-	-	-	-	-	-	
7) ISMT																					
7.1) Modify/Alter ISMT space aboard LPD17 Class platform	A		-	-	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7.2) ISMT Hardware Refresh (multiple locations and configurations) ⁽⁵⁾	A		-	-	31.660	-	-	6.457	-	-	2.906	-	-	1.964	-	-	-	-	-	1.964	
7.3) ISMT Hardware Labor Support			-	-	0.190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7.4) ISMT Hardware Contractor Logistics Support			-	-	0.239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 7) ISMT			-	-	32.289	-	-	6.457	-	-	2.906	-	-	1.964	-	-	-	-	-	1.964	
8) MTWS																					
8.1) MTWS Hardware and Software Refresh	A		-	-	1.311	-	-	-	-	-	0.117	-	-	0.120	-	-	-	-	-	0.120	
Subtotal: 8) MTWS			-	-	1.311	-	-	-	-	-	0.117	-	-	0.120	-	-	-	-	-	0.120	
9) MCDL																					
9.1) MCDL NAVAIR - Support ⁽⁶⁾			-	-	3.226	-	-	1.740	-	-	-	-	-	0.299	-	-	-	-	-	0.299	
9.2) MCDL MITRE Test Programs	A		-	-	0.858	-	-	0.938	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 9) MCDL			-	-	4.084	-	-	2.678	-	-	-	-	-	0.299	-	-	-	-	-	0.299	
10) Ranges and Training Area Management ⁽⁷⁾																					
10.1) RTAM Multiple Instrum, CTE, Targetry and BES TNG SYS and Range Re-Cap ⁽⁸⁾			-	-	358.334	-	-	8.363	-	-	-	-	-	25.600	-	-	-	-	-	25.600	
10.2) Simulated Weapon Systems (MK19 & M41)	A		-	-	2.721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10.3) RTAM Support ⁽⁹⁾			-	-	2.403	-	-	0.343	-	-	0.364	-	-	0.383	-	-	-	-	-	0.383	
10.4) IRSS/RPLI Re-Capitalization ⁽¹⁰⁾	A		-	-	9.863	-	-	5.089	-	-	3.976	-	-	4.667	-	-	-	-	-	4.667	
10.5) GUAM Targets & Instrumentation	A		-	-	13.416	-	-	7.223	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 10) Ranges and Training Area Management			-	-	386.737	-	-	21.018	-	-	4.340	-	-	30.650	-	-	-	-	-	30.650	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy																Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3									P-1 Line Item Number / Title: 6532 / Training Devices							Aggregated Items Title: Training Devices					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	
11) SAVT																					
11.1) SAVT Hardware Refresh	A		-	-	9.377	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11.2) SAVT Hardware Refresh Labor Support/CLS			-	-	0.794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11.3) SAVT - Post Deployment Software Support			-	-	1.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 11) SAVT			-	-	11.371	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12) IMMERSIVE TRAINING RANGE SUPPORT (ITRS)																					
12.1) Immersive Training Environment (11)	A		-	-	-	-	-	-	-	-	-	-	-	1.535	-	-	-	-	-	1.535	
12.3) ITRS CLNC OIIT NAVFAC Training Sys Equipment Tasks	B		-	-	28.534	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 12) IMMERSIVE TRAINING RANGE SUPPORT (ITRS)			-	-	28.534	-	-	-	-	-	-	-	-	1.535	-	-	-	-	-	1.535	
13) TRAINING SIMULATION SUPPORT (TSS)																					
13.1) Live, Virtual, Constructive (LVC) hardware and supporting equipment (12)	A		-	-	13.781	-	-	-	-	-	6.067	-	-	13.248	-	-	-	-	-	13.248	
Subtotal: 13) TRAINING SIMULATION SUPPORT (TSS)			-	-	13.781	-	-	-	-	-	6.067	-	-	13.248	-	-	-	-	-	13.248	
14) USMC ODS																					
14.1) USMC ODS Training System Hardware (13)	A		-	-	23.898	-	-	13.202	-	-	15.287	-	-	0.138	-	-	-	-	-	0.138	
Subtotal: 14) USMC ODS			-	-	23.898	-	-	13.202	-	-	15.287	-	-	0.138	-	-	-	-	-	0.138	
15) Prior Years Cumulative Funding																					
15.1) Other Prior Year			-	-	499.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 15) Prior Years Cumulative Funding			-	-	499.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	1,186.679	-	-	82.367	-	-	31.638	-	-	86.272	-	-	-	-	-	86.272	
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																					
Footnotes:																					
(1) The decrease of \$1.754M from FY 2022 to FY 2023 is due to reprioritization in support of higher priority Marine Corps requirements.																					

