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**Department of Defense  
Fiscal Year (FY) 2018 Budget Estimates**

May 2017



**Navy**

*Justification Book Volume 1 of 1*

***Procurement, Marine Corps***

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The estimated cost for this report for the Department of Navy (DON) is \$22,851.

The estimated total cost for supporting the DON budget justification material is approximately \$1,142,960 for the 2017 fiscal year. This includes \$76,659 in supplies and \$1,066,301 in labor.

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Navy • Budget Estimates FY 2018 • Procurement

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## **Department of Defense Appropriations Act, 2018**

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### **Procurement, Marine Corps**

For expenses necessary for the procurement, manufacture, and modification of missiles, armament, military equipment, spare parts, and accessories therefor; 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, \$2,130,099,000, to remain available for obligation until September 30, 2020 of which \$32,870,000 shall be available for the Marine Corps Reserve.

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## UNCLASSIFIED

Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation -----	FY 2016 Base + OCO -----	FY 2017 PB Request with CR Adj Base -----	FY 2017 Total PB Requests* with CR Adj Base -----
Procurement, Marine Corps	1,218,246	1,184,556	1,590,489
Total Department of the Navy	1,218,246	1,184,556	1,590,489

## UNCLASSIFIED

Department of the Navy  
 FY 2018 President's Budget Request  
 Exhibit P-1 FY 2018 President's Budget Request  
 Total Obligational Authority  
 (Dollars in Thousands)

Appropriation -----	FY 2017 PB Request with CR Adj OCO -----	FY 2017 Total PB Requests* with CR Adj OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj OCO -----
Procurement, Marine Corps	56,934	85,006		85,006
Total Department of the Navy	56,934	85,006		85,006

## UNCLASSIFIED

Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation -----	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA -----	FY 2017 Total PB Requests* with CR Adj Base + OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj Base + OCO -----
Procurement, Marine Corps	1,241,490	1,675,495		1,675,495
Total Department of the Navy	1,241,490	1,675,495		1,675,495

## UNCLASSIFIED

Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation -----	FY 2018 Base -----	FY 2018 OCO -----	FY 2018 Total -----
Procurement, Marine Corps	2,064,825	65,274	2,130,099
Total Department of the Navy	2,064,825	65,274	2,130,099

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Department of the Navy  
 FY 2018 President's Budget Request  
 Exhibit P-1 FY 2018 President's Budget Request  
 Total Obligational Authority  
 (Dollars in Thousands)

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2016 Base + OCO -----	FY 2017 PB Request with CR Adj Base -----	FY 2017 Total PB Requests* with CR Adj Base -----
02. Weapons and combat vehicles	154,942	191,042	225,021
03. Guided missiles and equipment	158,879	51,925	128,934
04. Communications And Electronics Equipment	660,380	737,792	950,127
05. Support Vehicles	104,102	217,525	252,035
06. Engineer and Other Equipment	129,999	141,637	189,737
07. Spares and Repair Parts	9,944	22,848	22,848
20. Undistributed		-178,213	-178,213
Total Procurement, Marine Corps	1,218,246	1,184,556	1,590,489

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Department of the Navy  
FY 2018 President's Budget Request  
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Total Obligational Authority  
(Dollars in Thousands)

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2017 PB Request with CR Adj OCO -----	FY 2017 Total PB Requests* with CR Adj OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj OCO -----
02. Weapons and combat vehicles	572	572		572
03. Guided missiles and equipment	1,606	1,606		1,606
04. Communications And Electronics Equipment	41,761	69,833		69,833
05. Support Vehicles				
06. Engineer and Other Equipment	75,000	75,000		75,000
07. Spares and Repair Parts				
20. Undistributed	-62,005	-62,005		-62,005
Total Procurement, Marine Corps	56,934	85,006		85,006

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Total Obligational Authority  
(Dollars in Thousands)

## Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA -----	FY 2017 Total PB Requests* with CR Adj Base + OCO -----	FY 2017 Less Enacted Div B P.L.114-254** OCO -----	FY 2017 Remaining Req with CR Adj Base + OCO -----
02. Weapons and combat vehicles	191,614	225,593		225,593
03. Guided missiles and equipment	53,531	130,540		130,540
04. Communications And Electronics Equipment	779,553	1,019,960		1,019,960
05. Support Vehicles	217,525	252,035		252,035
06. Engineer and Other Equipment	216,637	264,737		264,737
07. Spares and Repair Parts	22,848	22,848		22,848
20. Undistributed	-240,218	-240,218		-240,218
Total Procurement, Marine Corps	1,241,490	1,675,495		1,675,495

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Department of the Navy  
FY 2018 President's Budget Request  
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Total Obligational Authority  
(Dollars in Thousands)

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2018 Base -----	FY 2018 OCO -----	FY 2018 Total -----
02. Weapons and combat vehicles	404,642	5,360	410,002
03. Guided missiles and equipment	127,269	7,906	135,175
04. Communications And Electronics Equipment	951,220	31,008	982,228
05. Support Vehicles	334,634		334,634
06. Engineer and Other Equipment	211,420	21,000	232,420
07. Spares and Repair Parts	35,640		35,640
20. Undistributed			
Total Procurement, Marine Corps	2,064,825	65,274	2,130,099



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FY 2018 President's Budget Request  
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Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity Cost	S e c
----	-----	-----	-----	-----	-----	-----
Budget Activity 02: Weapons and combat vehicles						
-----						
Tracked Combat Vehicles						
1	AAV7A1 PIP	A	20,365	73,785	73,785	U
2	Amphibious Combat Vehicle 1.1	A				U
3	LAV PIP	A	88,756	53,423	53,423	U
Artillery and Other Weapons						
4	Expeditionary Fire Support System	A		3,360	3,360	U
5	155mm Lightweight Towed Howitzer	B	7,105	3,318	17,318	U
6	High Mobility Artillery Rocket System	A	16,285	33,725	53,015	U
7	Weapons and Combat Vehicles Under \$5 Million	A	7,845	8,181	8,870	U
Other Support						
8	Modification Kits	A	14,137	15,250	15,250	U
9	Weapons Enhancement Program	A	449			U
			-----	-----	-----	
Total Weapons and combat vehicles			154,942	191,042	225,021	
Budget Activity 03: Guided missiles and equipment						
-----						
Guided Missiles						
10	Ground Based Air Defense	A	6,642	9,170	9,170	U
11	Javelin	A	327	58,895	1,009	515
12	Follow On To SMAW	A		24,666	24,666	U

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Line		Ident	FY 2017 PB Request with CR Adj OCO		FY 2017 Total PB Requests* with CR Adj OCO		FY 2017 Less Enacted Div B P.L.114-254** OCO		FY 2017 Remaining Req with CR Adj OCO		S
No	Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	e
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
Budget Activity 02: Weapons and combat vehicles											
-----											
Tracked Combat Vehicles											
1	AAV7A1 PIP	A									U
2	Amphibious Combat Vehicle 1.1	A									U
3	LAV PIP	A									U
Artillery and Other Weapons											
4	Expeditionary Fire Support System	A									U
5	155mm Lightweight Towed Howitzer	B									U
6	High Mobility Artillery Rocket System	A									U
7	Weapons and Combat Vehicles Under \$5 Million	A		572		572				572	U
Other Support											
8	Modification Kits	A									U
9	Weapons Enhancement Program	A									U
			-----		-----		-----		-----		
Total Weapons and combat vehicles				572		572				572	
Budget Activity 03: Guided missiles and equipment											
-----											
Guided Missiles											
10	Ground Based Air Defense	A									U
11	Javelin	A	9	1,606	9	1,606			9	1,606	U
12	Follow On To SMAW	A									U

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(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	Cost	S e c
Budget Activity 02: Weapons and combat vehicles											
Tracked Combat Vehicles											
1	AAV7A1 PIP	A		73,785		73,785			73,785		U
2	Amphibious Combat Vehicle 1.1	A									U
3	LAV PIP	A		53,423		53,423			53,423		U
Artillery and Other Weapons											
4	Expeditionary Fire Support System	A		3,360		3,360			3,360		U
5	155mm Lightweight Towed Howitzer	B		3,318		17,318			17,318		U
6	High Mobility Artillery Rocket System	A		33,725		53,015			53,015		U
7	Weapons and Combat Vehicles Under \$5 Million	A		8,753		9,442			9,442		U
Other Support											
8	Modification Kits	A		15,250		15,250			15,250		U
9	Weapons Enhancement Program	A									U
Total Weapons and combat vehicles				191,614		225,593			225,593		
Budget Activity 03: Guided missiles and equipment											
Guided Missiles											
10	Ground Based Air Defense	A		9,170		9,170			9,170		U
11	Javelin	A	9	2,615	524	79,624		524	79,624		U
12	Follow On To SMAW	A		24,666		24,666			24,666		U

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	Se
Budget Activity 02: Weapons and combat vehicles									
Tracked Combat Vehicles									
1	AAV7A1 PIP	A		107,665			107,665		U
2	Amphibious Combat Vehicle 1.1	A	26	161,511			26	161,511	U
3	LAV PIP	A		17,244			17,244		U
Artillery and Other Weapons									
4	Expeditionary Fire Support System	A		626			626		U
5	155mm Lightweight Towed Howitzer	B		20,259			20,259		U
6	High Mobility Artillery Rocket System	A		59,943		5,360	65,303		U
7	Weapons and Combat Vehicles Under \$5 Million	A		19,616			19,616		U
Other Support									
8	Modification Kits	A		17,778			17,778		U
9	Weapons Enhancement Program	A							U
Total Weapons and combat vehicles				404,642		5,360	410,002		
Budget Activity 03: Guided missiles and equipment									
Guided Missiles									
10	Ground Based Air Defense	A		9,432			9,432		U
11	Javelin	A	222	41,159	11	2,833	233	43,992	U
12	Follow On To SMAW	A		25,125		49	25,174		U

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(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO		FY 2017 PB Request with CR Adj Base		FY 2017 Total PB Requests* with CR Adj Base		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
13	Anti-Armor Weapons System-Heavy (AAWS-H)			661		17,080		17,080	U
	Other Support								
14	Modification Kits	A		92,681					U
	Total Guided missiles and equipment			158,879		51,925		128,934	
Budget Activity 04: Communications And Electronics Equipment									
-----									
Command and Control Systems									
15	Unit Operations Center	A		10,384					U
16	Common Aviation Command and Control System (C	A		16,623		47,312		53,012	U
Repair and Test Equipment									
17	Repair and Test Equipment	A		14,892		16,469		16,969	U
Other Support (Tel)									
18	Combat Support System	A		942					U
19	Modification Kits	A		3,600					U
Command and Control System (Non-Tel)									
20	Items Under \$5 Million (Comm & Elec)	A		9,322		7,433		15,733	U
21	Air Operations C2 Systems	A		3,021		15,917		15,917	U
Radar + Equipment (Non-Tel)									
22	Radar Systems	A		22,464		17,772		17,772	U
23	Ground/Air Task Oriented Radar (G/ATOR)	A	3	125,597	3	123,758	6	248,258	U

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(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line			FY 2017		FY 2017		FY 2017		FY 2017		
No	Item Nomenclature	Ident	PB Request		Total		Less Enacted		Remaining Req		
		Code	with CR Adj		PB Requests*		Div B		with CR Adj		
			OCO		with CR Adj		P.L.114-254**		OCO		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
13	Anti-Armor Weapons System-Heavy (AAWS-H)										U
	Other Support										
14	Modification Kits	A									U
	Total Guided missiles and equipment			1,606		1,606				1,606	
Budget Activity 04: Communications And Electronics Equipment											
-----											
	Command and Control Systems										
15	Unit Operations Center	A									U
16	Common Aviation Command and Control System (C	A									U
	Repair and Test Equipment										
17	Repair and Test Equipment	A									U
	Other Support (Tel)										
18	Combat Support System	A									U
19	Modification Kits	A		2,600		2,600				2,600	U
	Command and Control System (Non-Tel)										
20	Items Under \$5 Million (Comm & Elec)	A		2,200		2,200				2,200	U
21	Air Operations C2 Systems	A									U
	Radar + Equipment (Non-Tel)										
22	Radar Systems	A									U
23	Ground/Air Task Oriented Radar (G/ATOR)	A									U

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA		FY 2017 Total PB Requests* with CR Adj Base + OCO		FY 2017 Less Enacted Div B P.L.114-254** OCO		FY 2017 Remaining Req with CR Adj Base + OCO		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
13	Anti-Armor Weapons System-Heavy (AAWS-H)			17,080		17,080				17,080	U
	Other Support										
14	Modification Kits	A									U
	Total Guided missiles and equipment			53,531		130,540				130,540	
Budget Activity 04: Communications And Electronics Equipment											
-----											
Command and Control Systems											
15	Unit Operations Center	A									U
16	Common Aviation Command and Control System (C	A		47,312		53,012				53,012	U
	Repair and Test Equipment										
17	Repair and Test Equipment	A		16,469		16,969				16,969	U
	Other Support (Tel)										
18	Combat Support System	A									U
19	Modification Kits	A		2,600		2,600				2,600	U
	Command and Control System (Non-Tel)										
20	Items Under \$5 Million (Comm & Elec)	A		9,633		17,933				17,933	U
21	Air Operations C2 Systems	A		15,917		15,917				15,917	U
	Radar + Equipment (Non-Tel)										
22	Radar Systems	A		17,772		17,772				17,772	U
23	Ground/Air Task Oriented Radar (G/ATOR)	A	3	123,758	6	248,258			6	248,258	U

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	FY 2018 Base Cost	FY 2018 OCO Quantity	FY 2018 OCO Cost	FY 2018 Total Quantity	FY 2018 Total Cost	S e c
13	Anti-Armor Weapons System-Heavy (AAWS-H)			51,553		5,024		56,577	U
	Other Support								
14	Modification Kits	A							U
	Total Guided missiles and equipment			127,269		7,906		135,175	
Budget Activity 04: Communications And Electronics Equipment									
Command and Control Systems									
15	Unit Operations Center	A							U
16	Common Aviation Command and Control System (C	A		44,928				44,928	U
	Repair and Test Equipment								
17	Repair and Test Equipment	A		33,056		8,241		41,297	U
	Other Support (Tel)								
18	Combat Support System	A							U
19	Modification Kits	A				750		750	U
	Command and Control System (Non-Tel)								
20	Items Under \$5 Million (Comm & Elec)	A		17,644		200		17,844	U
21	Air Operations C2 Systems	A		18,393				18,393	U
	Radar + Equipment (Non-Tel)								
22	Radar Systems	A		12,411				12,411	U
23	Ground/Air Task Oriented Radar (G/ATOR)	A	3	139,167			3	139,167	U

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Department of the Navy  
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Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity Cost	S e c
----	-----	-----	-----	-----	-----	----
24	RQ-21 UAS		3 77,916	4 80,217	4 89,177	U
	Intell/Comm Equipment (Non-Tel)					
25	GCSS-MC	A		1,089	1,089	U
26	Fire Support System	A	10,917	13,258	13,258	U
27	Intelligence Support Equipment	B	36,849	56,379	86,203	U
29	Unmanned Air Systems (Intel)	A	13,430	1,976	15,476	U
30	DCGS-MC	A	1,947	1,149	3,649	U
31	UAS Payloads	A		2,971	2,971	U
	Other Comm/Elec Equipment (Non-Tel)					
34	Night Vision Equipment	A	1,680			U
	Other Support (Non-Tel)					
35	Next Generation Enterprise Network (NGEN)	A	77,561	76,302	76,302	U
36	Common Computer Resources	A	30,836	41,802	49,109	U
37	Command Post Systems	A	33,546	90,924	90,924	U
38	Radio Systems	A	37,574	43,714	48,314	U
39	Comm Switching & Control Systems	A	62,956	66,383	66,383	U
40	Comm & Elec Infrastructure Support	A	65,520	30,229	36,873	U
999	Classified Programs		2,803	2,738	2,738	U
	Total Communications And Electronics Equipment		660,380	737,792	950,127	

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Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
24	RQ-21 UAS										U
	Intell/Comm Equipment (Non-Tel)										
25	GCSS-MC	A									U
26	Fire Support System	A									U
27	Intelligence Support Equipment	B		20,981		37,671			37,671		U
29	Unmanned Air Systems (Intel)	A		3,817		3,817			3,817		U
30	DCGS-MC	A				11,382			11,382		U
31	UAS Payloads	A									U
	Other Comm/Elec Equipment (Non-Tel)										
34	Night Vision Equipment	A									U
	Other Support (Non-Tel)										
35	Next Generation Enterprise Network (NGEN)	A									U
36	Common Computer Resources	A		2,600		2,600			2,600		U
37	Command Post Systems	A									U
38	Radio Systems	A		9,563		9,563			9,563		U
39	Comm Switching & Control Systems	A									U
40	Comm & Elec Infrastructure Support	A									U
999	Classified Programs										U
	Total Communications And Electronics Equipment			41,761		69,833				69,833	

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	Cost	S e c
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
24	RQ-21 UAS		4	80,217	4	89,177			4	89,177	U
	Intell/Comm Equipment (Non-Tel)										
25	GCSS-MC	A		1,089		1,089				1,089	U
26	Fire Support System	A		13,258		13,258				13,258	U
27	Intelligence Support Equipment	B		77,360		123,874				123,874	U
29	Unmanned Air Systems (Intel)	A		5,793		19,293				19,293	U
30	DCGS-MC	A		1,149		15,031				15,031	U
31	UAS Payloads	A		2,971		2,971				2,971	U
	Other Comm/Elec Equipment (Non-Tel)										
34	Night Vision Equipment	A									U
	Other Support (Non-Tel)										
35	Next Generation Enterprise Network (NGEN)	A		76,302		76,302				76,302	U
36	Common Computer Resources	A		44,402		51,709				51,709	U
37	Command Post Systems	A		90,924		90,924				90,924	U
38	Radio Systems	A		53,277		57,877				57,877	U
39	Comm Switching & Control Systems	A		66,383		66,383				66,383	U
40	Comm & Elec Infrastructure Support	A		30,229		36,873				36,873	U
999	Classified Programs			2,738		2,738				2,738	U
				-----		-----		-----		-----	
	Total Communications And Electronics Equipment			779,553		1,019,960				1,019,960	

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	Cost	FY 2018 OCO Quantity	Cost	FY 2018 Total Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-
24	RQ-21 UAS		4	77,841		8,400	4	86,241	U
	Intell/Comm Equipment (Non-Tel)								
25	GCSS-MC	A		1,990				1,990	U
26	Fire Support System	A		22,260		50		22,310	U
27	Intelligence Support Equipment	B		55,759		3,000		58,759	U
29	Unmanned Air Systems (Intel)	A		10,154				10,154	U
30	DCGS-MC	A		13,462				13,462	U
31	UAS Payloads	A		14,193				14,193	U
	Other Comm/Elec Equipment (Non-Tel)								
34	Night Vision Equipment	A							U
	Other Support (Non-Tel)								
35	Next Generation Enterprise Network (NGEN)	A		98,511				98,511	U
36	Common Computer Resources	A		66,894				66,894	U
37	Command Post Systems	A		186,912		5,777		192,689	U
38	Radio Systems	A		34,361		4,590		38,951	U
39	Comm Switching & Control Systems	A		54,615				54,615	U
40	Comm & Elec Infrastructure Support	A		44,455				44,455	U
999	Classified Programs			4,214				4,214	U
				-----		-----		-----	
	Total Communications And Electronics Equipment			951,220		31,008		982,228	

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Department of the Navy  
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Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO		FY 2017 PB Request with CR Adj Base		FY 2017 Total PB Requests* with CR Adj Base		S e c	
			Quantity	Cost	Quantity	Cost	Quantity	Cost		
Budget Activity 05: Support Vehicles										
-----										
Administrative Vehicles										
41	Commercial Passenger Vehicles	A		2,372						U
42	Commercial Cargo Vehicles	A		21,777	88,312		122,822			U
Tactical Vehicles										
43	Motor Transport Modifications	A		9,292	13,292		13,292			U
44	Joint Light Tactical Vehicle		119	58,578	192	113,230	192	113,230		U
45	Family of Tactical Trailers	A		3,757	2,691		2,691			U
46	Trailers	A								U
Other Support										
47	Items Less Than \$5 Million	A		8,326						U
Total Support Vehicles				104,102	217,525		252,035			
Budget Activity 06: Engineer and Other Equipment										
-----										
Engineer and Other Equipment										
48	Environmental Control Equip Assort	A			18		18			U
49	Bulk Liquid Equipment	A		1,037						U
50	Tactical Fuel Systems	A		135	78		78			U
51	Power Equipment Assorted	A		8,955	17,973		17,973			U
52	Amphibious Support Equipment	A		3,882	7,371		7,371			U

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Department of the Navy  
 FY 2018 President's Budget Request  
 Exhibit P-1 FY 2018 President's Budget Request  
 Total Obligational Authority  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line			FY 2017		FY 2017		FY 2017		FY 2017		
No	Item Nomenclature	Ident	PB Request		Total		Less Enacted		Remaining Req		
		Code	with CR Adj		PB Requests*		Div B		with CR Adj		
			OCO		with CR Adj		P.L.114-254**		OCO		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
Budget Activity 05: Support Vehicles											
-----											
Administrative Vehicles											
41	Commercial Passenger Vehicles	A									U
42	Commercial Cargo Vehicles	A									U
Tactical Vehicles											
43	Motor Transport Modifications	A									U
44	Joint Light Tactical Vehicle										U
45	Family of Tactical Trailers	A									U
46	Trailers	A									U
Other Support											
47	Items Less Than \$5 Million	A									U
			-----		-----		-----		-----		
Total Support Vehicles											
Budget Activity 06: Engineer and Other Equipment											
-----											
Engineer and Other Equipment											
48	Environmental Control Equip Assort	A									U
49	Bulk Liquid Equipment	A									U
50	Tactical Fuel Systems	A									U
51	Power Equipment Assorted	A									U
52	Amphibious Support Equipment	A									U

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	Cost	S e c e
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
Budget Activity 05: Support Vehicles											
-----											
Administrative Vehicles											
41	Commercial Passenger Vehicles	A									U
42	Commercial Cargo Vehicles	A		88,312		122,822			122,822		U
Tactical Vehicles											
43	Motor Transport Modifications	A		13,292		13,292			13,292		U
44	Joint Light Tactical Vehicle		192	113,230	192	113,230			192	113,230	U
45	Family of Tactical Trailers	A		2,691		2,691			2,691		U
46	Trailers	A									U
Other Support											
47	Items Less Than \$5 Million	A									U
Total Support Vehicles				217,525		252,035			252,035		
Budget Activity 06: Engineer and Other Equipment											
-----											
Engineer and Other Equipment											
48	Environmental Control Equip Assort	A		18		18			18		U
49	Bulk Liquid Equipment	A									U
50	Tactical Fuel Systems	A		78		78			78		U
51	Power Equipment Assorted	A		17,973		17,973			17,973		U
52	Amphibious Support Equipment	A		7,371		7,371			7,371		U

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	Cost	FY 2018 OCO Quantity	Cost	FY 2018 Total Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-
Budget Activity 05: Support Vehicles									
-----									
Administrative Vehicles									
41	Commercial Passenger Vehicles	A							U
42	Commercial Cargo Vehicles	A		66,951			66,951		U
Tactical Vehicles									
43	Motor Transport Modifications	A		21,824			21,824		U
44	Joint Light Tactical Vehicle		527	233,639			527	233,639	U
45	Family of Tactical Trailers	A		1,938			1,938		U
46	Trailers	A		10,282			10,282		U
Other Support									
47	Items Less Than \$5 Million	A							U
Total Support Vehicles				334,634			334,634		
Budget Activity 06: Engineer and Other Equipment									
-----									
Engineer and Other Equipment									
48	Environmental Control Equip Assort	A		1,405			1,405		U
49	Bulk Liquid Equipment	A							U
50	Tactical Fuel Systems	A		1,788			1,788		U
51	Power Equipment Assorted	A		9,910			9,910		U
52	Amphibious Support Equipment	A		5,830			5,830		U

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity Cost	S e c
----	-----	-----	-----	-----	-----	-----
53	EOD Systems	A	5,165	14,021	35,321	U
	Materials Handling Equipment					
54	Physical Security Equipment	A	30,228	31,523	37,723	U
55	Garrison Mobile Engineer Equipment (GMEE)	A	1,405			U
	General Property					
56	Training Devices	B	44,359	33,658	42,458	U
57	Container Family	A	1,154			U
58	Family of Construction Equipment	A	9,306	21,315	32,815	U
59	Family of Internally Transportable Veh (ITV)	A	18,638	9,654	9,654	U
	Other Support					
60	Items Less Than \$5 Million	A	5,146	6,026	6,326	U
61	Cancelled Account Adjustment (M)	A	589			U
			-----	-----	-----	
	Total Engineer and Other Equipment		129,999	141,637	189,737	
	Budget Activity 07: Spares and Repair Parts					
	-----					
	Spares and Repair Parts					
62	Spares and Repair Parts	A	9,944	22,848	22,848	U
			-----	-----	-----	
	Total Spares and Repair Parts		9,944	22,848	22,848	

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line		Ident	FY 2017 PB Request with CR Adj OCO		FY 2017 Total PB Requests* with CR Adj OCO		FY 2017 Less Enacted Div B P.L.114-254** OCO		FY 2017 Remaining Req with CR Adj OCO		S
No	Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	e
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
53	EOD Systems	A		75,000		75,000				75,000	U
	Materials Handling Equipment										
54	Physical Security Equipment	A									U
55	Garrison Mobile Engineer Equipment (GMEE)	A									U
	General Property										
56	Training Devices	B									U
57	Container Family	A									U
58	Family of Construction Equipment	A									U
59	Family of Internally Transportable Veh (ITV)	A									U
	Other Support										
60	Items Less Than \$5 Million	A									U
61	Cancelled Account Adjustment (M)	A									U
				-----		-----		-----		-----	
	Total Engineer and Other Equipment			75,000		75,000				75,000	
Budget Activity 07: Spares and Repair Parts											
-----											
	Spares and Repair Parts										
62	Spares and Repair Parts	A									U
				-----		-----		-----		-----	
	Total Spares and Repair Parts										

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity	Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity	Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity	Cost	S e c
53	EOD Systems	A		89,021		110,321			110,321		U
	Materials Handling Equipment										
54	Physical Security Equipment	A		31,523		37,723			37,723		U
55	Garrison Mobile Engineer Equipment (GMEE)	A									U
	General Property										
56	Training Devices	B		33,658		42,458			42,458		U
57	Container Family	A									U
58	Family of Construction Equipment	A		21,315		32,815			32,815		U
59	Family of Internally Transportable Veh (ITV)	A		9,654		9,654			9,654		U
	Other Support										
60	Items Less Than \$5 Million	A		6,026		6,326			6,326		U
61	Cancelled Account Adjustment (M)	A									U
	Total Engineer and Other Equipment			216,637		264,737			264,737		
Budget Activity 07: Spares and Repair Parts											
-----											
	Spares and Repair Parts										
62	Spares and Repair Parts	A		22,848		22,848			22,848		U
	Total Spares and Repair Parts			22,848		22,848			22,848		

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Department of the Navy  
FY 2018 President's Budget Request  
Exhibit P-1 FY 2018 President's Budget Request  
Total Obligational Authority  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	Cost	FY 2018 OCO Quantity	Cost	FY 2018 Total Quantity	Cost	S e c
----	-----	-----	-----	-----	-----	-----	-----	-----	-----
53	EOD Systems	A		27,240		21,000		48,240	U
	Materials Handling Equipment								
54	Physical Security Equipment	A		53,477				53,477	U
55	Garrison Mobile Engineer Equipment (GMEE)	A							U
	General Property								
56	Training Devices	B		76,185				76,185	U
57	Container Family	A							U
58	Family of Construction Equipment	A		26,286				26,286	U
59	Family of Internally Transportable Veh (ITV)	A		1,583				1,583	U
	Other Support								
60	Items Less Than \$5 Million	A		7,716				7,716	U
61	Cancelled Account Adjustment (M)	A							U
				-----		-----		-----	
	Total Engineer and Other Equipment			211,420		21,000		232,420	
	Budget Activity 07: Spares and Repair Parts								
	-----								
	Spares and Repair Parts								
62	Spares and Repair Parts	A		35,640				35,640	U
				-----		-----		-----	
	Total Spares and Repair Parts			35,640				35,640	

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 FY 2018 President's Budget Request  
 Exhibit P-1 FY 2018 President's Budget Request  
 Total Obligational Authority  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line		Ident	FY 2016		FY 2017		FY 2017		
No	Item Nomenclature	Code	Base + OCO		PB Request		Total		
----	-----	----	Quantity	Cost	Quantity	Cost	Quantity	Cost	
			-----	----	-----	----	-----	----	
Budget Activity 20: Undistributed									
-----									
Undistributed									
63	Adj to Match Continuing Resolution	A			-178,213		-178,213		U
			-----		-----		-----		
Total Undistributed					-178,213		-178,213		
			-----		-----		-----		
Total Procurement, Marine Corps				1,218,246	1,184,556		1,590,489		

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(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity	Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity	Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity	Cost	FY 2017 Remaining Req with CR Adj OCO Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----	----	-
Budget Activity 20: Undistributed											
-----											
Undistributed											
63	Adj to Match Continuing Resolution	A	-62,005		-62,005				-62,005		U
			-----		-----		-----		-----		
Total Undistributed			-62,005		-62,005				-62,005		
			-----		-----		-----		-----		
Total Procurement, Marine Corps			56,934		85,006				85,006		

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(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	FY 2017 Remaining Req with CR Adj Base + OCO Quantity Cost	S e c
Budget Activity 20: Undistributed							
Undistributed							
63	Adj to Match Continuing Resolution	A	-240,218	-240,218		-240,218	U
Total Undistributed			-240,218	-240,218		-240,218	
Total Procurement, Marine Corps			1,241,490	1,675,495		1,675,495	

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 FY 2018 President's Budget Request  
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 Total Obligational Authority  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Line No	Item Nomenclature	Ident Code	FY 2018 Base Quantity	Cost	FY 2018 OCO Quantity	Cost	FY 2018 Total Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-----
Budget Activity 20: Undistributed									
-----									
Undistributed									
63	Adj to Match Continuing Resolution	A							U
			-----		-----		-----		
Total Undistributed									
			-----		-----		-----		
Total Procurement, Marine Corps				2,064,825		65,274		2,130,099	