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3	P-1 Line Item Number / Title: 6532 / Training Devices	Aggregated Items Title: Training Devices
⁽²⁾ Increase of \$1.091M from FY 2022 to FY 2023 is due to requirement to procure computer hardware for scheduled technology refresh. ⁽³⁾ Increase of \$23.494M from FY 2022 to FY 2023 supports the procurement of FOFTS-Next Approved Acquisition Objective (AAO) across major Marine Corps installations including MAGTF-TC, Camp Pendleton, Camp Lejeune, Hawaii, Okinawa, and Quantico. ⁽⁴⁾ Increase of \$12.634M from FY 2022 to FY 2023 supports the procurement of FOFTS-Next Approved Acquisition Objective (AAO) across major Marine Corps installations including MAGTF-TC, Camp Pendleton, Camp Lejeune, Hawaii, Okinawa, and Quantico. ⁽⁵⁾ The decrease of \$0.942M from FY 2022 to FY 2023 is due to reduction in the number of simulated weapons requiring refresh. ⁽⁶⁾ Increase of \$0.299M from FY 2022 to FY 2023 will provide for updated testing and development equipment. The equipment provided allows the Digital Content Developer (DCD), the Professional Military Education (PME) program, and the E-Learning Ecosystem personnel to test on likely encountered equipment and develop on the latest platform to ensure features remain relevant. ⁽⁷⁾ RTAM: Increase of \$26.310M from FY 2022 to FY 2023 allows for range recapitalization efforts at multiple Marine Corps installations. ⁽⁸⁾ Increase of \$25.600M from FY 2022 to FY 2023 is for range recapitalization efforts at multiple Marine Corps installations. ⁽⁹⁾ The increase of \$0.019M from FY 2022 to FY 2023 is due to inflation. ⁽¹⁰⁾ Increase of \$0.691M from FY 2022 to FY 2023 is for range recapitalization and upgrade to the IRSS systems at multiple Marine Corps installations. ⁽¹¹⁾ Increase of \$1.535M from FY 2022 to FY 2023 allows for procurement of the Computer Generated Forces (CGF) solution currently in development. ⁽¹²⁾ Increase of \$7.181M from FY 2022 to FY 2023 provides new technology updates to systems fielded in FY 2023 and procures initial systems for remaining locations. ⁽¹³⁾ Decrease of \$15.149M from FY 2022 to FY 2023 is due to completion of Marine Common Driver Trainers (MCDT) replacement of the obsolete ODS simulators.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							P-1 Line Item Number / Title: 6544 / Family of Construction Equipment					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: 0206624M, 0206315M, 0708542M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	335.644	22.284	39.638	27.605	0.000	27.605	29.859	31.825	47.465	48.188	-	582.508
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	335.644	22.284	39.638	27.605	0.000	27.605	29.859	31.825	47.465	48.188	-	582.508
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	335.644	22.284	39.638	27.605	0.000	27.605	29.859	31.825	47.465	48.188	-	582.508
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	0.052	0.058	0.058	-	0.058	0.059	0.059	0.060	0.062	Continuing	Continuing
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Description:												
Vital for Expeditionary Advanced Base Operations (EABO) and austere base establishment in the Littoral Operations in Contested Environments (LOCE) and Indo-Pacific, the Family of Construction Equipment (FCE) consist of two lines of equipment sets that encompass the Family of Material Handling line and Family of Construction Equipment that provides for the replacement and Service Life Extension Program (SLEP) of Marine Corps Material Handling and Construction Equipment. Funding supports the operating forces in constructing Littoral Transition Points (LTPs), beach preparation and shaping, foundational site preparation for weapons system employment, blazing combat trails, airfield & V/STOL pad installation, building fuel berms, Force Protection, and conducting logistic support missions. This equipment supports constructing counter-mobility obstacles, building pioneer roads, establishing survivability positions for critical Force Design Air Defense Systems, the development of expeditionary airfields and general engineering support to forward operating bases and lodgment areas. Family of Construction Equipment includes Airfield Damage Repair (ADR) Kit, High Mobility Engineer Excavator (HMEE), which is a self-deployable excavation system with attachments to execute a wide range of mobility, counter-mobility, and general engineering and survivability missions. The line also includes the Medium Crawler Tractor (MCT), Backhoe Loader (BHL), Multi-Terrain Loader (MTL), Survey System, Grade Control System, D6K Dozer, 120M Road Grader, 621G Wheeled Scraper Tractor, Engineer Equipment Trailer, Trailer mounted 260 CFM compressor with multiple work tools, Mobile Welding Unit, and Family of Foreign Object Damage Mitigation Equipment (F2ME), which will provide the capability to identify and remove debris from airfields. Future programs include BHL, MTL replacement and MCT SLEP/ replacement. Family of Material Handling Equipment (FMHE) line provides light to heavy logistics lift support. FMHE is employed in Expeditionary Advanced Base Operations (EABO) forward port, beach and logistics hubs during Littoral Operations in Contested Environment (LOCE). Funding supports the replacement and cost saving Service Life Extension Programs (SLEP) for Marine Corps FMHE such as; forklifts, cranes, and container handlers. This budget line item also includes funding for equipment such as the Light Capability Rough Terrain Forklift (LCRTF), Hydraulic Excavator (HYEX), Extendable Boom Forklift Modernization (EBFL-M), Rough Terrain Container Handler (RTCH) SLEP, All-Terrain Crane (ATC) SLEP and the Tractor, Rubber Tires, and Articulated Steering, Multiple Purpose (TRAM) SLEP. The diverse equipment set in the FMHE line permits continuous support in various environments to include helicopter and airfield cargo support operations. Future programs would encompass Extendable Boom Forklift Replacement, Light Capability Rough Terrain Forklift Replacement and Tractor Rubber Tire, Articulated Steering, Multi-Purpose (SLEP or Replacement) Command Support Equipment - Funds life cycle replacement of industrial equipment and systems with unit cost of \$250K or greater to support the operations and mission of United States Marine Corps ground bases, air stations and districts. Examples include equipment such as open water spill equipment, warehouse conveyor systems, power generators and recycling systems. Beginning in FY 2021, Command Support Equipment is realigned from BLI 6544 Family of Construction Equipment to BLI 6438 Physical Security Equipment.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		P-1 Line Item Number / Title: 6544 / Family of Construction Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206624M, 0206315M, 0708542M
Line Item MDAP/MAIS Code: N/A		

Garrison Mobile Engineer Equipment (GMEE) - The Garrison Mobile Engineering Equipment (GMEE) program is a centrally-managed program for the procurement of commercial construction and engineering equipment such as graders, backhoes, cranes and other construction equipment. It provides logistical support for facilities and road maintenance, force protection barrier construction and airfield engineering.

Material Handling Equipment (MHE) - The Material Handling Equipment (MHE) program is a centrally-managed program for the procurement of a portfolio of replacement equipment such as forklifts, warehouse cranes and platform trucks.

Garrison Transportation and Management - The Garrison Transportation and Management is a centrally managed program that procures and replaces existing beyond service life, commercial construction and engineering equipment as well as material handling equipment at Marine Corps bases and installations. These are Commercial Off the Shelf (COTS) vehicles and equipment that are safer, reliable and more efficient. Vehicles and equipment include but not limited to warehouse tractors, narrow aisle forklifts, warehouse cranes and platform trucks and container handlers, tractors, road and runway sweepers, loaders, excavators, bulldozers, and scrapers. The Garrison Transportation and Management program provides logistical support for facilities, road maintenance, force protection barrier construction as well as airfield engineering. Starting in FY 2022, GMEE and MHE have been consolidated under BLI 6544 in Garrison Transportation and Management.

Secondary Distribution		FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	22.284	37.240	25.058	-	25.058	27.249	29.163	44.784	45.457
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	2.398	2.547	-	2.547	2.610	2.662	2.681	2.731
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	22.284	39.638	27.605	-	27.605	29.859	31.825	47.465	48.188

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property						P-1 Line Item Number / Title: 6544 / Family of Construction Equipment				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M, 0206315M, 0708542M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Family of Construction Equipment				- / 335.644	- / 22.284	- / 39.638	- / 27.605	- / -	- / 27.605
P-40	Total Gross/Weapon System Cost				- / 335.644	- / 22.284	- / 39.638	- / 27.605	- / 0.000	- / 27.605
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023: \$27.605M (ACTIVE \$25.058M; RESERVE \$2.547M) Family of Construction Equipment - \$8.188M (ACTIVE \$6.701M; RESERVE \$1.487M): Increase from FY 2022 to FY 2023 of \$0.791M Support the Family of Foreign Object Damage Mitigation Equipment (F2ME), the replacement of the aged and readiness plagued Multi-Terrain Loader and the Laser Leveling System hardware refresh. The F2ME provides a debris mitigation system capable of removing or relocating foreign objects from aircraft operating surfaces at Forward Operating Bases and CONUS/OCONUS aviation training sites. Due a capability change in the F2ME program, resources realized in FY 2022 has resulted in funds to support programs that were initially pushed further out in the FYDP. Family of Material Handling Equipment - \$8.632M (ACTIVE \$7.572M; RESERVE \$1.060M): Currently, funds support the cost saving Service Life Extension Program of the All-Terrain Crane (ATC-MAC-50) and Rough Terrain Container Handler (RTCH) for modernization efforts that are now and will continue to support operations and the evolving mission of the Fleet Marine Force (FMF) in EABO and LOCE actions. A decrease of \$5.407M from FY 2022 to FY 2023 for the Rough Terrain Container Handler (RTCH) SLEP reflects the one time, FY 2022 congressional add of \$4.980M, and a decrease in procurement quantities for the RTCH. This funding will ensure the critical continuation of the production line for both systems. Garrison Transportation and Management - \$10.785M: Funding will replace existing, beyond service life, Commercial Off the Shelf (COTS) vehicles and equipment across Marine Corps Installations worldwide with safer, more fuel efficient civil engineer equipment including, but not limited to (2) Asphalts, (1) Bulldozer Flywheel, (60) Forklifts, (8) Loaders, (1) Platform Hydraulics, (6) Sweepers, and (28) Tractors.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3						P-1 Line Item Number / Title: 6544 / Family of Construction Equipment									Aggregated Items Title: Family of Construction Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Family of Construction Equipment																				
1.1) Laser Leveling System ⁽¹⁾	A		-	-	24.207	-	-	-	-	-	-	-	-	0.420	-	-	-	-	-	0.420
1.2) High Mobility Engineer Excavator (HMEE)	A		-	-	19.464	-	-	1.225	-	-	-	-	-	-	-	-	-	-	-	-
1.3) High Mobility Engineer Excavator (HMEE)-Reserves	A		-	-	1.310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) Family of Foreign Object Damage (FOD) Mitigation Equipment (F2ME) ⁽²⁾	A		-	-	-	-	-	-	-	-	6.042	-	-	2.013	-	-	-	-	-	2.013
1.5) FOD F2ME-Reserves ⁽³⁾	A		-	-	-	-	-	-	-	-	1.355	-	-	1.487	-	-	-	-	-	1.487
1.8) Multi-Terrain Loader Replacement (MTL-R) ⁽⁴⁾	A		-	-	-	-	-	-	-	-	-	-	-	4.268	-	-	-	-	-	4.268
1.10) Prior Years Cumulative Funding	A		-	-	197.307	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Family of Construction Equipment			-	-	242.288	-	-	1.225	-	-	7.397	-	-	8.188	-	-	-	-	-	8.188
2) Family of Material Handling Equipment																				
2.1) Rough Terrain Container Handler SLEP ⁽⁵⁾	A		-	-	15.226	-	-	9.970	-	-	10.477	-	-	5.070	-	-	-	-	-	5.070
2.2) All-Terrain Crane 50 Ton SLEP ⁽⁶⁾	A		-	-	32.491	-	-	4.641	-	-	9.743	-	-	2.502	-	-	-	-	-	2.502
2.3) All-Terrain Crane 50 Ton SLEP-Reserves ⁽⁷⁾	A		-	-	1.003	-	-	-	-	-	1.043	-	-	1.060	-	-	-	-	-	1.060
Subtotal: 2) Family of Material Handling Equipment			-	-	48.720	-	-	14.611	-	-	21.263	-	-	8.632	-	-	-	-	-	8.632
3) Garrison Mobile Engineering Equipment																				
3.1) Garrison Mobile Engineering Equipment	A		-	-	25.810	-	-	4.361	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Garrison Mobile Engineering Equipment			-	-	25.810	-	-	4.361	-	-	-	-	-	-	-	-	-	-	-	-
4) Material Handling Equipment																				
4.1) Material Handling Equipment	A		-	-	7.197	-	-	2.087	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3							P-1 Line Item Number / Title: 6544 / Family of Construction Equipment								Aggregated Items Title: Family of Construction Equipment					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Subtotal: 4) Material Handling Equipment			-	-	7.197	-	-	2.087	-	-	-	-	-	-	-	-	-	-	-	-
5) Command Support Equipment																				
5.1) Command Support Equipment		A	-	-	11.629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) Command Support Equipment			-	-	11.629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6) Garrison Transportation and Management																				
6.1) Garrison Transportation and Management ⁽⁸⁾		A	-	-	-	-	-	-	-	-	10.978	-	-	10.785	-	-	-	-	-	10.785
Subtotal: 6) Garrison Transportation and Management			-	-	0.000	-	-	-	-	-	10.978	-	-	10.785	-	-	-	-	-	10.785
Total			-	-	335.644	-	-	22.284	-	-	39.638	-	-	27.605	-	-	-	-	-	27.605

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

- ⁽¹⁾ CE 1.1: The increase of \$0.420M from FY22 to FY23 is for a Laser Leveling System hardware refresh.
- ⁽²⁾ CE 1.4: Decrease of \$4.029M from FY22 to FY23 reflects decrease in planned capability in the Family of Foreign Object Damage (FOD) Mitigation Equipment (F2ME).
- ⁽³⁾ CE 1.5: An increase of \$0.132M from FY22 to FY23 is due to increased production quantities, unit cost and logistic support of the Family of Foreign Object Damage (FOD) Mitigation Equipment (F2ME) Reserves.
- ⁽⁴⁾ CE 1.8: Increase of \$4.268M from FY22 to FY23 supports the procurement of the Multi-Terrain Loader Replacement (MTL-R).
- ⁽⁵⁾ CE 2.1: A decrease of \$5.407M from FY22 to FY23 for the Rough Terrain Container Handler (RTCH) SLEP reflects the one time, FY22 Congressional add of \$4.980M, and a decrease in procurement quantities for the RTCH. This funding will ensure the critical continuation of the production line.
- ⁽⁶⁾ CE 2.2: Decrease of \$7.241M from FY22 to FY23 of the All-Terrain Crane 50 Ton SLEP- Active (ATC SLEP) reflects the prioritization of other Marine Corps priorities.
- ⁽⁷⁾ CE 2.3: Increase of \$0.017M from FY22 to FY23 of the All-Terrain Crane 50 Ton SLEP-Reserves and Active (ATC SLEP) reflects minor increase due to inflation rates for Non-Pay and Non-Fuel Purchases.
- ⁽⁸⁾ CE 6.1: The decrease of \$0.193M from FY 2022 to FY 2023 is due to changes in FY 2023 requirements for a bulldozer flywheel.