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18	04	09	4617	Combat Support System.....	Volume 1 - 95
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31	04	16	4787	UAS Payloads.....	Volume 1 - 153
34	04	18	4930	Night Vision Equipment.....	Volume 1 - 155
35	04	19	4625	Next Generation Enterprise Service.....	Volume 1 - 157
36	04	19	4630	Common Computer Resources.....	Volume 1 - 165
37	04	19	4631	Command Post Systems.....	Volume 1 - 175
38	04	19	4633	Radio Systems.....	Volume 1 - 181
39	04	19	4634	Comm Switching & Control Systems.....	Volume 1 - 187
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Commercial Passenger Vehicles	5003	41	05	01.....	Volume 1 - 199
Common Aviation Command and Control System (CAC2S)	4644	16	04	04.....	Volume 1 - 79
Common Computer Resources	4630	36	04	19.....	Volume 1 - 165
Container Family	6543	57	06	03.....	Volume 1 - 261
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Expeditionary Fire Supt Sys	2064	4	02	02.....	Volume 1 - 19
Family of Construction Equipment	6544	58	06	03.....	Volume 1 - 263
Family of Internally Trans Veh (ITV)	6545	59	06	03.....	Volume 1 - 269
Family of Tactical Trailers	5097	45	05	02.....	Volume 1 - 225
Fire Support System	4733	26	04	16.....	Volume 1 - 131
Follow on To Smaw	3016	12	03	01.....	Volume 1 - 57
GCSS-MC	4616	25	04	16.....	Volume 1 - 129
Garrison Mobile Eng Equip (GMEE)	6441	55	06	02.....	Volume 1 - 251
Ground Based Air Defense (GBAD)	3006	10	03	01.....	Volume 1 - 43
Ground/Air Task Oriented Radar (G/ATOR)	4655	23	04	15.....	Volume 1 - 109
High Mobility Artillery Rocket System	2212	6	02	02.....	Volume 1 - 25
Intelligence Support Equipment	4747	27	04	16.....	Volume 1 - 135
Items Less Than \$5 Million	6670	60	06	04.....	Volume 1 - 271
Items less Than \$5 Million	5230	47	05	03.....	Volume 1 - 229
Items under \$5 million (Comm & Elec)	4620	20	04	14.....	Volume 1 - 99
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Next Generation Enterprise Service	4625	35	04	19.....	Volume 1 - 157
Night Vision Equipment	4930	34	04	18.....	Volume 1 - 155
Physical Security Equipment	6438	54	06	02.....	Volume 1 - 247
Power Equipment Assorted	6366	51	06	01.....	Volume 1 - 237
RQ-21 UAS	4737	24	04	15.....	Volume 1 - 119
Radar Systems	4650	22	04	15.....	Volume 1 - 107
Radio Systems	4633	38	04	19.....	Volume 1 - 181
Repair and Test Equipment	4181	17	04	07.....	Volume 1 - 89
Spares and Repair Parts	7000	62	07	01.....	Volume 1 - 273
Tactical Fuel Systems	6277	50	06	01.....	Volume 1 - 235
Trailers	5132	46	05	02.....	Volume 1 - 227
Training Devices	6532	56	06	03.....	Volume 1 - 253
UAS Payloads	4787	31	04	16.....	Volume 1 - 153
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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles							<b>P-1 Line Item Number / Title:</b> 2021 / AAV7A1 PIP					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M, 0206629M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	975.318	20.365	73.785	107.665	0.000	107.665	180.750	312.152	299.658	39.132	20.645	2,029.470
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	975.318	20.365	73.785	107.665	0.000	107.665	180.750	312.152	299.658	39.132	20.645	2,029.470
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>975.318</b>	<b>20.365</b>	<b>73.785</b>	<b>107.665</b>	<b>0.000</b>	<b>107.665</b>	<b>180.750</b>	<b>312.152</b>	<b>299.658</b>	<b>39.132</b>	<b>20.645</b>	<b>2,029.470</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
<p>The Assault Amphibious Vehicle (AAV) modification program 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, nonrecurring engineering, procurement, and fielding of Engineering Change Proposals (ECP) for capability based improvements of fleet assets, reduced total ownership cost initiatives, and improved AAV sustainment initiatives. AAV modification funding will procure modernized components and subsystems that impact safe and reliable use of AAV such as Electrical Modernization, Intercom Modernization, Aluminum Road Wheels, technical refresh of servers and laptops for C-Variant, and associated production support for the AAV FOV.</p> <p>The AAV Survivability Upgrade is a capability based upgrade program centered on material upgrades in survivability such as, but not limited to, blast mitigating seats, belly/sponson armor, spall liner, deck liner and external fuel tanks. Procurement funding for the Survivability Upgrade began with Low Rate Initial Production (LRIP) in FY 2017.</p>												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	20.013	73.471	107.344	-	107.344	180.423	311.818	299.319	38.786		
NR	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	0.352	0.314	0.321	-	0.321	0.327	0.334	0.339	0.346		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-	-	
	<b>Total Obligation Authority</b>	<b>20.365</b>	<b>73.785</b>	<b>107.665</b>	-	<b>107.665</b>	<b>180.750</b>	<b>312.152</b>	<b>299.658</b>	<b>39.132</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles						<b>P-1 Line Item Number / Title:</b> 2021 / AAV7A1 PIP				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206623M, 0206629M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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	P-5a, P-21			- / 975.318	- / 20.365	- / 73.785	- / 107.665	- / 0.000	- / 107.665
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 975.318</b>	<b>- / 20.365</b>	<b>- / 73.785</b>	<b>- / 107.665</b>	<b>- / 0.000</b>	<b>- / 107.665</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										

**Justification:**

FY18 Base Appropriation Request: \$107.665M (\$107.344M Active; \$0.321M Reserve)  
 The AAV program FY17 to FY18 increase (\$33.880M) will procure additional Low Rate Initial Production (LRIP) vehicles for the Survivability Upgrade and the procurement and fleet-wide installation of engineering changes such as Electrical Modernization, Intercom Modernization, Aluminum Road Wheels, and C-Variant Hardware Tech Refresh. Continue nonrecurring engineering efforts, field activity, and contract services in support of safety, maintainability, and supportability Engineering Change Proposals (ECPs) for the AAV family of vehicles.

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				975.318		20.365		73.785		107.665		0.000		107.665				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				975.318		20.365		73.785		107.665		0.000		107.665				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				975.318		20.365		73.785		107.665		0.000		107.665				
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 <sup>(1)</sup>	-	-	78.118	-	-	13.307	-	-	15.125	-	-	25.692	-	-	-	-	-	25.692
1.1.3) Reserve Vehicle Modifications	-	-	0.938	-	-	0.352	-	-	0.314	-	-	0.321	-	-	-	-	-	0.321
1.1.4) Survivability Upgrade <sup>(†)</sup> <sup>(2)</sup>	-	-	-	-	-	-	2.438	18	43.884	2.401	30	72.038	-	-	-	2.401	30	72.038
1.1.5) Engineering Change Orders (ECO)	-	-	1.668	-	-	2.833	-	-	1.629	-	-	0.805	-	-	-	-	-	0.805
Subtotal: Recurring Cost	-	-	937.671	-	-	16.492	-	-	60.952	-	-	98.856	-	-	-	-	-	98.856
Non Recurring Cost																		
1.2.1) Nonrecurring Engineering and Tooling	-	-	6.721	-	-	0.338	-	-	0.406	-	-	0.256	-	-	-	-	-	0.256
Subtotal: Non Recurring Cost	-	-	6.721	-	-	0.338	-	-	0.406	-	-	0.256	-	-	-	-	-	0.256
Subtotal: Flyaway Cost	-	-	944.392	-	-	16.830	-	-	61.358	-	-	99.112	-	-	-	-	-	99.112
Support Cost																		
2.1) Peculiar Training Equipment & Simulators	-	-	1.893	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) Integrated Logistics Support <sup>(3)</sup>	-	-	-	-	-	2.949	-	-	-	-	-	2.841	-	-	-	-	-	2.841

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
2.3) Production Engineering Support <sup>(4)</sup>	-	-	20.848	-	-	0.586	-	-	11.313	-	-	3.621	-	-	-	-	-	3.621
2.4) Acceptance Testing	-	-	0.116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) Support Equipment	-	-	6.739	-	-	-	-	-	0.379	-	-	0.832	-	-	-	-	-	0.832
2.6) Pubs & Tech Data	-	-	1.330	-	-	-	-	-	0.735	-	-	1.259	-	-	-	-	-	1.259
Subtotal: Support Cost	-	-	30.926	-	-	3.535	-	-	12.427	-	-	8.553	-	-	-	-	-	8.553
Gross/Weapon System Cost	-	-	975.318	-	-	20.365	-	-	73.785	-	-	107.665	-	-	0.000	-	-	107.665

(†) indicates the presence of a P-5a

**Footnotes:**

- (1) Increase from FY17 to FY18 attributed to procurement and fleet-wide installation of engineering changes such as Intercom and Electrical modernizations, Aluminum Road Wheels and C-Variant Hardware Tech Refresh.
- (2) Increase from FY17 to FY18 due to increased quantities. Quantities increased by 12 kits in FY18.
- (3) In order to correctly capture ILS costs that were previously reported under Production Support (CE 2.3), the program has updated the P5 to include an Integrated Logistics Support cost element (CE 2.2) in FY18. ILS provides for reliability and maintainability engineering, supply support, GFE management, training, technical data/publications support, and packaging, handling, storage, and transportation.
- (4) FY18 production engineering support has been decreased due to the completion of fleet wide installations of EELS, AAVC7A1 MBR-II, and Tow Pintle safety upgrades, which were completed in FY17 as well as the movement of ILS costs to CE 2.2, in order to accurately capture ILS resources.



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Exhibit P-5a, Procurement History and Planning: FY 2018 Navy								Date: May 2017				
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				
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
1.1.4) Survivability Upgrade <sup>(†)</sup>		2017 <sup>(5)</sup>	SAIC / Charleston, SC	C / FFP	MCSC	Aug 2017	Feb 2018	18	2.438	N		
1.1.4) Survivability Upgrade <sup>(†)</sup>		2018	SAIC / Charleston, SC	C / FFP	MCSC	Mar 2018	Sep 2018	30	2.401	N		

<sup>(†)</sup> indicates the presence of a P-21

Footnotes:

<sup>(5)</sup> AAV Survivability Upgrade Low Rate Initial Production awards (Lot 1 and Lot 2) are options on current EMD contract.

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017																					
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																					
Cost Elements (Units in Each)							Fiscal Year 2017													Fiscal Year 2018													BALANCE								
O C 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											
1.1.4) Survivability Upgrade <sup>(2)</sup>																																									
	1	2017	NAVY	18	0	18														A -	-	-	-	-	-	-	2	3	3	3	3	3	1		0						
	1	2018	NAVY	30	0	30																											A -	-	-	-	-	-	-	2	28
							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: FY 2018 Navy																			Date: May 2017												
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												
Cost Elements (Units in Each)							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
1.1.4) Survivability Upgrade <sup>(2)</sup>																															
	1	2017	NAVY	18	18	0																						0			
	1	2018	NAVY	30	2	28	3	3	3	3	3	3	3	2	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: FY 2018 Navy								Date: May 2017				
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				
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	SAIC - Charleston, SC	18	62	96	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).

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles							<b>P-1 Line Item Number / Title:</b> 2025 / Amphibious Combat Vehicle 1.1					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> 472												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	26	-	26	30	56	92	-	-	204
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	0.000	0.000	0.000	161.511	0.000	161.511	169.811	316.064	471.775	0.761	-	1,119.922
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	0.000	0.000	0.000	161.511	0.000	161.511	169.811	316.064	471.775	0.761	-	1,119.922
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>161.511</b>	<b>0.000</b>	<b>161.511</b>	<b>169.811</b>	<b>316.064</b>	<b>471.775</b>	<b>0.761</b>	<b>-</b>	<b>1,119.922</b>
<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> )	-	-	-	5.569	-	5.569	6.221	14.115	13.798	-	-	39.703
Flyaway Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	5,290K	-	5,290K	4,709K	4,777K	4,439K	-	-	4,680K
Gross/Weapon System Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	6,212K	-	6,212K	5,660K	5,644K	5,128K	-	-	5,490K
<p><b>Description:</b></p> <p>The Amphibious Combat Vehicle (ACV) will be a partial and complementary replacement for 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 ACV program is structured to be executed in multiple phases, with the first phase designed to provide an initial operational capability of personnel carriers. Subsequent phases are planned to expand the personnel carrier capacity and to develop additional command and control and tactical recovery capabilities.</p> <p>The ACV phased approach allows the Marine Corps to procure a modernized assault amphibian to serve as a complimentary platform for forcible entry operations. The ACV Increment 1.1 variant will deliver combat ready Marines from ship-to-shore connector craft in order to mass forces at littoral penetration points and continue to maneuver onward to inland objectives. The estimated Approved Acquisition Objective (AAO) is 204 vehicles (ACV 1.1).</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles						<b>P-1 Line Item Number / Title:</b> 2025 / Amphibious Combat Vehicle 1.1				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> N/A			
<b>Line Item MDAP/MAIS Code:</b> 472										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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			- / 0.000	- / 0.000	- / 0.000	26 / 161.511	- / 0.000	26 / 161.511
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 0.000</b>	<b>- / 0.000</b>	<b>- / 0.000</b>	<b>26 / 161.511</b>	<b>- / 0.000</b>	<b>26 / 161.511</b>
*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 2018 Baseline Appropriation Request: \$161.511M  
 Funds used for Low Rate Initial Production (LRIP) of 26 vehicles, plus procurement of related items such as production support, systems engineering/program management, Engineering Change Orders (ECOs), Government Furnished Equipment (GFE), and integrated logistics support.

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1						P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle 1.1						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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		26		-		26				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				0.000		0.000		0.000		161.511		0.000		161.511				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				0.000		0.000		0.000		161.511		0.000		161.511				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				0.000		0.000		0.000		161.511		0.000		161.511				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		-		-		5.569		-		5.569				
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				-		-		-		6,212K		-		6,212K				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Surface Vehicle <sup>(1)</sup> (1)	-	-	-	-	-	-	-	-	-	3,071K	26	79.846	-	-	-	3,071K	26	79.846
1.1.2) Government Furnished Equipment <sup>(2)</sup> (2)	-	-	-	-	-	-	-	-	-	-	-	17.353	-	-	-	-	-	17.353
1.1.3) System Engineering Program Management <sup>(3)</sup> (3)	-	-	-	-	-	-	-	-	-	-	-	27.169	-	-	-	-	-	27.169
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	124.368	-	-	-	-	-	124.368
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	-	-	-	124.368	-	-	-	-	-	124.368
Flyaway - Cost																		
Non Recurring Cost																		
2.1.3) Engineering Change Order	-	-	-	-	-	-	-	-	-	-	-	1.597	-	-	-	-	-	1.597
2.1.4) Nonrecurring Engineering & Industrial Tooling	-	-	-	-	-	-	-	-	-	-	-	11.587	-	-	-	-	-	11.587
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	13.184	-	-	-	-	-	13.184
Subtotal: Flyaway - Cost	-	-	-	-	-	-	-	-	-	-	-	13.184	-	-	-	-	-	13.184
Support Cost																		
3.1) Production Support	-	-	-	-	-	-	-	-	-	-	-	7.444	-	-	-	-	-	7.444

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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1							P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle 1.1						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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
3.2) Acceptance Testing (4)	-	-	-	-	-	-	-	-	-	-	-	2.151	-	-	-	-	-	2.151
3.3) Peculiar Training Equipment and Simulators	-	-	-	-	-	-	-	-	-	-	-	1.633	-	-	-	-	-	1.633
3.4) Pubs & Tech Data	-	-	-	-	-	-	-	-	-	-	-	2.987	-	-	-	-	-	2.987
3.5) Support Equipment	-	-	-	-	-	-	-	-	-	-	-	1.972	-	-	-	-	-	1.972
3.6) Integrated Logistics Support (ILS) (5)	-	-	-	-	-	-	-	-	-	-	-	7.772	-	-	-	-	-	7.772
Subtotal: Support Cost	-	-	-	-	-	-	-	-	-	-	-	23.959	-	-	-	-	-	23.959
Gross/Weapon System Cost	-	-	0.000	-	-	0.000	-	-	0.000	6,212K	26	161.511	-	-	0.000	6,212K	26	161.511

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

**Footnotes:**

- (1) Engineering Change Orders (ECOs) address fact of life changes to vehicle configuration such as performance, safety, or reliability.
- (2) GFE includes communication suites, Driver's Vision Enhancer, exportable power, Joint Battle Command-Platform (JBC-P), and the Amphibious Remote Weapon Stations (ARWS).
- (3) Systems Engineering/Program Management 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 redesign/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.
- (4) Acceptance Testing is funded in the fiscal year in which the item is procured as part of the full funding policy.
- (5) 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 established.