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	112.839	0.678	15.439	15.033	0.000	15.033	18.499	19.285	20.530	27.033	-	229.336
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	112.839	0.678	15.439	15.033	0.000	15.033	18.499	19.285	20.530	27.033	-	229.336
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	112.839	0.678	15.439	15.033	0.000	15.033	18.499	19.285	20.530	27.033	-	229.336
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: The Family of Ultra-light Tactical Vehicles (FULTV), which consists of the Utility Task Vehicle (UTV) and its replacement the Ultra-light Tactical Vehicle (ULTV), provides operational capabilities for infantry logistics, long-range surveillance, and reconnaissance missions in support of distributed airborne operations. The vehicles provide units with increased logistics support while reducing the combat load burden on the individual Marine, as well as providing casualty evacuation for wounded Marines. In addition, the FULTV fills a much needed capability gap in forward arming and refueling point (FARP) operations by enabling the Tactical Aviation Ground Refueling System (TAGRS) to rapidly establish refueling sites in austere locations. The vehicles are transportable in the MV-22 Tilt Rotary Wing aircraft, CH53E rotary wing aircraft and CH53F tilt selected rotary and fixed wing aircraft. The FULTV vehicles mitigate the infantry units, reconnaissance battalions, and wing support squadrons capability gaps, with the ability to operate in remote, rural regions where currently fielded ground mobility platforms may be unsuitable due to size, weight, and transportability concerns. The UTV is a part of the family of vehicles that supports the Fleet Marine Forces by providing infantry and reconnaissance battalions with a reliable, easily maintained, inexpensive vehicle that supports the range of military operations (ROMO) including distributed operations (DO), littoral operation in a contested environment (LOCE), expeditionary advanced based operations (EABO), and Humanitarian Assistance and Disaster Relief (HADR). Efforts are underway to replace the UTV with the Ultra-light Tactical Vehicle (ULTV). The replacement vehicle will leverage technology upgrades to improve operational capabilities. The desired outcomes from ULTV employment include, but are not limited to, a lighter, faster, more maneuverable, and more resilient force, with an increased ability to operate and be sustained in austere environments, reduced operational risk through a smaller logistics footprint and threat exposure, and an increased autonomy and tactical mobility, particularly at the company-level and below. The FULTV line item will provide for any safety related configuration changes of the fielded UTVs prior to replacement of the fleet by the ULTV. This hands-on method ensures proper in-service management and vehicle sustainment while allowing the program office to develop and implement improvements as needed to respond to evolving requirements of the Marine Corps that affect vehicle reliability, safety, availability and readiness. The ULTVs will begin to replace the UTVs in FY 2022. Safety and reliability modifications are planned throughout the life of the FULTV's to ensure maximum readiness as vehicles age.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property						P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206623M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	1 / Family of Internally Trans Veh (ITV)	P-5a, P-21			- / 112.839	- / 0.678	- / 15.439	- / 15.033	- / 0.000	- / 15.033
P-40	Total Gross/Weapon System Cost				- / 112.839	- / 0.678	- / 15.439	- / 15.033	- / 0.000	- / 15.033
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										

Justification:

FY 2023 Base Appropriation Request: \$15.033M

The FY 2023 funding supports the procurement of 122 ULTV's with associated integration kits, new equipment training for both operator and maintainer, engineering change proposals (ECPs), program support, as well as the interim contractor support for supply chain management until provisioning is complete and the program transitions to organic supply support. Force Design discussions include the ULTV due to the lightweight and agile capabilities this platform provides.

The decrease from FY 2022 to FY 2023 of \$0.406M is associated with the transition of the Operator New Equipment Training (OPNET), Field Level Maintenance New Equipment Training (FLMNET), and program support to the O&M appropriation.

The FY 2023 funding request was adjusted by \$0.295M to account for the availability of prior year execution balances.

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Exhibit P-5, Cost Analysis: PB 2023 Navy												Date: April 2022						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3						P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)						Item Number / Title [DODIC]: 1 / Family of Internally Trans Veh (ITV)						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				112.839		0.678		15.439		15.033		0.000		15.033				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				112.839		0.678		15.439		15.033		0.000		15.033				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				112.839		0.678		15.439		15.033		0.000		15.033				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		-		-		-				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
1.1.1) Prior years Cumulative Funding	-	-	111.442	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	111.442	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Flyaway Cost	-	-	111.442	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hardware Cost																		
Recurring Cost																		
2.1.2) UTV ECPs/ Modifications	-	-	1.397	-	-	0.678	-	-	-	-	-	-	-	-	-	-	-	-
2.1.3) ULTV Fielding, Equipment, Spares	-	-	-	-	-	-	-	-	0.370	-	-	0.309	-	-	-	-	-	0.309
2.1.4) ULTV Vehicles ^(t)	-	-	-	-	-	-	75,580.00	120	9.070	77,016.00	122	9.396	-	-	-	77,016.00	122	9.396
2.1.5) ULTV Kits	-	-	-	-	-	-	-	-	0.453	-	-	0.470	-	-	-	-	-	0.470
2.1.6) ULTV ECPs/ Modifications	-	-	-	-	-	-	-	-	0.660	-	-	0.673	-	-	-	-	-	0.673
Subtotal: Recurring Cost	-	-	1.397	-	-	0.678	-	-	10.553	-	-	10.848	-	-	-	-	-	10.848
Subtotal: Hardware Cost	-	-	1.397	-	-	0.678	-	-	10.553	-	-	10.848	-	-	-	-	-	10.848
Support Cost																		
3.1) ULTV Training	-	-	-	-	-	-	-	-	3.063	-	-	1.918	-	-	-	-	-	1.918
3.2) ULTV Program Support	-	-	-	-	-	-	-	-	0.766	-	-	0.468	-	-	-	-	-	0.468

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Exhibit P-5, Cost Analysis: PB 2023 Navy													Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3							P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)						Item Number / Title [DODIC]: 1 / Family of Internally Trans Veh (ITV)					
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
3.3) ULTV Interim Contractor Support	-	-	-	-	-	-	-	-	1.057	-	-	1.799	-	-	-	-	-	1.799
Subtotal: Support Cost	-	-	-	-	-	-	-	-	4.886	-	-	4.185	-	-	-	-	-	4.185
Gross/Weapon System Cost	-	-	112.839	-	-	0.678	-	-	15.439	-	-	15.033	-	-	0.000	-	-	15.033
Remarks: [Hardware] The ULTV is the planned replacement vehicle for the UTV in FY22. The FY23 funding supports the procurement of 122 ULTV's with associated integration kits, new equipment training for both operator and maintainer, ECPs, program support, as well as the interim contractor support for supply chain management until provisioning is complete and the program transitions to organic supply support. Force Design discussions include the ULTV due to the lightweight, agile capabilities this platform provides. [Support Cost] The decrease in the (\$.701) Support cost element is associated with the transition of the Operator New Equipment Training (OPNET), Field Level Maintenance New Equipment Training (FLMNET), and program support to the O&M appropriation. (†) indicates the presence of a P-5a																		

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy								Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3				P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)				Item Number / Title [DODIC]: 1 / Family of Internally Trans Veh (ITV)				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.4) ULTV Vehicles ^(†)		2022	Polaris Defense / Wyoming, MN	C / IDIQ	Wyoming	Apr 2022	Jul 2022	120	75,580.00	Y		Apr 2020
2.1.4) ULTV Vehicles ^(†)		2023	Polaris Defense / Wyoming, MN	C / IDIQ	Wyoming	Feb 2023	May 2023	122	77,016.00	N		

^(†) indicates the presence of a P-21

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3							P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)												Item Number / Title [DODIC]: 1 / Family of Internally Trans Veh (ITV)															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2022										Fiscal Year 2023													BALANCE				
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022										Calendar Year 2023																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P			
2.1.4) ULTV Vehicles																																		
	1	2022	NAVY	120	0	120	A -						-	-	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	0			
	1	2023	NAVY	122	0	122	A -															-	-	-	10	10	10	10	10	10	10	10	10	72
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy																			Date: April 2022																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3							P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)													Item Number / Title [DODIC]: 1 / Family of Internally Trans Veh (ITV)																
Cost Elements (Units in Each)							Fiscal Year 2024													Fiscal Year 2025													BALANCE			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024													Calendar Year 2025																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P						
2.1.4) ULTV Vehicles																																				
	1	2022	NAVY		120		120		0																											0
	1	2023	NAVY		122		50		72	10	10	10	10	10	11	11																				0
									O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 3					P-1 Line Item Number / Title: 6545 / Ultra-Light Tactical Vehicle (ULTV)				Item Number / Title [DODIC]: 1 / Family of Internally Trans Veh (ITV)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Polaris Defense - Wyoming, MN	1	3	720	3	1	3	4	3	1	3	4

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 4: Other Support							P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million					
ID Code (A=Service Ready, B=Not Service Ready): B				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	70.314	9.174	4.402	26.433	0.000	26.433	9.372	8.793	18.674	19.043	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	70.314	9.174	4.402	26.433	0.000	26.433	9.372	8.793	18.674	19.043	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	70.314	9.174	4.402	26.433	0.000	26.433	9.372	8.793	18.674	19.043	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:
This budget line item includes various procurements such as engineering efforts, engineering change proposals, modifications, and other related items less than \$5 million each.

Vital to maintaining readiness of fleet assets, the Corrosion Prevention and Control (CPAC) Program provides a comprehensive approach to extend the useful life on Marine Corps tactical ground and ground support equipment. An enabler to Force Design readiness, the CPAC Program Office is responsible for the governance, oversight and management of both preventive and corrective corrosion control on such systems as Joint Light Tactical Vehicle (JLTV), Ultra Light Tactical Vehicle (ULTV), Amphibious Combat Vehicle (ACV), Medium Tactical Vehicle Replacement (MTVR), Logistics Vehicle System Replacement (LVSr), encompasses Acquisition Engineering, Material Development, Corrosion Service Teams, and Corrosion Repair Facility activities. The Consolidated CPAC Program provides a total lifecycle solution focused on Total Ownership Cost reduction and improved readiness to enrich our capability to engage the enemy in saltwater and corrosive environments through the application materials to mitigate the effects of corrosion in order to enhance and enable our ability to operate in the Expeditionary Advanced Base Operations (EABO) and austere base establishment in the littorals Littoral Operations in Contested Environments (LOCE) and Indo-Pacific.

Marine Corps Family of Containers (MCFC) provides Marine Corps Operating Forces with a fully intermodal transport capability emphasizing dimensional standardization and International Organization for Standardization compatibility. This family of containers includes the Palletized Container (PALCON), Quadruple Container (QUADCON), Quadruple Container with Roll-up door (QUADCON RUD) and Joint Modular Intermodal Container (JMIC). PALCONS and JMICs replace prefabricated wooden mount boxes and flat box pallets. With a 3:1 collapsible ratio, the Joint Modular Intermodal Container (JMIC) provides efficient movement of supplies and unit equipment throughout the transportation and distribution systems. All containers support the storage and movement of organizational property and consumable supplies; provide field, garrison and shipboard warehousing; and facilitate ship-to-shore movement.

Family of Shelters and Shelters Equipment (FSSE) provides expeditionary soft wall and rigid wall shelters, and camouflage netting to protect personnel from environmental effects and conceal personnel and equipment from detection. The various expeditionary shelters, heater, and lighting system serve as berthing quarters, command posts, ground equipment maintenance shops in support of Marines operating in expeditionary environments. The next generation Ultra Lightweight Camouflage Netting System (ULCANS) directly supports Force Design 2030 by providing enhanced spectrum compliance in concealing high value targets through signature management and reducing detection and observation.