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Exhibit P-5a, Procurement History and Planning: FY 2018 Navy								Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1				P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle 1.1				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 <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Surface Vehicle <sup>(†)</sup>		2018	Down-Select Contractor / TBD	C / FPIF	MCSC	Jun 2018	May 2019	26	3,071K	Y		Dec 2017

<sup>(†)</sup> indicates the presence of a P-21

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1										P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle 1.1										Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle														
Cost Elements <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			
1.1.1) Surface Vehicle <sup>(1)</sup>																																		
	1	2018	NAVY		26	0	26								A	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	10	3		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: FY 2018 Navy									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1					P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle 1.1				Item Number / Title [DODIC]: 1 / Amphibious Combat Vehicle			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	Down-Select Contractor - TBD	TBD	TBD	92	0	9	11	20	0	4	7	11

"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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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles							<b>P-1 Line Item Number / Title:</b> 2038 / LAV PIP					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,685.490	88.756	53.423	17.244	0.000	17.244	44.697	63.676	66.206	57.503	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,685.490	88.756	53.423	17.244	0.000	17.244	44.697	63.676	66.206	57.503	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>1,685.490</b>	<b>88.756</b>	<b>53.423</b>	<b>17.244</b>	<b>0.000</b>	<b>17.244</b>	<b>44.697</b>	<b>63.676</b>	<b>66.206</b>	<b>57.503</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	1.275	0.628	1.006	-	1.006	5.830	5.990	6.157	6.283	Continuing	Continuing
Flyaway Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
<p>The LAV Anti-Tank Modernization (LAV-ATM) Program will modernize the legacy turret and Tube-launched, Optically-tracked, Wire-guided (TOW) system in order to sustain the capability, improve readiness, ensure a high degree of commonality with USMC and U.S. Army systems, and enable the Light Armored Reconnaissance (LAR) Battalion to employ the full range of current and emerging TOW munitions. The program will counter two converging obsolescence issues on the LAV-ATM platform: (1) the M901 Emerson turret is no longer in production and has been retired from the U.S. Army inventory, and (2) the M2203A3 TOW system is being replaced by the M41 SABER system in the USMC infantry and tank battalions leaving the LAR Battalion as the only unit using the legacy TOW system.</p> <p>The LAV Modification &amp; Sustainment program funds important vehicle modifications, support equipment and tools and other projects that increase LAV reliability and readiness while simultaneously reducing operations and support costs. The Marine Corps Program Management LAV Modification Team uses multi-disciplined integrated project teams consisting of engineering, logistical, contracting and financial personnel to manage Modification projects. Currently the LAV Modification and Sustainment program will capture the ACAT IV(M) Obsolescence program (OB). The OB program will address the Family of Light Armored Vehicles (FOLAV) automotive system obsolescence and reduced performance due to increased Gross Vehicle Weight (GVW). The OB program will improve fleet reliability and availability by addressing the three sub-systems (power pack, driveline and steering) that specifically account for 95% of total system downtime. Also, fields a modern driver's instrument panel and LAV-25 Slip Ring. The contract for the Obsolescence project was awarded as a Sole Source contract to the Original Equipment Manufacturer (OEM). This effort will require delivery of 8 kits (7 installed on vehicles, 1 stand-alone kit) during the Engineering &amp; Manufacturing Development (EMD) phase to support Developmental Testing (DT), fielding, Integrated Logistics Support (ILS) products, Modification Instructions (MI) and Engineering Change Proposals (ECP).</p>												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	51.756	53.423	17.244	-	17.244	43.601	62.549	65.059	56.333		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	37.000	-	-	-	-	1.096	1.127	1.147	1.170		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-		
	<b>Total Obligation Authority</b>	<b>88.756</b>	<b>53.423</b>	<b>17.244</b>	<b>-</b>	<b>17.244</b>	<b>44.697</b>	<b>63.676</b>	<b>66.206</b>	<b>57.503</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 1: Tracked Combat Vehicles		<b>P-1 Line Item Number / Title:</b> 2038 / LAV PIP
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206623M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p><b>Justification:</b>  FY 2018 Baseline Appropriation: \$17.244M  LAV Anti-Tank Modernization (ATM): \$13.876M Funds the fielding of the Anti-Tank Weapon Systems (ATWS) and supporting efforts such as all required logistics support, installation, and required government and contractor support.</p> <p>LAV Modification and Sustainment (MOD): \$3.368M Funds the Safety related pneumatic valve and locking pin on the drivers seat modification and other low cost, on demand field requirements.</p> <p>The funding decrease from FY17 to FY18 of \$35.801M reflects the ramp down of production and completion of the Approved Acquisition Objective (AAO) for the ATM program.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons							<b>P-1 Line Item Number / Title:</b> 2064 / Expeditionary Fire Supt Sys					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	90.062	0.000	3.360	0.626	0.000	0.626	0.066	0.070	0.071	0.071	-	94.326
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	90.062	0.000	3.360	0.626	0.000	0.626	0.066	0.070	0.071	0.071	-	94.326
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>90.062</b>	<b>0.000</b>	<b>3.360</b>	<b>0.626</b>	<b>0.000</b>	<b>0.626</b>	<b>0.066</b>	<b>0.070</b>	<b>0.071</b>	<b>0.071</b>	<b>-</b>	<b>94.326</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Expeditionary Fire Support System (EFSS) is an all-weather, ground based indirect fire system designed to support the vertical assault element of a Ship-To-Objective Maneuver (STOM) force. EFSS is defined as a Launcher, Mobility Platform (prime mover), Ammunition, Ammunition Supply Vehicle, and Technical Fire Direction and Control equipment necessary for orienting weapons to an azimuth of fire. EFSS supports irregular warfare and distributed operations. The EFSS system deployed to Afghanistan in January 2011 and is an integral part of the Marines triad of land-based fire support for expeditionary operations.												
<b>Justification:</b> FY18 Baseline Appropriation Request: \$0.626M Baseline appropriation funds will be used for procurement of EFSS and EFSS Fire Control System (EFCS) upgrades. The EFSS Fire Control System (EFCS) is needed for employment of guided munitions, such as the Precision Extended Range Munition (PERM) which will provide extended range and precision guidance capabilities to the EFSS. The decrease of \$2.734M from FY17 to FY18 is due to completion of EFSS Fire Control System (EFCS) hardware procurement.												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons							<b>P-1 Line Item Number / Title:</b> 2185 / 155MM Ltw Towed Howitzer					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,322.156	7.105	17.318	20.259	0.000	20.259	0.211	0.072	0.072	0.074	-	1,367.267
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,322.156	7.105	17.318	20.259	0.000	20.259	0.211	0.072	0.072	0.074	-	1,367.267
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>1,322.156</b>	<b>7.105</b>	<b>17.318</b>	<b>20.259</b>	<b>0.000</b>	<b>20.259</b>	<b>0.211</b>	<b>0.072</b>	<b>0.072</b>	<b>0.074</b>	<b>-</b>	<b>1,367.267</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> LW155 (also known as the M777A2 howitzer) provides direct, reinforcing, and general support fires to maneuver forces as well as direct support artillery. It is a joint program between the Marine Corps and Army, which is additionally supporting various foreign military purchases of the weapon system. The LW155 was first fielded by the Marine Corps in April 2005 and since then the 10th, 11th, 12th, and 14th Marines and the schoolhouses have been fielded. The Army has fielded the system to its Stryker Brigades and Fires Brigades and is currently fielding to its Infantry Brigades. The LW155 is being significantly utilized in Afghanistan operations.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	6.768	16.185	20.250	-	20.250	0.205	0.066	0.066	0.066	0.068	
NR	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	0.337	1.133	0.009	-	0.009	0.006	0.006	0.006	0.006	0.006	
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
	<b>Total Obligation Authority</b>	<b>7.105</b>	<b>17.318</b>	<b>20.259</b>	<b>-</b>	<b>20.259</b>	<b>0.211</b>	<b>0.072</b>	<b>0.072</b>	<b>0.072</b>	<b>0.074</b>	

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons						<b>P-1 Line Item Number / Title:</b> 2185 / 155MM Ltwt Towed Howitzer				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206623M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-5	1 / 155MM Ltwt Towed Howitzer - Active				- / 1,322.156	- / 7.105	- / 17.318	- / 20.259	- / 0.000	- / 20.259
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 1,322.156</b>	<b>- / 7.105</b>	<b>- / 17.318</b>	<b>- / 20.259</b>	<b>- / 0.000</b>	<b>- / 20.259</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b>  FY 2018 Base Appropriation Request: \$20.259M(\$20.250M Active; \$0.009M Reserve)  This budget line item provides funding for various modification and sustainment efforts such as Digital Fire Control System (DFCS) component refresh, integration of upgraded components, and interoperability issues including M-Code satellite signal in support of the M777A2 program. Specifically, FY18 funding will continue to support installations of modification kits such as the Improved Power Conditioning Control Module(I-PCCM), Electronic Thermal Warning Device (ETWD), Hydraulic Power Assist Kit (HyPAK), Mission Computer (MSC-R), Chief of Section Display (CSD-R), Improved Platform Integration Kit (iPIK) and Primer Feed Mechanism (PFM) Components. The PFM and ETWD procurements are critical efforts to address current field restrictions for firing the Modular Artillery Charge System (MACS) at higher elevations. Additionally, funding supports the procurement of Chrome Cannon Tubes for the M777A2 howitzer. Chrome Cannon Tubes increase safety, accuracy, and longevity of the howitzer by eliminating propellant residue inside the cannon tubes. Propellant residue causes spiral wear which reduces the muzzle velocity of the howitzer and fuze malfunctions of projectiles. Reduced muzzle velocity leads to projectiles impacting short of their intended targets. Funding also supports the procurement of software defined radios, cables and brackets, and integration onto the M777A2 howitzer.</p> <p>Net funding increase of \$2.941 from FY17 to FY18 reflects the FY18 commencement of the procurement of software defined radios for the M777A2 fleet as well as the previous completion of qualification of engineering changes for the howitzer power supply to the Enhanced Power pack.</p>										

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-		-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				1,322.156		7.105		17.318		20.259		0.000		20.259				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				1,322.156		7.105		17.318		20.259		0.000		20.259				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				1,322.156		7.105		17.318		20.259		0.000		20.259				
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
Software - Active Cost																		
Non Recurring Cost																		
1.1.1) Training Aids, Devices, Simulators and Simulations	-	-	0.770	-	-	0.758	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	0.770	-	-	0.758	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Software - Active Cost	-	-	0.770	-	-	0.758	-	-	-	-	-	-	-	-	-	-	-	-
Support - Active Cost																		
2.1) Systems Engineering/Program Mgt	-	-	14.205	-	-	0.428	-	-	-	-	-	-	-	-	-	-	-	-
2.2) Hardware/electronic obsolescence and improvement ECP Retrofits <sup>(1)</sup>	-	-	6.885	-	-	5.582	-	-	2.185	-	-	5.602	-	-	-	-	-	5.602
2.3) Power Upgrade	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4) Chrome Cannon Tubes	-	-	-	-	-	-	-	-	14.000	-	-	14.648	-	-	-	-	-	14.648
Subtotal: Support - Active Cost	-	-	24.090	-	-	6.010	-	-	16.185	-	-	20.250	-	-	-	-	-	20.250
Support - Reserves - 155MM LtwT Towed Howitzer Cost																		
3.1) Systems Engineering/Program Management	-	-	0.420	-	-	0.025	-	-	0.132	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
3.2) Hardware/electronic obsolescence and improvement ECP retrofits	-	-	0.796	-	-	0.312	-	-	1.001	-	-	0.009	-	-	-	-	-	0.009
Subtotal: Support - Reserves - 155MM Ltwt Towed Howitzer Cost	-	-	1.216	-	-	0.337	-	-	1.133	-	-	0.009	-	-	-	-	-	0.009
Support - Prior Years Cost																		
4.1) Prior Years Cumulative Funding	-	-	1,296.080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support - Prior Years Cost	-	-	1,296.080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	1,322.156	-	-	7.105	-	-	17.318	-	-	20.259	-	-	0.000	-	-	20.259
Footnotes:																		
(1) Reflects the FY18 commencement of the procurement of software defined radios for the M777A2 fleet																		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons							<b>P-1 Line Item Number / Title:</b> 2212 / High Mobility Artillery Rocket System					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	549.714	16.285	53.015	59.943	5.360	65.303	40.184	48.020	211.446	380.509	-	1,364.476
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	549.714	16.285	53.015	59.943	5.360	65.303	40.184	48.020	211.446	380.509	-	1,364.476
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>549.714</b>	<b>16.285</b>	<b>53.015</b>	<b>59.943</b>	<b>5.360</b>	<b>65.303</b>	<b>40.184</b>	<b>48.020</b>	<b>211.446</b>	<b>380.509</b>	-	<b>1,364.476</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> High Mobility Artillery Rocket Systems (HIMARS) is a C-130 transportable, wheeled, indirect fire, rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM). The system includes one launcher, two Re-Supply Systems (RSS), and the MFOM.  HIMARS will provide the Marine Air-Ground Task Force (MAGTF) with 24 hour ground-based, responsive General Support/General Support Reinforcing (GS/GSR) indirect fires which accurately engage targets at long range (60+km), with high volumes of lethal fire under all weather conditions throughout all phases of combat operations ashore, to include irregular warfare and distributed operations.  HIMARS is a significant improvement over previously fielded ground fire support systems. During a 24 hour period, the system is expected to conduct multiple moves and multiple fire missions. Guided Multiple Launch Rocket System (GMLRS) is the primary munition for units fielded with the HIMARS. GMLRS provides close, medium, and long range precision and area fires to destroy, suppress, and shape threat forces and protect friendly forces against cannon, mortar, rocket and missile artillery, light material and armor, personnel, command and control, and air defense surface targets. GMLRS integrates guidance and control packages and an improved rocket motor achieving greater range and precision accuracy, requiring fewer rockets to defeat targets, thereby reducing the logistics burden. The GMLRS integrates a multi-mode fuse and high explosive warhead making it an all-weather, precision strike rocket. The three GMLRS variants are GMLRS with Dual Purpose Improved Conventional Munitions (DPICM), GMLRS Unitary (U), and GMLRS Alternative Warhead (AW). GMLRS U expands the MLRS target set into urban and complex environments by adding point, proximity, and delay fusing modes. GMLRS U have been fired in support of Overseas Contingency Operations (OCO), and has demonstrated high effectiveness and low collateral damage while supporting Marines in combat. GMLRS AW was developed to replace GMLRS-DPICM and meet the requirements outlined in a 25 June 2008 cluster munitions policy.  HIMARS satisfies the Marine Corps requirement for an indirect fire system that is responsive, maneuverable, and is capable of engaging targets at long range. The Reduced Range Practice Rocket (RRPR) includes training devices for tactical training, classroom training and handling exercises.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	13.445	49.852	56.753	5.360	62.113	37.072	44.840	208.199	377.197		

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy							Date: May 2017			
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 / High Mobility Artillery Rocket 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										
Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.840	3.163	3.190	-	3.190	3.112	3.180	3.247	3.312
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	16.285	53.015	59.943	5.360	65.303	40.184	48.020	211.446	380.509

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons						<b>P-1 Line Item Number / Title:</b> 2212 / High Mobility Artillery Rocket System				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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 / HIMARS	P-5a, P-21			- / 549.714	- / 16.285	- / 53.015	- / 59.943	- / 5.360	- / 65.303
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 549.714</b>	<b>- / 16.285</b>	<b>- / 53.015</b>	<b>- / 59.943</b>	<b>- / 5.360</b>	<b>- / 65.303</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										

**Justification:**

FY 2018 Baseline Appropriation Request: \$59.943M  
 Funding will procure the GMLRS Alternative Warhead (AW) and RRPRs. In addition, funds will provide program management and engineering support for HIMARS, GMLRS and RRPRs. These systems are fielded to both the active (\$56.753M) and reserve (\$3.190M) components. The increase of \$6.928M from FY 17 to FY 18 will be used to procure additional GMLRS AW.

OCO:  
 FY 2018 Overseas Contingency Operations (OCO) Request: \$5.360M  
 Funding will be used to replenish projected SOCOM HIMARS rocket expenditures. Funding will support the procurement of 43 GMLRS Alternate Warhead rockets.

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Exhibit P-5, Cost Analysis: FY 2018 Navy											Date: May 2017							
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2						P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System						Item Number / Title [DODIC]: 1 / HIMARS						
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:								
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				549.714		16.285		53.015		59.943		5.360		65.303				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				549.714		16.285		53.015		59.943		5.360		65.303				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				549.714		16.285		53.015		59.943		5.360		65.303				
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 ECPs	-	-	1.481	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.2) USMC HIMARS PMO	-	-	17.730	-	-	0.407	-	-	0.528	-	-	0.500	-	-	-	-	-	0.500
1.1.3) Prior Year Cumulative Funding	-	-	16.146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	35.357	-	-	0.407	-	-	0.528	-	-	0.500	-	-	-	-	-	0.500
Subtotal: Flyaway Cost	-	-	35.357	-	-	0.407	-	-	0.528	-	-	0.500	-	-	-	-	-	0.500
Hardware Cost																		
Recurring Cost																		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(†) (1)</sup>	114,894.74	76	8.732	114,635.00	63	7.222	122,634.00	357	43.780	124,528.00	405	50.434	124,528.00	43	5.354	124,528.00	448	55.788
2.1.2) GMLRS Alternative Warhead Program (AWP) Reserve <sup>(†) (2)</sup>	114,888.89	27	3.102	114,635.00	24	2.751	122,634.00	25	3.065	124,528.00	25	3.113	-	-	-	124,528.00	25	3.113
2.1.3) M28A2 Reduced Range Practice Rocket (RRPR-DODIC H185) <sup>(†) (3)</sup>	5,645.26	1,308	7.384	7,018.00	648	4.547	5,771.00	648	3.739	6,812.00	648	4.414	-	-	-	6,812.00	648	4.414
2.1.6) M31 Guided Multiple Launch	201,038.61	2,020	406.098	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2						P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System							Item Number / Title [DODIC]: 1 / HIMARS					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
Rocket Systems (GMLRS - DODIC HA51) <sup>(†)</sup>																		
2.1.7) M31 GMLRS (DODIC HA51) OCO	-	-	77.033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1.8) ATACMS Procurement	1,700K	1	1.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	504.049	-	-	14.520	-	-	50.584	-	-	57.961	-	-	5.354	-	-	63.315
Subtotal: Hardware Cost	-	-	504.049	-	-	14.520	-	-	50.584	-	-	57.961	-	-	5.354	-	-	63.315
Support Cost																		
3.1) Procurement Support Reserves	-	-	0.052	-	-	0.089	-	-	0.098	-	-	0.077	-	-	-	-	-	0.077
3.2) Engineering Services for Rockets (GMLRS and AWP)	-	-	4.359	-	-	0.524	-	-	0.609	-	-	0.672	-	-	0.006	-	-	0.678
3.3) Engineering Services for RRPRs	-	-	3.371	-	-	0.210	-	-	0.423	-	-	0.147	-	-	-	-	-	0.147
3.4) Travel	-	-	0.050	-	-	0.050	-	-	0.050	-	-	0.050	-	-	-	-	-	0.050
3.5) FSS Shared Costs	-	-	2.329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.6) Logistics	-	-	-	-	-	0.352	-	-	0.388	-	-	0.240	-	-	-	-	-	0.240
3.7) HIMARS Engineering Support NSWC DD	-	-	0.147	-	-	0.133	-	-	0.335	-	-	0.296	-	-	-	-	-	0.296
Subtotal: Support Cost	-	-	10.308	-	-	1.358	-	-	1.903	-	-	1.482	-	-	0.006	-	-	1.488
Gross/Weapon System Cost	-	-	549.714	-	-	16.285	-	-	53.015	-	-	59.943	-	-	5.360	-	-	65.303

(†) indicates the presence of a P-5a

**Footnotes:**

- (1) AWP unit costs are dependent on total quantities procured amongst the Army, Marine Corps and Foreign Military Sales (FMS) organizations that participate in the contract award. The Marine Corps quantities procured are only a small portion of the total buy. Marine Corps GMLRS unit cost does not include GMLRS Training Devices. Unit costs updated to match the Army submission.
- (2) AWP unit costs are dependent on total quantities procured amongst the multiple service organizations that participate in the contract award. The Marine Corps quantities procured are only a small portion of the total buy. Unit costs updated to match the Army submission.
- (3) RRPR unit costs are dependent on total quantities procured amongst the multiple service organizations that participate in the contract award. The Marine Corps quantities procured are only a small portion of the total buy. FY17/18 unit costs updated to match the Army submission.