Key for the survival of personnel in forward areas of operations such as austere basing in the EABO, LOCE and Indo-Pacific in support of Force Design, the Family of Expeditionary Water Systems (FEWS) is a family of systems line that contains purification, storage, distribution, hygiene, and test systems. This capability is necessary to provide safe and potable water to Marines in expeditionary environments. The family contains individual Table of Allowance Material Control Numbers which supports Fleet Marine Force (FMF) Marine Air-Ground Task Force (MAGTF) operations by providing all aspects of land-based water

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy		Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 4: Other Support		P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0206624M
Line Item MDAP/MAIS Code: N/A		
support to include test analysis, purification, reuse, storage, transfer, dispensing, and field hygiene support. The line contains items such as the Tactical Water Purification System (TWPS), Lightweight Water Purification System (LWPS), Platoon Water Purification System (PWPS), Individual Water Purification System (IWPS), Forward Area Water Point Supply System,(FAWPSS) Pump Unit Set, Containerized Batch Laundry, Shower Systems, as well as all the various water supply support and analysis components and equipment including Six Container (SIXCON) Pump and Tank Modules, Nozzles, Interconnection Sets, Water Packaging Components, 3k/5k/25k Tanks, Hypo chlorination Units, and Water Quality Analysis Sets. Engineer Modification Kits (EMK) and Tool Kits provides critical improvements to various pieces of equipment by enhancing their current capabilities, expanding protection and enabling our ability to operate in the Expeditionary Advanced Base Operations (EABO) and austere base establishment in the Littoral Operations in Contested Environments (LOCE) and Indo-Pacific. An enabler to operations in forward basing areas such as EABO, LOCE and Indo-Pacific, EMK and Tool Kits provide protection from direct and indirect fire with specific tool kits, including the specific chest or case to store and transport the tools, to perform specific missions in support of Force Design. Supports equipment armor installations, upgrades and safety concerns to prevent deterioration in Fleet readiness for Engineer Systems inventory consisting of over 47,000 end items associated to 120 TAMCNs. Supports modifications and upgrades to fielded legacy equipment as well as newly fielded systems and provides quick response capability for meeting Fleet Marine Force sustainment for safety engineering, readiness, Quality Deficiency Report analysis, and legacy system modifications.		

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy								Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 4: Other Support						P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million				
ID Code (A=Service Ready, B=Not Service Ready): B			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206624M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Items Less Than \$5 Million	P-5a, P-21			- / 70.314	- / 9.174	- / 4.402	- / 26.433	- / -	- / 26.433
P-40	Total Gross/Weapon System Cost				- / 70.314	- / 9.174	- / 4.402	- / 26.433	- / 0.000	- / 26.433
*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Funding Request: \$26.433M Corrosion Prevention and Control (CPAC) \$0.946M: The consolidated CPAC program currently monitors the corrosion condition of 100,717 tactical ground and support equipment assets. FY 2023 funding continues to procure the fielding and replacement of equipment protective covers, Personal Property/Collateral Equipment (PP/CE), and Real Property Installed Equipment (RPIE) such as, but not limited to, compressors, blast booths, sanding/painting related equipment, and hazardous waste reduction equipment to support corrosion prevention and repair operations throughout the Fleet Marine Force (FMF) and supporting establishments. Funding Increase of \$0.144M from FY 2022 to FY 2023 aligns with the replacement of CPAC Collateral Equipment requirements throughout the FMF. Marine Corps Family of Containers (MCFC) \$0.455M: The increase from FY 2022 to FY 2023 of \$0.455M supports the procurement of Joint Modular Intermodal Container (JMIC). Family of Shelters and Shelters Equipment (FSSE) \$18.758M: The increase from FY 2022 to FY2023 of \$18.758M supports the procurement of the next generation Ultra Lightweight Camouflage Netting System (ULCANS) in support of Force Design 2030. Family of Expeditionary Water Systems (FEWS) \$3.670M: The increase from FY 2022 to FY 2023 of \$3.670M is to fund the procurement of modification kits for the Lightweight Water Purification System (LWPS). The identification of the LWPS requirement is in regards to Force Design 2030 as the replacement of the Tactical Water Purification System (TWPS). Due to unforeseeable schedule delays in procurement of Platoon Water Purification Systems in FY 2020, concurrent with the finalization of requirements for Lightweight Water Purification System, PMC funding was zeroed out in FEWS in FY 2022. Engineer Modification Kits (EMK) \$2.604M: Continues to fund equipment armor installations, upgrades and safety concerns to prevent deterioration in Fleet readiness for Engineer Systems inventory consisting of over 47,000 end items associated to 120 TAMCNs. Supports modifications and upgrades to fielded legacy equipment as well as newly fielded systems and provides quick response capability for meeting Fleet Marine Force sustainment for safety engineering, readiness, Quality Deficiency Report analysis, and legacy system modifications. The decrease of \$0.996M from FY 2022 to FY 2023 reflects decrease of Engineer Change Proposals on various Combat Engineer Equipment during FY 2023 along with a Program requested Technical Correction of procurement dollars to operation and maintenance dollars. The FY 2023 funding request was adjusted by \$1.163M to account for the availability of prior year execution balances.										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4						P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million									Aggregated Items Title: Items Less Than \$5 Million					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
1) Items Less Than \$5 Million																				
1.1) Prior Years Cumulative Funding	A		-	-	7.071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Items Less Than \$5 Million			-	-	7.071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2) Corrosion Prevention and Control (420114)																				
2.1) Corrosion Prevention and Control Equipment (420114) ⁽¹⁾	A		-	-	5.793	-	-	0.913	-	-	0.802	-	-	0.946	-	-	-	-	-	0.946
Subtotal: 2) Corrosion Prevention and Control (420114)			-	-	5.793	-	-	0.913	-	-	0.802	-	-	0.946	-	-	-	-	-	0.946
3) Marine Corps Family of Containers (438098)																				
3.1) Joint Modular Intermodal Containers (JMIC) - Active ^{(2)(t)}	A		3,463.18	937	3.245	2,466.00	506	1.248	-	-	-	2,410.00	189	0.455	-	-	-	2,410.00	189	0.455
3.2) Prior Years Cumulative Funding	A		-	-	1.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Marine Corps Family of Containers (438098)			-	-	4.257	-	-	1.248	-	-	-	-	-	0.455	-	-	-	-	-	0.455
4) Family of Shelters and Shelter Equipment (422906)																				
4.1) Family of Shelters and Shelter Equipment (422906) ⁽³⁾	A		-	-	-	-	-	-	-	-	-	-	-	18.758	-	-	-	-	-	18.758
Subtotal: 4) Family of Shelters and Shelter Equipment (422906)			-	-	0.000	-	-	-	-	-	-	-	-	18.758	-	-	-	-	-	18.758
5) Family of Expeditionary Water Systems (260412)																				
5.1) FEWS Platoon Water Purification Systems (Active) ^{(4)(t)}	B		27,187.13	171	4.649	-	-	0.349	-	-	-	-	-	-	-	-	-	-	-	-
5.2) FEWS Supply Support & Components/ Equipment (Active) ⁽⁵⁾	A		-	-	3.802	-	-	0.482	-	-	-	-	-	0.200	-	-	-	-	-	0.200
5.3) Lightweight Water Purification System (LWPS) 3.0 ⁽⁶⁾	A		-	-	-	-	-	0.187	-	-	-	-	-	3.470	-	-	-	-	-	3.470
5.4) FEWS Water Supply Support Components/ Equipment (Reserve)	A		-	-	0.413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) Family of Expeditionary Water Systems (260412)			-	-	8.864	-	-	1.018	-	-	-	-	-	3.670	-	-	-	-	-	3.670

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Navy															Date: April 2022				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4								P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million							Aggregated Items Title: Items Less Than \$5 Million				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2021			FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
6) Engineer Modification Kits (268098)																				
6.1) Engineer Equipment Modifications ⁽⁷⁾	A		-	-	42.019	-	-	5.995	-	-	3.600	-	-	2.604	-	-	-	-	-	2.604
Subtotal: 6) Engineer Modification Kits (268098)			-	-	42.019	-	-	5.995	-	-	3.600	-	-	2.604	-	-	-	-	-	2.604
7) Prior Years Cumulative Funding																				
7.1) Prior Years Cumulative Funding	A		-	-	2.310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 7) Prior Years Cumulative Funding			-	-	2.310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total			-	-	70.314	-	-	9.174	-	-	4.402	-	-	26.433	-	-	-	-	-	26.433

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

- (1) Funding increase of \$0.144M from FY 2022 to FY 2023 aligns with the replacement of CPAC Collateral Equipment requirements throughout the FMF.
- (2) Funding increase of \$0.455M from FY 2022 to FY 2023 aligns with new JMIC contract.
- (3) The increase from FY 2022 to FY2023 of \$18.758M supports the procurement of the next generation Ultra Lightweight Camouflage Netting System (ULCANS) in support of Force Design 2030.
- (4) Total Cost was reduced as a portion of the FY 2021 purchase of the PWPS IIP was funded by FY 2020 cost savings.
- (5) The increase from FY 2022 to FY 2023 of \$0.200M is to fund the cost for program contract support for the procurement of water systems
- (6) This is a new cost element in the FY 2023 submission, as FY 2021 cost savings on Platoon Water Purification Systems allowed the program office to initiate the Lightweight Water Purification System (LWPS) procurement ahead of schedule. The increase from FY 2022 to FY 2023 of \$3.470M is to fund the procurement of modification kits for the Lightweight Water Purification System (LWPS). The identification of the LWPS requirement is in regards to Force Design 2030 as the replacement of the Tactical Water Purification System (TWPS).
- (7) Funds equipment armor installations, upgrades and safety concerns to prevent deterioration in Fleet readiness for Engineer Systems inventory consisting of over 47,000 end items associated to 120 TAMCNs. Supports modifications and upgrades to fielded legacy as well as newly fielded systems and provides quick response capability for meeting Fleet Marine Force sustainment for safety engineering, readiness, Quality Deficiency Report analysis, and legacy system modifications. Decrease of \$0.996M from FY 2022 to FY 2023 reflects decrease of Engineer Change Proposals on various Combat Engineer Equipment during FY23 along with a Program requested Technical Correction of procurement dollars to operation and maintenance dollars.

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Exhibit P-5a, Procurement History and Planning: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4			P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million						Aggregated Items: Items Less Than \$5 Million			
Item Number / Title [DODIC]	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3) Marine Corps Family of Containers (438098)												
3.1) Joint Modular Intermodal Containers (JMIC) - Active ^{(2)(†)}		2021	Garrett Container Systems Inc. / Accident, MD	C / TBD	MCSC Quantico, VA	Aug 2021	Dec 2021	506	2,466.00	Y		
3.1) Joint Modular Intermodal Containers (JMIC) - Active ^{(2)(†)}		2023	Garrett Container Systems Inc. / Accident, MD	C / TBD	MCSC Quantico, VA	Mar 2023	Jul 2023	189	2,410.00	Y		
5) Family of Expeditionary Water Systems (260412)												
5.1) FEWS Platoon Water Purification Systems (Active) ⁽⁴⁾		2019	PARKER-HANNIFIN CORP / Carson, CA	C / FFP	MCSC Quantico, VA	Apr 2020	Apr 2020	14	23,536.14	Y		Aug 2018
5.1) FEWS Platoon Water Purification Systems (Active) ⁽⁴⁾		2020	PARKER-HANNIFIN CORP / Carson, CA	C / FFP	MCSC Quantico, VA	Apr 2020	Apr 2020	157	25,603.99	Y		
^(†) indicates the presence of a P-21												

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4										P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million										Aggregated Items: Items Less Than \$5 Million														
Items <i>(Units in Each)</i>							Fiscal Year 2020										Fiscal Year 2021										B A L A N C E							
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020										Calendar Year 2021																	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y		J U N	J U L	A U G	S E P			
3) Marine Corps Family of Containers (438098)																																		
3.1) Joint Modular Intermodal Containers (JMIC) - Active ⁽²⁾																																		
Prior Years Deliveries: 937																																		
45	2021	NAVY		506	0	506																										A -	-	506
45	2023	NAVY		189	0	189																												189
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022												
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4										P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million										Aggregated Items: Items Less Than \$5 Million												
Items <i>(Units in Each)</i>							Fiscal Year 2022												Fiscal Year 2023												BALANCE	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
3) Marine Corps Family of Containers (438098)																																
3.1) Joint Modular Intermodal Containers (JMIC) - Active ⁽²⁾																																
Prior Years Deliveries: 937																																
45	2021	NAVY		506	0	506	-	-	42	42	42	42	42	42	42	42	42	42	44													0
45	2023	NAVY		189	0	189															A -				-	-	-	-	16	16	16	141
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		

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Exhibit P-21, Production Schedule: PB 2023 Navy																				Date: April 2022													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4										P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million										Aggregated Items: Items Less Than \$5 Million													
Items <i>(Units in Each)</i>							Fiscal Year 2024										Fiscal Year 2025										BALANCE						
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	Calendar Year 2024										Calendar Year 2025																
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP		
3) Marine Corps Family of Containers (438098)																																	
3.1) Joint Modular Intermodal Containers (JMIC) - Active ⁽²⁾																																	
Prior Years Deliveries: 937																																	
	45	2021	NAVY		506	506	0																										0
	45	2023	NAVY		189	48	141	16	16	16	16	16	16	16	13																0		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			

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Exhibit P-21, Production Schedule: PB 2023 Navy									Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 06 / 4					P-1 Line Item Number / Title: 6670 / Items Less Than \$5 Million				Aggregated Items: Items Less Than \$5 Million			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2023	1-8-5 For 2023	MAX For 2023	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Garrett Container Systems Inc. - Accident, MD	150	300	1,500	0	11	4	15	0	5	4	9