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Navy</b>									<b>Date: May 2017</b>			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 02 / 2				<b>P-1 Line Item Number / Title:</b> 2212 / High Mobility Artillery Rocket System					<b>Item Number / Title [DODIC]:</b> 1 / HIMARS			
<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(†)</sup>		2015	Lockheed Martin / Dallas, TX	SS / FFP	Huntsville, AL	Jun 2015	Oct 2016	76	114,895.00	Y		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(†)</sup>		2016	Lockheed Martin / Dallas, TX	C / FPIF	Huntsville, AL	Mar 2016	Jul 2017	63	114,635.00	Y		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(†)</sup>		2017	Lockheed Martin / Dallas, TX	C / FPIF	Huntsville, AL	Jun 2017	Oct 2018	357	122,634.00	N		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(†)</sup>		2018	Lockheed Martin / Dallas, TX	C / CPIF	Huntsville, AL	Jul 2018	Nov 2019	405	124,528.00	N		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(†)</sup>	✓	2018	Lockheed Martin / Dallas, TX	C / CPIF	Huntsville, AL	Jul 2018	Nov 2019	43	124,528.00	N		
2.1.2) GMLRS Alternative Warhead Program (AWP) Reserve		2015	Lockheed Martin / Dallas, TX	SS / FFP	Huntsville, AL	Jun 2015	Oct 2016	27	114,895.00	N	Oct 2015	
2.1.2) GMLRS Alternative Warhead Program (AWP) Reserve		2016	Lockheed Martin / Dallas, TX	C / FPIF	Huntsville, AL	Mar 2016	Jul 2017	24	114,635.00	N	Oct 2016	
2.1.2) GMLRS Alternative Warhead Program (AWP) Reserve		2017	Lockheed Martin / Dallas, TX	C / FPIF	Huntsville, AL	Jun 2017	Oct 2018	25	122,634.00	N	Oct 2017	
2.1.2) GMLRS Alternative Warhead Program (AWP) Reserve		2018	Lockheed Martin / Dallas, TX	C / FPIF	Huntsville, AL	Jul 2018	Nov 2019	25	124,528.00	N		
2.1.3) M28A2 Reduced Range Practice Rocket (RRPR-DODIC H185)		2015	LetterKenny Munitions Center / Chambersburg, PA	MIPR	Letterkenny, PA	Jun 2015	Oct 2016	648	6,891.00	N	Sep 2016	
2.1.3) M28A2 Reduced Range Practice Rocket (RRPR-DODIC H185)		2016	LetterKenny Munitions Center / Chambersburg, PA	MIPR	Letterkenny, PA	Mar 2016	Jul 2017	648	7,018.00	N	Sep 2017	
2.1.3) M28A2 Reduced Range Practice Rocket (RRPR-DODIC H185)		2017	LetterKenny Munitions Center / Chambersburg, PA	MIPR	Letterkenny, PA	Jun 2017	Oct 2018	648	5,771.00	N	Sep 2018	
2.1.3) M28A2 Reduced Range Practice Rocket (RRPR-DODIC H185)		2018	LetterKenny Munitions Center / Chambersburg, PA	MIPR	Letterkenny, PA	Jul 2018	Nov 2019	648	6,812.00	N	Sep 2019	
2.1.6) M31 Guided Multiple Launch Rocket Systems (GMLRS - DODIC HA51)		2015	Lockheed Martin <sup>(4)</sup> / Dallas, TX	SS / FFP	Huntsville, AL	Jun 2015	Oct 2016	33	106,969.70	Y		
<sup>(†)</sup> indicates the presence of a P-21  <b>Footnotes:</b>												

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Navy</b>		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 02 / 2	<b>P-1 Line Item Number / Title:</b> 2212 / High Mobility Artillery Rocket System	<b>Item Number / Title [DODIC]:</b> 1 / HIMARS

(4) Marine Corps items are only a portion of the contractor's deliveries each month, the Army and Foreign Military Sales bring line up to the MSR. PFRMS PMO raised the Minimum Sustaining Rate (MSR) for GMLRS due to the final delivery and installation of hardware necessary to achieve the DA directed 6,000 rate capacity. Production below MSR will significantly impact unit cost due to increased overhead/maintenance required to support Department of Army directed facilitation. Production of GMLRS varies as this program shares a production line with RRPRs. There are no production gaps during months that GMLRS are not being produced as RRPRs Rocket production continues.

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017																				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System										Item Number / Title [DODIC]: 1 / HIMARS																				
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015										Fiscal Year 2016										BALANCE													
OCO	MFR #	FY	SERVICE	PROC QTY	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									
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(1)</sup>																																								
	1	2015	NAVY	76	0	76											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76						
	1	2016	NAVY	63	0	63																					A -	-	-	-	-	-	-	-	-	-	-	-	-	63
	1	2017	NAVY	357	0	357																										357								
	1	2018	NAVY	405	0	405																										405								
✓	1	2018	NAVY	43	0	43																										43								
							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: FY 2018 Navy																				Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System										Item Number / Title [DODIC]: 1 / HIMARS													
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													
							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	O C 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		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(1)</sup>																																	
	1	2015	NAVY	76	0	76	8	9	9	9	9	9	8	3	3	3	3	3														0	
	1	2016	NAVY	63	0	63	-	-	-	-	-	-	-	-	-	6	6	6	6	6	6	5	4	4	4	4						0	
	1	2017	NAVY	357	0	357								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357	
	1	2018	NAVY	405	0	405																					A -	-	-	-	405		
✓	1	2018	NAVY	43	0	43																					A -	-	-	-	43		
							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	O C 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: FY 2018 Navy																				Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System										Item Number / Title [DODIC]: 1 / HIMARS													
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		
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(1)</sup>																																	
	1	2015	NAVY	76	76	0																											0
	1	2016	NAVY	63	63	0																											0
	1	2017	NAVY	357	0	357	30	30	30	30	30	30	30	30	29	29	29																0
	1	2018	NAVY	405	0	405	-	-	-	-	-	-	-	-	-	-	-	-	34	34	34	34	34	34	34	34	34	34	33	33	33		
✓	1	2018	NAVY	43	0	43	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	3	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: FY 2018 Navy																				Date: May 2017														
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2										P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System										Item Number / Title [DODIC]: 1 / HIMARS														
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			
2.1.1) GMLRS Alternative Warhead Program (AWP) Active <sup>(1)</sup>																																		
	1	2015	NAVY	76	76	0																											0	
	1	2016	NAVY	63	63	0																											0	
	1	2017	NAVY	357	357	0																											0	
	1	2018	NAVY	405	372	33	33																											0
✓	1	2018	NAVY	43	43	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	0			

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Exhibit P-21, Production Schedule: FY 2018 Navy									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 2					P-1 Line Item Number / Title: 2212 / High Mobility Artillery Rocket System				Item Number / Title [DODIC]: 1 / HIMARS			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	1,080	3,000	6,000	0	2	15	17	0	2	16	18

"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: FY 2018 Navy								Date: May 2017				
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	91.950	7.845	9.442	19.616	0.000	19.616	32.727	22.805	11.708	11.971	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	91.950	7.845	9.442	19.616	0.000	19.616	32.727	22.805	11.708	11.971	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	91.950	7.845	9.442	19.616	0.000	19.616	32.727	22.805	11.708	11.971	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:												
This line item supports multiple Weapons and Tracked Combat Vehicle requirements to enhance the existing systems and kits within the USMC inventory with improved, state-of-the-art electronics and tools for units that have been added or changed due to Table of Organizational and Table of Equipment changes. The line item also supports the ongoing changes to the various stock lists prescribing those components of sets of test equipment and tools.												
This line also provides funding for the Weapons Enhancement Program for various force protection items and Marine upgrades. The program funds urgently required commercially available equipment and non-developmental items (NDI) that can be rapidly fielded to support the Operating Forces such as the Family of Ballistic Protection Systems which includes Full Spectrum Battlefield Equipment (FSBE), Marine Enhancement Program (MEP), Escalation of Force - Equipment (EoF-E), Ocular Interruption (OI), and Family of Incident Response Systems (FIRS). FSBE is used to address the needs of Marines performing Special Operations Capable missions in Maritime Special Purpose Force (MSPF) (i.e. MSPF detachment and helicopter Assault Company). Less weight, increased positive buoyancy, spare air source, and a cutaway system are all desired quality changes under this program. MEP is a Congressionally initiated program that provides an avenue for obtaining equipment and end items that would otherwise be considered low visibility, low cost. The MEP Program funding focuses on equipment that will benefit the individual Marine by reducing load, increasing survivability, enhancing safety, and improving combat effectiveness. EoF-E funding provides support and sustainment of all fielded equipment and capabilities. Additionally, EoF-E supports type-classification, testing and procurement of new advancements and technologies to provide an increased capability over existing or outdated equipment currently or associated in the Escalation of Force-Mission Modules (EoF-MMs). OI is the replacement of the 'Dazzling Laser' program for the LA-9/P and the Non Glare Mount 532P-M (Mini Green) laser. OI is a "Non-damaging" dazzling system that will be used in Escalation of Force-Missions to provide a non-lethal, force protection capability to warn and visually suppress targeted personnel at ranges from 10 to 500 meters. 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).												
Increases in funding beginning in FY 2017 are attributed to the addition of funding from BLI 2208.												
Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	7.722	9.442	19.616	-	19.616	32.727	22.805	11.708	11.971		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 2: Artillery and Other Weapons						<b>P-1 Line Item Number / Title:</b> 2220 / Wpns & Cmbt Vehs under \$5 million				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.123	-	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>7.845</b>	<b>9.442</b>	<b>19.616</b>	-	<b>19.616</b>	<b>32.727</b>	<b>22.805</b>	<b>11.708</b>	<b>11.971</b>
<p><b>Justification:</b> FY 2018 Base Appropriation: \$19.616M</p> <p>The increase of \$10.174M from FY17 to FY18 is due to the FIRS program being added to procure Prime Movers and Unified Command Suit (UCS); Company and Battalion Mortars to support mortar systems; and Ocular Interruption to procure OI systems.</p> <p>Family of Infantry Weapons Systems - \$5.331M will provide for continuous monitoring, assessment of and implementation of Joint Service and USMC unique system modifications. This includes efforts such as: sustain weapon capability and/or improve the operation, maintainability, supportability, service life, ergonomics, and safety enhancements. Funding supports the continued multiple year procurement of Lightweight Machinegun Tripods (LMT) (Traverse and Elevation (T&amp;E) Mechanisms), the MK 13 Rifle with associated optic, and principle end items (PEI) due to combat losses, wash-outs, and increases in AAO, as well as continuing product improvement and modernization of sniper and special purpose weapons, and support equipment. Funding also supports various program/acquisition support activities, such as ammunition costs related to those production verification activities.</p> <p>Family of Incident Response Systems (FIRS) - \$0.806M will facilitate procurement of two Prime Movers needed for CBIRF's Common Analytical Laboratory System (CALS) and the modernization of CBIRF's legacy Unified Command Suit (UCS) which is facing obsolescence in FY18.</p> <p>Company and Battalion Mortars - \$0.810M will support the capability of indirect fire systems to the Marine Corps inventory of 60mm and 81mm mortar systems and incorporate component product improvements, ammunition costs related to mortar production verification activities, as well as procurement of hardware for integration with the Lightweight Handheld Mortar Ballistic Computer (LHMCB) upgrade.</p> <p>Escalation of Force Equipment (EoF-E) - \$1.748M will be used to procure EoF-MM upgraded components such as the Improved Voice Translation Device. Funding for EoF-E moved from BLI 2208 beginning in FY17.</p> <p>Ocular Interruption (OI) - \$10.921M will be used to procure OI Systems. Funding for OI moved from BLI 2208 beginning in FY17.</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 4: Other Support							<b>P-1 Line Item Number / Title:</b> 2061 / Modification Kits					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	722.302	14.137	15.250	17.778	0.000	17.778	18.197	18.401	38.769	46.307	-	891.141
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	722.302	14.137	15.250	17.778	0.000	17.778	18.197	18.401	38.769	46.307	-	891.141
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>722.302</b>	<b>14.137</b>	<b>15.250</b>	<b>17.778</b>	<b>0.000</b>	<b>17.778</b>	<b>18.197</b>	<b>18.401</b>	<b>38.769</b>	<b>46.307</b>	<b>-</b>	<b>891.141</b>
<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> )	-	2.069	4.380	0.362	-	0.362	-	-	-	-	-	6.811
Flyaway Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
This budget line item is used to acquire and sustain assigned systems, and other capabilities for the Operating Forces to accomplish their war fighting mission. Items such as Engineering Change Proposals (ECP) and upgrades to address known and future reliability, sustainability, maintainability and obsolescence issues to ensure mission readiness and capability on the battlefield will be procured.												
M1A1 MOD KIT: The M1A1 Mod Kit Line is established to sustain the technology of the M1A1 Tank. Funding supports the procurement, fielding and testing of critical operational and safety related modifications. The funding is also used to enhance and maintain platform characteristics of the Tank and its components such as reliability-availability-maintainability (RAM) and in operationally relevant attributes relating to survivability (Active/Re-active/Passive), lethality, and Command & Control. Funding also supports items such as miscellaneous tools and test items for the M1A1 tank and associated supporting platforms, safety and sustainment modifications to the bridge launcher, and Materiel Fielding Support.												
M88A2 HERCULES: The M88A2 HERCULES recovery vehicle is a Product Improvement Program which reuses the fielded M88A1 hull, upgraded with a new engine, transmission, hydraulics, suspension, and armor protection, supporting recovery of vehicles weighing up to 70 tons. The Recovery Vehicle, Full Tracked, M88A2 is the Marine Air-Ground Task Force's (MAGTF) heavy lift, recovery, and battlefield maintenance asset. Funding procures, fields and tests critical operational and safety related modifications. Funding also addresses issues such as reliability, and configuration control of the M88A2 HERCULES and supporting systems. Funding also includes miscellaneous tools and test items for the M88A2 HERCULES and Material Fielding Support.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	13.948	14.757	15.270	-	15.270	15.631	15.775	36.090	43.573		
NR	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	0.189	0.493	2.508	-	2.508	2.566	2.626	2.679	2.734		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
	<b>Total Obligation Authority</b>	<b>14.137</b>	<b>15.250</b>	<b>17.778</b>	<b>-</b>	<b>17.778</b>	<b>18.197</b>	<b>18.401</b>	<b>38.769</b>	<b>46.307</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 4: Other Support		<b>P-1 Line Item Number / Title:</b> 2061 / Modification Kits
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206624M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p><b>Justification:</b>  FY 2018 M1A1 MOD KIT \$14.883M: Active \$12.582M; Reserves \$2.301M:  This funds modifications to the M1A1 Abrams tank (active and reserve components) to increase capabilities in survivability and lethality, specifically, to procure the Abrams Integrated Display and Targeting System (AIDATS) which will complete Full Rate Production (FRP). The increase in FY18 of \$2.306M will fund the procurement of Improved Side Armor (ISA), upgrades to the Gunner's Primary Sight Lower Panel, and transportability modifications to the Track Width Mine Plow (TWMP).</p> <p>FY 2018 M88A2 HERCULES \$2.895M: Active \$2.688M; Reserves \$0.207M:  Funds will continue the procurement of modifications kits and associated Systems Technical Support addressing modernization and mitigating obsolescence for the M88A2. They will also support modification of tools and test equipment unique to the product office's portfolio of combat vehicles such as Direct Support Electrical Systems Test Set (DSESTS) and echeloned tool kits. The increase of \$0.222M is Marine Corps Hardware Suites (MCHS) funding for the procurement of computer assets.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 02: Weapons and combat vehicles / BSA 4: Other Support							<b>P-1 Line Item Number / Title:</b> 2208 / Weapons Enhancement Program					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	53.900	0.449	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	54.349
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	53.900	0.449	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	54.349
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>53.900</b>	<b>0.449</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-</b>	<b>54.349</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> The Weapons Enhancement Program provides funding for various force protection items and Marine upgrades. The program funds urgently required commercially available equipment and non-developmental items (NDI) that can be rapidly fielded to support the Operating Forces such as the Family of Ballistic Protection Systems which includes Full Spectrum Battlefield Equipment (FSBE), Marine Enhancement Program (MEP), Escalation of Force - Equipment (EoF-E), and Ocular Interruption (OI). FSBE is used to address the needs of Marines performing Special Operations Capable missions in Maritime Special Purpose Force (MSPF) (i.e. MSPF detachment and helicopter Assault Company). Less weight, increased positive buoyancy, spare air source, and a cutaway system are all desired quality changes under this program. MEP is a Congressionally initiated program that provides an avenue for obtaining equipment and end items that would otherwise be considered low visibility, low cost. The MEP Program funding focuses on equipment that will benefit the individual Marine by reducing load, increasing survivability, enhancing safety, and improving combat effectiveness. EoF-E funding provides support and sustainment of all fielded equipment and capabilities. Additionally, EoF-E supports type-classification, testing and procurement of new advancements and technologies to provide an increased capability over existing or outdated equipment currently or associated in the Escalation of Force- Mission Modules (EoF-MMs). OI is the replacement of the 'Dazzling Laser' program for the LA-9/P and the Non Glare Mount 532P-M (Mini Green) laser. OI is a "Non-damaging" dazzling system that will be used in Escalation of Force-Missions to provide a non-lethal, force protection capability to warn and visually suppress targeted personnel at ranges from 10 to 500 meters.												
Funding for the Weapons Enhancement Program, moves to BLI 2220 beginning in FY 2017.												
<b>Justification:</b> Funding in BLI 2208 moved to BLI 2220, beginning in FY 2017.												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							<b>P-1 Line Item Number / Title:</b> 3006 / Ground Based Air Defense (GBAD)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	77.784	6.642	9.170	9.432	0.000	9.432	15.922	16.501	16.825	15.513	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	77.784	6.642	9.170	9.432	0.000	9.432	15.922	16.501	16.825	15.513	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>77.784</b>	<b>6.642</b>	<b>9.170</b>	<b>9.432</b>	<b>0.000</b>	<b>9.432</b>	<b>15.922</b>	<b>16.501</b>	<b>16.825</b>	<b>15.513</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Ground Based Air Defense-Transformation (GBAD-T) supports the Low Altitude Air Defense (LAAD) Battalion's missions of Short Range Air Defense (SHORAD) and provides the Marine Air Ground Task Force (MAGTF), to include, Bases, Posts and Stations, the necessary Force Protection to defeat the full spectrum of threats associated with the Marine Corps Low-Altitude Air Defense mission, to include hostile aerial threats from Unmanned Aerial Systems (UAS). The Advanced Man-Portable Air Defense System (A-MANPADS) Fire Unit is a mobile, Stinger missile-based low altitude surface-to-air weapons system designed to provide close-in short range air defense. A-MANPADS assets are organic to the Low Altitude Air-Defense (LAAD) Battalion of the Marine Air Control Group (MACG). LAAD Battalions support the Marine Air Ground Task Force by defending forward combat areas, maneuver forces, vital areas and installations, and units engaged in special or independent operations. The LAAD Battalion consists of a headquarters and two A-MANPADS firing batteries. Each firing battery, in turn, consists of a battery headquarters and two A-MANPADS firing platoons. Firing platoons include a platoon headquarters and three firing sections, the smallest tactical units of the LAAD Battalion. The A-MANPADS Section is comprised of a Section Leader and five Fire Units. The Section Leader oversees the deployment of the Fire Units and directs their fires in support of the overall air defense plan. A major service-life extension must be conducted in order to mitigate the potential gap between the current and follow-on weapon system. Therefore, GBAD is executing a Service Life Extension Program (SLEP), due to the approaching shelf life expiration of the Stinger Missile. Additionally, GBAD requires an Optics upgrade/replacement of the current Stinger Missile Night Sight (AN/PAS-18), and replacement of the Identification Friend or Foe (IFF) belt pack (AN/PPX-3B). With the proliferation of both military and commercial UAS platforms, the program anticipates pursuing and acquiring GBAD Future Weapons System platforms with Counter-UAS capability now and for the foreseeable future.												
<b>Justification:</b> FY2018 Baseline Appropriation Request: Ground Based Air Defense-Transformation (GBAD-T) \$9.432M - FY18 active funding will support continued A-MANPADS upgrade and fielding of the Fire Unit Vehicle (FUV). The increase in funding of \$.262M from FY17 to FY18 is to initiate the upgrade and fielding of Section Leader Vehicle (SLV) procurement which provides the Low Altitude Air Defense (LAAD) Battalions with an armored vehicle variant that enables the LAAD Gunners to deploy in support of all Operational Forces.  OCO: FY2018 Overseas Contingency Operations Request (OCO): N/A												

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy										Date: May 2017	
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 / JAVELIN				

<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A										<b>Program Elements for Code B Items:</b> N/A										<b>Other Related Program Elements:</b> N/A									
<b>Line Item MDAP/MAIS Code:</b> N/A																													

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	930	327	524	222	11	233	101	114	101	2	Continuing	Continuing
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	149.339	58.895	79.624	41.159	2.833	43.992	20.164	22.545	20.218	1.344	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	149.339	58.895	79.624	41.159	2.833	43.992	20.164	22.545	20.218	1.344	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority ( <i>\$ in Millions</i> )	149.339	58.895	79.624	41.159	2.833	43.992	20.164	22.545	20.218	1.344	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> )	160.580	180.107	151.954	185.401	257.545	188.807	199.644	197.763	200.178	672.000	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Thousands</i> )	160.580	180.107	151.954	185.401	257.545	188.807	199.644	197.763	200.178	672.000	Continuing	Continuing

**Description:**

Javelin provides the US Army and USMC a man-portable, fire-and-forget, medium-range missile with enhanced situational awareness and precision direct-fire effects 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 day/night, battlefield obscurants, adverse weather and multiple counter-measure conditions. The system's soft launch feature permits firing from a fighting position or an enclosure. Javelin uses a modular design to allow the system to evolve to meet changing threats and requirements via both software and hardware upgrades. The system consists of a reusable Command Launch Unit (CLU) with a built-in-test (BIT), and a modular missile encased in a disposable launch tube assembly. The system also includes training devices for tactical training and classroom training. Javelin's fire-and-forget technology allows the gunner to fire again without the need to track targets. The Javelin provides enhanced lethality through the use of a tandem warhead which will defeat all current armor threats. It is effective against both stationary and moving targets. This system also provides defensive capability against attacking/hovering helicopters. The performance improvements in current production Javelin Block I CLUs are: increased target identification range, increased surveillance time with new battery and software management and external RS-170 interface for video output. The performance improvements in current production Javelin Block I missiles are: 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.

<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	327	524	222	11	233	101	114	101	2
	Total Obligation Authority	58.743	79.459	40.985	2.833	43.818	19.984	22.361	20.031	1.152
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.152	0.165	0.174	-	0.174	0.180	0.184	0.187	0.192
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>58.895</b>	<b>79.624</b>	<b>41.159</b>	<b>2.833</b>	<b>43.992</b>	<b>20.164</b>	<b>22.545</b>	<b>20.218</b>	<b>1.344</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						<b>P-1 Line Item Number / Title:</b> 3011 / JAVELIN				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> N/A			
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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			930 / 149.339	327 / 58.895	524 / 79.624	222 / 41.159	11 / 2.833	233 / 43.992
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>930 / 149.339</b>	<b>327 / 58.895</b>	<b>524 / 79.624</b>	<b>222 / 41.159</b>	<b>11 / 2.833</b>	<b>233 / 43.992</b>
*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 2018 Base Appropriation Request: \$41.159M (active \$40.985M, reserve \$0.174M)  
 Guided Missiles - Javelin - Funding supports the procurement of 222 Javelin missiles to replenish inventory due to end of life service conditions. Funding also provides for engineering and logistics support of the Javelin system, updating of reserve equipment, and program management support.

OCO:  
 FY 2018 Overseas Contingency Operations (OCO) Request: \$2.833M  
 Guided Missiles - Javelin - Funding supports replenishment of 11 Javelin missiles used in combat operations in theater as well as training specific ammunition for units in direct support of operations. Funding will also provide for engineering, logistics and program management required to place Javelin missiles in service.

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<b>Exhibit P-5, Cost Analysis: FY 2018 Navy</b>										<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 03 / 1						<b>P-1 Line Item Number / Title:</b> 3011 / JAVELIN					<b>Item Number / Title [DODIC]:</b> 1 / JAVELIN		

ID Code (A=Service Ready, B=Not Service Ready) :				MDAP/MAIS Code:		
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	930	327	524	222	11	233
Gross/Weapon System Cost (\$ in Millions)	149.339	58.895	79.624	41.159	2.833	43.992
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	149.339	58.895	79.624	41.159	2.833	43.992
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	149.339	58.895	79.624	41.159	2.833	43.992
(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 Thousands)	160.580	180.107	151.954	185.401	257.545	188.807

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 <sup>(†)</sup> (1)	152.510	928	141.529	144.505	398	57.513	149.532	524	78.355	180.000	222	39.960	180.000	11	1.980	180.000	233	41.940
1.1.2) Government Engineering Services	-	-	5.782	-	-	0.402	-	-	0.647	-	-	0.185	-	-	-	-	-	0.185
1.1.3) Government Program Management (2)	-	-	1.920	-	-	0.828	-	-	0.457	-	-	0.610	-	-	-	-	-	0.610
1.1.4) Reserves-Training Equipment	-	-	0.108	-	-	0.152	-	-	0.165	-	-	0.174	-	-	-	-	-	0.174
1.1.5) In-Service Management Support	-	-	-	-	-	-	-	-	-	-	-	0.230	-	-	0.853	-	-	1.083
Subtotal: Recurring Cost	-	-	149.339	-	-	58.895	-	-	79.624	-	-	41.159	-	-	2.833	-	-	43.992
Subtotal: Flyaway Cost	-	-	149.339	-	-	58.895	-	-	79.624	-	-	41.159	-	-	2.833	-	-	43.992
<b>Gross/Weapon System Cost</b>	<b>160.580</b>	<b>930</b>	<b>149.339</b>	<b>180.107</b>	<b>327</b>	<b>58.895</b>	<b>151.954</b>	<b>524</b>	<b>79.624</b>	<b>185.401</b>	<b>222</b>	<b>41.159</b>	<b>257.545</b>	<b>11</b>	<b>2.833</b>	<b>188.807</b>	<b>233</b>	<b>43.992</b>

<sup>(†)</sup> indicates the presence of a P-5a

**Footnotes:**

<sup>(1)</sup> The unit price per missile is determined by the demand in production quantities per year through foreign military sales and combined service bulk purchases. The estimated missile unit price for FY2017 is based upon OEM vendor rates for Block I missile variant, to include an estimated 4.3% surcharge fee. An increase in unit price per missile is projected FY18 and out as a result of a new missile variant (Spiral II) being procured which is currently being managed by the United States Army.

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Exhibit P-5, Cost Analysis: FY 2018 Navy		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1	P-1 Line Item Number / Title: 3011 / JAVELIN	Item Number / Title [DODIC]: 1 / JAVELIN
ID Code (A=Service Ready, B=Not Service Ready) :		MDAP/MAIS Code:
<div>(2) Government Program Management support increases after FY17 due to new safety support requirements.</div>		

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Exhibit P-5a, Procurement History and Planning: FY 2018 Navy								Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1			P-1 Line Item Number / Title: 3011 / 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 <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Guided Missiles <sup>(†)</sup>	✓	2013	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	May 2013	Jan 2016	142	152.348	Y		
1.1.1) Guided Missiles <sup>(†)</sup>		2014	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Sep 2014	Aug 2017	229	141.418	Y		
1.1.1) Guided Missiles <sup>(†)</sup>	✓	2014	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Sep 2014	Aug 2017	178	141.418	Y		
1.1.1) Guided Missiles <sup>(†)</sup>	✓	2015	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Jun 2015	Aug 2018	102	163.328	Y		
1.1.1) Guided Missiles <sup>(†)</sup>		2016	Javelin Joint Venture, All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Apr 2016	Aug 2018	350	144.505	Y		
1.1.1) Guided Missiles <sup>(†)</sup>	✓	2016	Javelin Joint Venture, All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Apr 2016	Aug 2018	48	144.505	Y		
1.1.1) Guided Missiles <sup>(†)</sup>		2017	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / TBD	** NO PCO **	Apr 2017	Dec 2019	515	149.532	N		
1.1.1) Guided Missiles <sup>(†)</sup>	✓	2017	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Apr 2017	Dec 2019	9	149.532	Y		
1.1.1) Guided Missiles <sup>(†)</sup>		2018	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Apr 2018	Dec 2020	222	180.000	Y		
1.1.1) Guided Missiles <sup>(†)</sup>	✓	2018	Javelin Joint Venture All Up Round / Orlando. FL/Tucson, AZ	C / FFP	Orlando, FL/Tucson, AZ	Apr 2018	Dec 2020	11	180.000	Y		

<sup>(†)</sup> indicates the presence of a P-21

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3011 / JAVELIN										Item Number / Title [DODIC]: 1 / JAVELIN															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2013										Fiscal Year 2014														B A L A N C E				
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2012	BAL DUE AS OF 1 OCT	Calendar Year 2013										Calendar Year 2014																		
							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) Guided Missiles <sup>(1)</sup>																																			
Prior Years Deliveries: 277																																			
✓	1	2013	NAVY	142	0	142											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142
	2	2014	NAVY	229	0	229																									A -	229			
✓	2	2014	NAVY	178	0	178																									A -	178			
✓	3	2015	NAVY	102	0	102																										102			
	4	2016	NAVY	350	0	350																										350			
✓	4	2016	NAVY	48	0	48																										48			
	1	2017	NAVY	515	0	515																										515			
✓	1	2017	NAVY	9	0	9																										9			
	1	2018	NAVY	222	0	222																										222			
✓	1	2018	NAVY	11	0	11																										11			
							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: FY 2018 Navy																							Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3011 / JAVELIN													Item Number / Title [DODIC]: 1 / JAVELIN													
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015												Fiscal Year 2016												BALANCE					
OCO	MFR #	FY	SERVICE	PROC QTY	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) Guided Missiles <sup>(1)</sup>																																				
Prior Years Deliveries: 277																																				
✓	1	2013	NAVY	142	0	142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0					
	2	2014	NAVY	229	0	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229					
✓	2	2014	NAVY	178	0	178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	178					
✓	3	2015	NAVY	102	0	102									A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	102				
	4	2016	NAVY	350	0	350																			A	-	-	-	-	-	-	-	-	-	-	350
✓	4	2016	NAVY	48	0	48																			A	-	-	-	-	-	-	-	-	-	-	48
	1	2017	NAVY	515	0	515																											515			
✓	1	2017	NAVY	9	0	9																											9			
	1	2018	NAVY	222	0	222																											222			
✓	1	2018	NAVY	11	0	11																											11			
							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: FY 2018 Navy																			Date: May 2017																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1									P-1 Line Item Number / Title: 3011 / JAVELIN										Item Number / Title [DODIC]: 1 / JAVELIN																	
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) Guided Missiles <sup>(1)</sup>																																				
Prior Years Deliveries: 277																																				
✓	1	2013	NAVY	142	142	0																											0			
	2	2014	NAVY	229	0	229	-	-	-	-	-	-	-	-	-	-	229																0			
✓	2	2014	NAVY	178	0	178	-	-	-	-	-	-	-	-	-	-	178																0			
✓	3	2015	NAVY	102	0	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	102	0					
	4	2016	NAVY	350	0	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	0					
✓	4	2016	NAVY	48	0	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	0					
	1	2017	NAVY	515	0	515											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	515		
✓	1	2017	NAVY	9	0	9											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	
	1	2018	NAVY	222	0	222																						A -	-	-	-	-	-	-	-	222
✓	1	2018	NAVY	11	0	11																						A -	-	-	-	-	-	-	-	11
							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: FY 2018 Navy																			Date: May 2017																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1							P-1 Line Item Number / Title: 3011 / JAVELIN													Item Number / Title [DODIC]: 1 / JAVELIN																
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						
1.1.1) Guided Missiles <sup>(1)</sup>																																				
Prior Years Deliveries: 277																																				
✓	1	2013	NAVY		142	142	0																								0					
	2	2014	NAVY		229	229	0																								0					
✓	2	2014	NAVY		178	178	0																								0					
✓	3	2015	NAVY		102	102	0																								0					
	4	2016	NAVY		350	350	0																								0					
✓	4	2016	NAVY		48	48	0																								0					
	1	2017	NAVY		515	0	515	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
✓	1	2017	NAVY		9	0	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0						
	1	2018	NAVY		222	0	222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	222						
✓	1	2018	NAVY		11	0	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11						
								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: FY 2018 Navy																							Date: May 2017											
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3011 / JAVELIN													Item Number / Title [DODIC]: 1 / JAVELIN											
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) Guided Missiles <sup>(1)</sup>																																		
Prior Years Deliveries: 277																																		
✓	1	2013	NAVY		142	142	0																											0
	2	2014	NAVY		229	229	0																											0
✓	2	2014	NAVY		178	178	0																											0
✓	3	2015	NAVY		102	102	0																											0
	4	2016	NAVY		350	350	0																											0
✓	4	2016	NAVY		48	48	0																											0
	1	2017	NAVY		515	515	0																											0
✓	1	2017	NAVY		9	9	0																											0
	1	2018	NAVY		222	0	222	-	-	222																								0
✓	1	2018	NAVY		11	0	11	-	-	11																								OCT