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy										Date: April 2022		
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 07: Spares and Repair Parts / BSA 1: Spares And Repair Parts							P-1 Line Item Number / Title: 7000 / Spares and Repair Parts					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0206211M, 0206625M, 0204460M, 0206313M, 0206315M, 0305208M				
Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	0.000	27.295	32.819	34.799	0.000	34.799	35.716	36.483	37.131	37.803	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	0.000	27.295	32.819	34.799	0.000	34.799	35.716	36.483	37.131	37.803	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	0.000	27.295	32.819	34.799	0.000	34.799	35.716	36.483	37.131	37.803	Continuing	Continuing
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Description: Spares - Funds are required to reimburse the Navy Working Capital Fund for both repairable and consumable components at the time the initial spare parts package is released with the principal end item (PEI) to the Fleet Marine Force. This concept complies with the Navy Working Capital Fund funding of Initial Spares with reimbursement from the Procurement Account. Funds also provide for direct vendor support of the PEI delivery to the Fleet Marine Force. This account has funding for the following programs: Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T), Tactical Remote Sensor System (TRSS), Intelligence Analysis System (IAS), Terrestrial Collection, LAV-Anti Tank System Program, LAV Reset Program, M1A1 Modification, Family of Material Handling Equipment (FMHE), Ground/Air Task Oriented Radar (G/ATOR AN/TPS-80), RQ-21A Small Tactical UAS, General Purpose Tool and Test Systems (GPTTS), Amphibious Combat Vehicle Family of Vehicles (ACV FOV), and Training Simulation Support (TSS)/Training Devices.												

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Exhibit P-40, Budget Line Item Justification: PB 2023 Navy							Date: April 2022			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 07: Spares and Repair Parts / BSA 1: Spares And Repair Parts						P-1 Line Item Number / Title: 7000 / Spares and Repair Parts				
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A			Other Related Program Elements: 0206211M, 0206625M, 0204460M, 0206313M, 0206315M, 0305208M				
Line Item MDAP/MAIS Code: N/A										
Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-18	PMC spares				- / -	- / 27.295	- / 32.819	- / 34.799	- / -	- / 34.799
P-40	Total Gross/Weapon System Cost				- / 0.000	- / 27.295	- / 32.819	- / 34.799	- / 0.000	- / 34.799
Title represents the P-18 Title for Spares.										
Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.										
Justification: FY 2023 Base Appropriation Request: Amphibious Combat Vehicle Family of Vehicles (ACV FOV) BLI 2025: \$20.127M will provide for initial spares for communication suites, Driver's Vision Enhancer, Exportable Power, Battlefield Situation Awareness (currently Joint Battle Command-Platform (JBC-P)), and Remote Weapon Stations (RWS). Initial spares for ACV FOV are procured commensurate with the end items they support based on lead time for procurement. The increase in initial spares of \$1.157M between FY 2023 and FY 2022 is due to normal inflation. Additionally, the spares for the RWS cost more because the program can no longer procure refurbished Army systems as their supplies have run out; now the program has to buy all new systems and spares. General Purpose Tool and Test Systems (GPTTS) BLI 4181: \$0.192M will procure equipment spares for newly fielded mechanical test equipment, electrical test equipment, and tool sets and kits. Funding ensures critical spares are available to the Fleet Marine Force when breakage occurs to minimize equipment down time. AN/TPS-80 Ground Air Task Oriented Radar (G/ATOR) BLI 4655: \$14.422M will provide spares funding to support the Lot Four Full Rate Production (FRP) systems procured in FY 2022. FY 2023 spares funding is required to procure the initial provisioning package (IPP) which consists of over one hundred assemblies/parts with over 60 critical items to include Five-Axis Motor Controllers and Dual Leaf Assemblies. Funding will primarily support the Lot Four FRP systems being procured in FY 2022 and fielded in FY 2024/25, as over 90 percent of the G/ATOR spares have a lead time exceeding 12 months. Thus, the FY 2023 spares funding will obligate in FY 2023 and deliver Spares in FY 2024/25 to align with end item systems deliveries. The spares funding increase of \$0.813M will support the fielding of eight (8) new systems beginning in FY 2024 for a total of forty-five (45) G/ATOR systems fielded by 2Q FY 2025. The funding in FY 2023 is also required for the decentralized distribution of initial spares from LOGCOM to the Repair Inventory Points at each Marine Expeditionary Force, as required. Additionally, adequate sparing is essential so Fleet Marine Forces will have the necessary repair parts to operate and maintain newly fielded G/ATOR Radar Systems and to avoid placing the program at significant risk of not meeting its important Key Performance Parameter (KPP) 8 of Sustainment. Family of Material Handling Equipment (FMHE) BLI 6544: \$0.058M will provide for the replacement and Service Life Extension Program (SLEP) of Marine Corps MHE such as forklifts, cranes, and container handlers. This budget line item also includes funding for equipment such as the Light Capability Rough Terrain Forklift (LCRTF), Hydraulic Excavator (HYEX), Extendable Boom Forklift Modernization (EBFL-M), Rough Terrain Container Handler (RTCH) SLEP and the Tractor, Rubber Tires, and Articulated Steering, Multiple Purpose (TRAM) SLEP.										

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Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification: PB 2023 Navy					Date: April 2022	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 07 / 1		P-1 Line Item Number / Title: 7000 / Spares and Repair Parts			Title: PMC spares	
End Item Line Item Number / Name [MDAP/MAIS]	Prior Years (\$ M)	FY 2021 (\$ M)	FY 2022 (\$ M)	FY 2023 Base (\$ M)	FY 2023 OCO (\$ M)	FY 2023 Total (\$ M)
Initial						
BA 02 - Weapons and combat vehicles						
2025 / Amphibious Combat Vehicle Family of Vehicles	-	13.557	18.970	20.127	-	20.127
BA 04 - Communications and Electronics Equipment						
4181 / Repair and Test Equipment	-	0.180	0.182	0.192	-	0.192
4655 / Ground/Air Task Oriented Radar (G/ATOR)	-	13.506	13.609	14.422	-	14.422
BA 06 - Engineer and Other Equipment						
6544 / Family of Construction Equipment	-	0.052	0.058	0.058	-	0.058
Subtotal: Initial	-	27.295	32.819	34.799	-	34.799
Total Cost (Initial + Replenishment)	-	27.295	32.819	34.799	-	34.799

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