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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Navy								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 03 / 1				<b>P-1 Line Item Number / Title:</b> 3011 / JAVELIN				<b>Item Number / Title [DODIC]:</b> 1 / JAVELIN			

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	Javelin Joint Venture All Up Round - Orlando. FL/Tucson, AZ	1,320	6,480	8,040	11	3	26	29	11	3	32	35
2	Javelin Joint Venture All Up Round - Orlando. FL/Tucson, AZ	TBD	TBD	TBD	0	0	0	0	0	0	35	35
3	Javelin Joint Venture All Up Round - Orlando. FL/Tucson, AZ	TBD	TBD	TBD	0	0	0	0	0	0	38	38
4	Javelin Joint Venture, All Up Round - Orlando. FL/Tucson, AZ	TBD	TBD	TBD	0	0	0	0	0	0	28	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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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							<b>P-1 Line Item Number / Title:</b> 3016 / Follow on To Smaw					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0603635M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	54.852	0.000	24.666	25.125	0.049	25.174	0.023	0.067	0.090	0.112	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	54.852	0.000	24.666	25.125	0.049	25.174	0.023	0.067	0.090	0.112	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>54.852</b>	<b>0.000</b>	<b>24.666</b>	<b>25.125</b>	<b>0.049</b>	<b>25.174</b>	<b>0.023</b>	<b>0.067</b>	<b>0.090</b>	<b>0.112</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Follow on to Shoulder-Launched Multipurpose Assault Weapon (SMAW) (FOTS): The solution to the Follow on to SMAW (FOTS) capability requirement has been defined as the SMAW MOD 2 system. It is a lightweight, short range, fire-and-forget assault weapon comprised of a launcher and integral sighting system that enables a Marine to neutralize a variety of ground targets. Marine Expeditionary Forces will employ the SMAW MOD 2 across the spectrum of conflict, under all environmental conditions, to destroy a variety of ground targets. As defined in the FOTS Capability Production Document (CPD), the program consists of requirements for a new Launcher with an integrated laser range finder and thermal sight. The Launcher will be physically and functionally compatible with existing inventory of SMAW rocket variants [High Explosive Dual Purpose, Anti-Armor, Novel Explosive and Common Practice (CP)] and will replace the existing Mark 153 Mod 0 SMAW launcher. Procurement funds will be used to procure SMAW Mod 2 systems (launcher and sighting system), initial issue of spare parts, millijoule meter, next generation firing mechanism, program office and production engineering support. SMAW Mod 2 is fully funded for a quantity of 1166 as required by the Acquisition Program Baseline. The Approved Acquisition Objective for SMAW Mod 2 is 1249.												

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy							Date: May 2017			
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 / Follow on To Smaw					
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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		-	- / 54.852	- / 0.000	- / 24.666	- / 25.125	- / 0.049	- / 25.174
P-40	Total Gross/Weapon System Cost				- / 54.852	- / 0.000	- / 24.666	- / 25.125	- / 0.049	- / 25.174
*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 2018 Base Appropriation Request: \$25.125M

\$24.755M will fund procurement of 512 Full Rate Production quantities of SMAW MOD 2 systems, associated support equipment, replacement millijoule meters for boresight kits, and initial issue spare parts.  
\$0.370M funds the USMC program office and engineering support.

Increase of \$.459M funding from FY17 to FY18 is due to FY18 Full Rate Production of SMAW MOD 2 launchers.

## OCO:

FY2018 Overseas Contingency Operations (OCO): \$0.049M

Funding will support procurement of 1 SMAW MOD 2 system due to combat loss.

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 3016 / Follow on To Smaw						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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				54.852		0.000		24.666		25.125		0.049		25.174				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				54.852		0.000		24.666		25.125		0.049		25.174				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				54.852		0.000		24.666		25.125		0.049		25.174				
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Government Engineering Services (1)	-	-	4.556	-	-	-	-	-	0.310	-	-	0.092	-	-	-	-	-	0.092
1.1.2) SMAW MOD 2 Launcher <sup>(†)</sup> (2)	625,825.40	63	39.427	-	-	-	47,033.20	512	24.081	48,349.61	512	24.755	48,349.61	1	0.048	48,349.61	513	24.803
1.1.3) Government Program Management (3)	-	-	0.118	-	-	-	-	-	0.275	-	-	0.278	-	-	0.001	-	-	0.279
1.1.4) Non Recurring Expenditure (NRE) Production	-	-	2.254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	46.355	-	-	-	-	-	24.666	-	-	25.125	-	-	0.049	-	-	25.174
Subtotal: Flyaway Cost	-	-	46.355	-	-	-	-	-	24.666	-	-	25.125	-	-	0.049	-	-	25.174
Support Cost																		
2.1) SMAW MOD 2 - Reserves	-	-	0.894	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) Prior Years Cumulative Funding	-	-	7.603	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	8.497	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	54.852	-	-	0.000	-	-	24.666	-	-	25.125	-	-	0.049	-	-	25.174
† indicates the presence of a P-5a																		

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<b>Exhibit P-5, Cost Analysis:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 03 / 1	<b>P-1 Line Item Number / Title:</b> 3016 / Follow on To Smaw	<b>Item Number / Title [DODIC]:</b> 1 / Follow on To Smaw - Active
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>
<p><b>Footnotes:</b></p> <p>(1) The decrease from FY17 to FY18 is due to a reduction in engineering requirements.</p> <p>(2) The unit costs are driven down in FY17 due to the increased quantities for the FRP procurements as well as the gain from the manufacturer being further down the production learning curve following completion of LRIP production.</p> <p>(3) By the end of FY18, the approved acquisition objective will have been reached reducing the demand for government program management services in the out-years.</p>		



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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Navy</b>								<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 03 / 1				<b>P-1 Line Item Number / Title:</b> 3016 / Follow on To Smaw				<b>Item Number / Title [DODIC]:</b> 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
1.1.2) SMAW MOD 2 Launcher <sup>(†)</sup>		2015 <sup>(4)</sup>	ADS, Inc. / Virginia Beach, VA	C / FFP	MCSC, Quantico, VA	Oct 2015	Nov 2017	63	59,357.77	Y		Jan 2015
1.1.2) SMAW MOD 2 Launcher <sup>(†)</sup>		2017	ADS, Inc. / Virginia Beach, VA	C / FFP	MCSC, Quantico, VA	May 2017	Apr 2018	512	47,033.20	Y		Jan 2015
1.1.2) SMAW MOD 2 Launcher <sup>(†)</sup>		2018	ADS, Inc. / Virginia Beach, VA	C / FFP	MCSC, Quantico, VA	Nov 2017	Oct 2018	512	48,349.61	Y		Jan 2015
1.1.2) SMAW MOD 2 Launcher <sup>(†)</sup>	✓	2018	ADS, Inc. / Virginia Beach, VA	C / FFP	MCSC, Quantico, VA	Nov 2017	Oct 2018	1	48,349.61	Y		Jan 2015

<sup>(†)</sup> indicates the presence of a P-21

**Footnotes:**

<sup>(4)</sup> \*Delivery Order (DO) 0001 procured 56 SMAW MOD 2 systems for \$61.159K per unit; and DO 0002 procured 7 systems for \$44.948K per unit

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3016 / Follow on To Smaw										Item Number / Title [DODIC]: 1 / Follow on To Smaw - Active													
Cost Elements (Units in Each)							Fiscal Year 2016												Fiscal Year 2017												B A L A N C E		
O C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016												Calendar Year 2017														
							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			
1.1.2) SMAW MOD 2 Launcher <sup>(2)</sup>																																	
	2	2015	NAVY	63	0	63	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63		
	1	2017	NAVY	512	0	512																			A -	-	-	-	-	512			
	1	2018	NAVY	512	0	512																											512
✓	1	2018	NAVY	1	0	1																											1
							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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# LI 3016 - Follow on To Smaw Navy

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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Navy								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 03 / 1					<b>P-1 Line Item Number / Title:</b> 3016 / Follow on To Smaw				<b>Item Number / Title [DODIC]:</b> 1 / Follow on To Smaw - Active		

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	ADS, Inc. - Virginia Beach, VA	400	600	800	0	5	11	16	0	5	11	16
2	ADS, Inc. - Virginia Beach, VA	400	600	800	0	5	25	30	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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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles							<b>P-1 Line Item Number / Title:</b> 3017 / Anti Armor Weapons System-Heavy (AAWS-H)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0603635M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	138.112	0.661	17.080	51.553	5.024	56.577	45.106	6.111	6.251	6.384	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	138.112	0.661	17.080	51.553	5.024	56.577	45.106	6.111	6.251	6.384	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>138.112</b>	<b>0.661</b>	<b>17.080</b>	<b>51.553</b>	<b>5.024</b>	<b>56.577</b>	<b>45.106</b>	<b>6.111</b>	<b>6.251</b>	<b>6.384</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>The M41A7 Saber weapon system is a combat proven system that provides long-range, lethal anti-armor and precision assault fires capability for USMC Infantry, Tank and Light Armored Reconnaissance Battalions across the spectrum of contemporary operational environments. The M41A7 is the replacement for the M220 Tube-launched, Optically tracked, Wire/Wireless-guided (TOW) 2 weapon system. Far target location includes a GPS based position and altitude determination subsystem, enabling the system to generate a 10-digit grid coordinate of a target location. The M41A7's superior surveillance capability also enables the Marine to shape the battlefield by detecting targets at long range and either engaging with TOW missiles or other weapon systems to destroy those targets. The M41A7 continues to be the weapon of choice in precision combat engagements in Overseas Contingency Operations (OCO).</p> <p>TOW missiles (BGM-71 Series) are the munition for the M41A7 system. The TOW missile is a highly lethal, cost effective, interoperable, multi-purpose munition. TOW missiles are used in direct fire or fly-over, shoot down mode against anti-armor or direct fire 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.</p> <p>The Lithium-Ion Battery Box (LBB) GEN 2 is the power source to the M41A7 Saber weapon system. The current Saber LBB cannot be transported on ships while in the weapon system, reducing the mission readiness of units operating on ships. The procurement of LBB GEN 2 will maintain the current operational capability with Navy safety certification for charging, shipping, and storage aboard Naval vessels.</p> <p>The Image Enhancement (IE) modification to the M41A7 reduces operator workload by automating the display's focus and brightness and contrast adjustments and optimizing the Night Sight image presented to gunner through electronic processing of the Forward Looking Infrared (FLIR) image. The Night Sight image optimization reduces the time required for the operator to identify targets thereby decreasing engagement times.</p> <p>The M41A7 is mounted from a variety of combat vehicle systems such as HighMobility Multipurpose Wheeled Vehicle (HMMWV), Mine Resistant Ambush Protected Vehicle (MRAP), and Light Armored Vehicle - Anti-Tank (LAV-AT), and Joint Lightweight Tactical Vehicle (JLTV), as well as having the capability for ground mounted operations.</p> <p>Procurement activities include replenishment of stocks used in combat operations, and modification of missiles for training and expiring stocks. In addition, modification kits, upgrades, engineering and program support services for maintenance and configuration management are procured from this budget line item.</p>												

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy							Date: May 2017			
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 Weapons System-Heavy (AAWS-H)					
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.545	16.859	51.342	5.024	56.366	44.918	5.913	6.048	6.177
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.116	0.221	0.211	-	0.211	0.188	0.198	0.203	0.207
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.661	17.080	51.553	5.024	56.577	45.106	6.111	6.251	6.384

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 1: Guided Missiles						<b>P-1 Line Item Number / Title:</b> 3017 / Anti Armor Weapons System-Heavy (AAWS-H)				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0603635M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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, P-21			- / 138.112	- / 0.661	- / 17.080	- / 51.553	- / 5.024	- / 56.577
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 138.112</b>	<b>- / 0.661</b>	<b>- / 17.080</b>	<b>- / 51.553</b>	<b>- / 5.024</b>	<b>- / 56.577</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b>  FY2018 Base Appropriation Request: \$51.553M  \$44.354M will procure 662 missiles expended during the Pre-Deployment Training Period (PTP) for training conducted during Desert Talon, Integrated Training Exercise (ITX), Weapons and Tactics Instructor course (WTI), Urban Warfare, Marine Corps Mountain Warfare Training Center (MCMWTC), combined arms training for units preparing to deploy and loss of missiles due to end of service life. Failure to replenish missile expenditures will require additional withdraws from war reserve stockpiles, further exacerbating the delay between expenditure reporting and replacement via the acquisition process. Funds will also be used for engineering and program management efforts associated with the refurbishing and retrofitting of missiles in order to extend their service life. Additionally, \$7.199M will support product improvement upgrades for the Saber System, engineering, logistics, program office support and reserve equipment support.</p> <p>The funding increase in this BLI is due to the inclusion of funds from BLI 3123 beginning in FY 2017.</p> <p>The funding increase of \$34.473M from FY17 to FY18 is due to the procurement of 505 more missiles and related product support costs.</p> <p>OCO:  FY2018 Overseas Contingency Operations (OCO): \$5.024M  Funding in the amount of \$4.958M covers replenishment of 74 TOW missiles in combat operations in theater as well as training specific ammunition for units in direct support of operations. Additionally, \$0.066M will provide program support.</p>										

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1						P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)						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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				138.112		0.661		17.080		51.553		5.024		56.577				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				138.112		0.661		17.080		51.553		5.024		56.577				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				138.112		0.661		17.080		51.553		5.024		56.577				
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) TOW Missiles <sup>(†)</sup> (1)	-	-	-	-	-	-	58,273.00	157	9.149	67,000.00	662	44.354	67,000.00	74	4.958	67,000.00	736	49.312
1.1.3) Prior Years Cumulative Funding	-	-	90.212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	90.212	-	-	-	-	-	9.149	-	-	44.354	-	-	4.958	-	-	49.312
Subtotal: Flyaway - Prior Years Cumulative Funding Cost	-	-	90.212	-	-	-	-	-	9.149	-	-	44.354	-	-	4.958	-	-	49.312
Hardware - Cost																		
Recurring Cost																		
2.1.1) Saber Maintenance and Support Equipment <sup>(2)</sup>	-	-	5.298	-	-	-	-	-	0.808	-	-	0.786	-	-	-	-	-	0.786
2.1.2) Saber Subsystems/ Components	-	-	5.830	-	-	-	-	-	1.968	-	-	1.983	-	-	-	-	-	1.983
2.1.3) Prior Years Cumulative Funding	37,561.57	942	35.383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	46.511	-	-	-	-	-	2.776	-	-	2.769	-	-	-	-	-	2.769
Subtotal: Hardware - Cost	-	-	46.511	-	-	-	-	-	2.776	-	-	2.769	-	-	-	-	-	2.769
Support Cost																		



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Exhibit P-5, Cost Analysis: FY 2018 Navy										Date: May 2017									
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)					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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) USMC PMO Support - Saber Product Improvement	-	-	0.495	-	-	0.352	-	-	0.404	-	-	0.503	-	-	-	-	-	0.503
3.2) Engineering Support (3)	-	-	0.159	-	-	0.193	-	-	3.345	-	-	2.528	-	-	-	-	-	2.528
3.3) Program Support	-	-	0.391	-	-	-	-	-	1.185	-	-	1.188	-	-	0.066	-	-	1.254
3.4) Reserves - Saber	-	-	0.344	-	-	0.116	-	-	0.221	-	-	0.211	-	-	-	-	-	0.211
<i>Subtotal: Support Cost</i>	-	-	<b>1.389</b>	-	-	<b>0.661</b>	-	-	<b>5.155</b>	-	-	<b>4.430</b>	-	-	<b>0.066</b>	-	-	<b>4.496</b>
<b>Gross/Weapon System Cost</b>	-	-	<b>138.112</b>	-	-	<b>0.661</b>	-	-	<b>17.080</b>	-	-	<b>51.553</b>	-	-	<b>5.024</b>	-	-	<b>56.577</b>

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

## Footnotes:

(1) The unit price per missile is influenced by the demand in production quantities per year through foreign military sales and combined service purchases. The estimated missile unit price for FY 2017 is based on a historical average of prior year procurements of 3 different missile variants (2A, 2B, and Bunker Buster), factoring inflation. The estimated missile unit price for FY 2018 and beyond is increased due to expected surcharge fees and lower demand in production quantities. Unit prices are affected by combining U.S. Army procurement quantities with other U.S. services and foreign military sales quantities. In FY 2020, missile procurements are expected to stop due to the reprioritization of efforts focused on enhancing safety with the procurement of the LBB GEN 2.

(2) The decrease in FY16 is attributed to the fielding of Image Enhancement kits which is projected to complete by 4th quarter of 2016.

(3) Beginning in FY17 funds will also be used to support the delivery of previously procured TOW missiles (from BLI 3123/Modification Kits).

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Exhibit P-5a, Procurement History and Planning: FY 2018 Navy									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1				P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)				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 <i>(Each)</i>	Unit Cost <i>(\$)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) TOW Missiles <sup>(†)</sup>		2017	Raytheon, Tuscon, AZ / USARMY Huntsville, AL	C / FFP	CCWS, Redstone	Jun 2017	May 2020	157	58,273.00	Y		Oct 2015
1.1.1) TOW Missiles <sup>(†)</sup>		2018	Raytheon, Tuscon, AZ / USARMY Huntsville, AL	C / FFP	CCWS, Redstone	Jun 2018	May 2021	662	67,000.00	Y		Oct 2015
1.1.1) TOW Missiles <sup>(†)</sup>	✓	2018	Raytheon, Tuscon, AZ / USARMY Huntsville, AL	C / FFP	CCWS, Redstone	Jun 2018	May 2021	74	67,000.00	Y		Oct 2015

<sup>(†)</sup> indicates the presence of a P-21

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)										Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM- HEAVY (AAWS-H)															
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2017										Fiscal Year 2018														B A L A N C E				
O C C #	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					
1.1.1) TOW Missiles <sup>(1)</sup>																																			
	1	2017	NAVY	157	0	157											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157
	1	2018	NAVY	662	0	662																									A -	-	-	-	662
✓	1	2018	NAVY	74	0	74																									A -	-	-	-	74
							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: FY 2018 Navy																				Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)										Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM- HEAVY (AAWS-H)													
Cost Elements (Units in Each)							Fiscal Year 2019													Fiscal Year 2020													B A L A N C E
O C C #	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			
1.1.1) TOW Missiles <sup>(1)</sup>																																	
	1	2017	NAVY	157	0	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157					0
	1	2018	NAVY	662	0	662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	662	
✓	1	2018	NAVY	74	0	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	
							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: FY 2018 Navy																				Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1										P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)										Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM- HEAVY (AAWS-H)													
Cost Elements (Units in Each)							Fiscal Year 2021													Fiscal Year 2022													BALANCE
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			
1.1.1) TOW Missiles <sup>(1)</sup>																																	
	1	2017	NAVY	157	157	0																											0
	1	2018	NAVY	662	0	662	-	-	-	-	-	-	-	662																		0	
✓	1	2018	NAVY	74	0	74	-	-	-	-	-	-	-	74																		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: FY 2018 Navy									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 03 / 1					P-1 Line Item Number / Title: 3017 / Anti Armor Weapons System-Heavy (AAWS-H)				Item Number / Title [DODIC]: 1 / ANTI ARMOR WEAPNS SYSTEM- HEAVY (AAWS-H)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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 - USARMY Huntsville, AL	1,200	3,000	4,200	0	5	27	32	0	5	35	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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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 03: Guided missiles and equipment / BSA 3: Other Support							<b>P-1 Line Item Number / Title:</b> 3123 / Modification Kits					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0603635M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	733.589	92.681	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> )	733.589	92.681	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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>733.589</b>	<b>92.681</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b>            This budget line item is used to procure items such as missiles and modification of missiles for replenishment of stocks used in combat operations, training and expiring stocks. In addition, modification kits, upgrades, engineering and program support services for maintenance and configuration management.</p> <p>The Tube-launched, Optically tracked, Wire/Wireless-guided (TOW) missiles (BGM-71 Series) are combat proven missiles that provide heavy anti-armor/assault capability to the USMC Infantry, Tank, and Light Armored Vehicle Battalions. TOW continues to be used consistently in Operation Freedom Sentinel (OFS) as the weapon of choice in precision combat engagements. Marines employ TOW missiles against buildings and field fortifications taking advantage of the missile's inherent precision assault capability against such targets. The TOW missiles are launched from a variety of combat systems such as High Mobility Multipurpose Wheeled Vehicle (HMMWV), Mine Resistant Ambush Protected (MRAP) Vehicle, and Light Armored Vehicle (LAV), as well as ground mounted. The TOW missile provides the warfighter with a highly lethal, cost effective, interoperable, multi-purpose weapon. Product improvement upgrades will be performed to the TOW missile launcher system and its components.</p> <p>Funding for Modification Kits moves to BLI 3017 beginning in FY 2017.</p>												
<p><b>Justification:</b>            FY2018 Base Appropriation: \$0.0M</p> <p>OCO:            FY2018 Overseas Contingency Operations (OCO): \$0.0M</p> <p>Funding for Modification Kits moves to BLI 3017 beginning in FY 2017.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 4: Command and Control Systems							<b>P-1 Line Item Number / Title:</b> 4190 / Unit Operations Center					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M, 0506313M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	778.908	10.384	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> )	778.908	10.384	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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>778.908</b>	<b>10.384</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Combat Operations Center (COC) - AN/TSQ-239 (V)1/2/3/4 is a deployable, self-contained, modular, centralized and scalable facility ((V)1 MEF-size, (V)2 MSC/Div-size, (V)3 Regiment-size, (V)4 Battalion-size) which provides digital, shared Command and Control/Situational Awareness functionalities to enhance the Common Operational Picture (COP) for the Command Element, Ground Command Element, Air Combat Element, and Logistics Combat Element. It is a commercial-off-the-shelf integrated hardware solution using unit provided radios, re-hosted tactical data systems, and available Marine Corps prime movers to transport the system.  Funding for Unit Operation Center moves to BLI 4631 beginning in FY 2017.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	9.190	-	-	-	-	-	-	-	-		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	1.194	-	-	-	-	-	-	-	-		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		
	<b>Total Obligation Authority</b>	<b>10.384</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		
<b>Justification:</b> FY 2018 Base Appropriation Request: NA  OCO: FY2016 Overseas Contingency Operations (OCO) Request: NA												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 4: Command and Control Systems							<b>P-1 Line Item Number / Title:</b> 4644 / Common Aviation Command and Control System (CAC2S)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M, 0206335M				
<b>Line Item MDAP/MAIS Code:</b> N36												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	13.830	16.623	53.012	44.928	0.000	44.928	32.875	41.504	34.228	17.553	-	254.553
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	13.830	16.623	53.012	44.928	0.000	44.928	32.875	41.504	34.228	17.553	-	254.553
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>13.830</b>	<b>16.623</b>	<b>53.012</b>	<b>44.928</b>	<b>0.000</b>	<b>44.928</b>	<b>32.875</b>	<b>41.504</b>	<b>34.228</b>	<b>17.553</b>	<b>-</b>	<b>254.553</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> The Common Aviation Command and Control System (CAC2S) is a coordinated modernization effort to replace the existing aviation command and control equipment of the Marine Air Command and Control System (MACCS) and to provide the Aviation Combat Element with the necessary hardware, software, equipment, and facilities to effectively command, control, and coordinate aviation operations. The CAC2S system will accomplish the MACCS missions with a suite of operationally scalable modules to support Marine Air-Ground Task Force (MAGTF), Joint, and Coalition Forces. The CAC2S integrates the functions of aviation command and control into an interoperable system that will support the core competencies of all Marine Corps warfighting concepts. The CAC2S, in conjunction with the MACCS organic sensors (AN/TPS-63, AN/TPS-59 and AN/TPS-80 (G/ATOR)) and Weapon systems (Composite Tracking Network (CTN)) supports the tenets of Expeditionary Maneuver Warfare and fosters joint interoperability. CAC2S Increment I will replace 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). Future increments encompassing Marine Air Traffic Control Detachment (MATCD), Low Altitude Air Defense Battalion (LAAD BN), Unmanned Aerial Systems (UAS), and airborne node capabilities are anticipated but are not yet baselined. CAC2S funding prior to FY 2014 is in Line Item 4640. (AAO: 50) (TAMCN'S: N/A). (RDTE: PE 0206313M, Project 2273 for Prior Years to FY 2014; RDT&E: PE 0206335M, Project 3373 for FY 2015 through the FYDP).												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 4: Command and Control Systems						<b>P-1 Line Item Number / Title:</b> 4644 / Common Aviation Command and Control System (CAC2S)				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0206335M			
<b>Line Item MDAP/MAIS Code:</b> N36										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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)	P-5a, P-21			- / 13.830	- / 16.623	- / 53.012	- / 44.928	- / 0.000	- / 44.928
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 13.830</b>	<b>- / 16.623</b>	<b>- / 53.012</b>	<b>- / 44.928</b>	<b>- / 0.000</b>	<b>- / 44.928</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										

**Justification:**  
 FY 2018 Base Appropriation (\$44.928M):  
 Funds the continuation of production contract to procure Lot 2 quantity fifteen (15) Full Deployment Units (FDUs) and all activities associated with the procurement, such as the Government Furnished Equipment (GFE), production support and New Equipment Training (NET). The GFE consists of the following CAC2S subcomponents: Multifunction Information Distribution System (MIDS), Single Data Processor (SDP), Multifunction External Interface Converter (MEIC), Universal Serial Bus 4G (USB-4G), Army-Navy/Portable Radio Communication 117G (AN/PRC-117G), and Global Positioning System - Miniature Precision Lightweight GPS Receiver (PLGR) Engine - Selective (GPS MPE-S). Funding decrease of \$8.084M from FY 2017 to FY 2018 is due to reduction of GFE costs and procurement of two less FDU systems.

OCO:  
 FY 2018 Overseas Contingency Operations: NA

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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017								
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				-			-			-			-			-			-		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				13.830			16.623			53.012			44.928			0.000			44.928		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				13.830			16.623			53.012			44.928			0.000			44.928		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				13.830			16.623			53.012			44.928			0.000			44.928		
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Limited Deployment Unit (LDU) <sup>(†)</sup>	2,686K	4	10.744	2,158K	4	8.633	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.2) LDU (Reserve) <sup>(†)</sup>	-	-	-	2,158K	1	2.158	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.3) Full Deployment Unit (FDU) <sup>(†)</sup>	-	-	-	-	-	-	2,213K	17	37.622	2,213K	15	33.196	-	-	-	2,213K	15	33.196			
1.1.4) ECP Production	-	-	1.767	-	-	1.150	-	-	0.500	-	-	0.518	-	-	-	-	-	0.518			
Subtotal: Recurring Cost	-	-	12.511	-	-	11.941	-	-	38.122	-	-	33.714	-	-	-	-	-	33.714			
Non Recurring Cost																					
1.2.1) LDU Refurbishment	-	-	-	-	-	1.127	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Non Recurring Cost	-	-	-	-	-	1.127	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Flyaway Cost	-	-	12.511	-	-	13.068	-	-	38.122	-	-	33.714	-	-	-	-	-	33.714			
Hardware Cost																					
Recurring Cost																					
2.1.1) Multifunctional Information Distribution System (MIDS)	-	-	-	-	-	-	-	-	3.855	-	-	2.880	-	-	-	-	-	2.880			

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<b>Exhibit P-5, Cost Analysis: FY 2018 Navy</b>										<b>Date:</b> May 2017							
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 4					<b>P-1 Line Item Number / Title:</b> 4644 / Common Aviation Command and Control System (CAC2S)					<b>Item Number / Title [DODIC]:</b> 1 / Common Aviation Command and Control System (CAC2S)							

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :										<b>MDAP/MAIS Code:</b>							
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Single Data Processor (SDP)	-	-	-	-	-	-	-	-	5.117	-	-	3.799	-	-	-	-	-	3.799
2.1.3) Multi-function External Interface Converter (MEIC)	-	-	-	-	-	-	-	-	1.106	-	-	0.648	-	-	-	-	-	0.648
2.1.4) Universal Serial Bus 4G (USB-4G)	-	-	-	-	-	-	-	-	1.992	-	-	1.374	-	-	-	-	-	1.374
2.1.5) Army-Navy/ Portable Radio Communication 117G (AN/PRC 117G)	-	-	-	-	-	-	-	-	0.441	-	-	0.363	-	-	-	-	-	0.363
2.1.6) GPS - MPE-S (See ACRN defined in P5 Remarks) <sup>(1)</sup>	-	-	-	-	-	-	-	-	0.013	-	-	0.012	-	-	-	-	-	0.012
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	12.524	-	-	9.076	-	-	-	-	-	9.076
<i>Subtotal: Hardware Cost</i>	-	-	-	-	-	-	-	-	12.524	-	-	9.076	-	-	-	-	-	9.076
<b>Support Cost</b>																		
3.1) Production Support	-	-	1.319	-	-	2.524	-	-	1.564	-	-	1.385	-	-	-	-	-	1.385
3.2) Production Support (Reserve)	-	-	-	-	-	0.037	-	-	-	-	-	-	-	-	-	-	-	-
3.3) New Equipment Training (NET)	-	-	-	-	-	0.994	-	-	0.802	-	-	0.753	-	-	-	-	-	0.753
<i>Subtotal: Support Cost</i>	-	-	1.319	-	-	3.555	-	-	2.366	-	-	2.138	-	-	-	-	-	2.138
<b>Gross/Weapon System Cost</b>	-	-	13.830	-	-	16.623	-	-	53.012	-	-	44.928	-	-	0.000	-	-	44.928

<sup>(t)</sup> indicates the presence of a P-5a

**Footnotes:**

<sup>(1)</sup> Global Positioning System - Miniature Precision Lightweight GPS Receiver (PLGR) Engine - Selective Availability Anti-spoofing Module (SAASM)(GPS - MPE-S).

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Exhibit P-5a, Procurement History and Planning: FY 2018 Navy									Date: May 2017			
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)			
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) Limited Deployment Unit (LDU)		2016	General Dynamics / Scottsdale, AZ	C / FFP	MCSC, Quantico, VA	Jun 2016	Jun 2017	4	2,158K	Y		Feb 2012
1.1.2) LDU (Reserve)		2016	General Dynamics / Scottsdale, AZ	C / FFP	MCSC, Quantico, VA	Apr 2016	Apr 2017	1	2,158K	Y		Feb 2012
1.1.3) Full Deployment Unit (FDU) <sup>(†)</sup>		2017 <sup>(2)</sup>	TBD / TBD	C / FFP	MCSC, Quantico, VA	Jul 2017	Jul 2018	17	2,213K	Y		Oct 2016
1.1.3) Full Deployment Unit (FDU) <sup>(†)</sup>		2018 <sup>(3)</sup>	TBD / TBD	C / FFP	MCSC, Quantico, VA	Jul 2018	Jul 2019	15	2,213K	Y		Oct 2016

<sup>(†)</sup> indicates the presence of a P-21

## Footnotes:

<sup>(2)</sup> Production Request for Proposal (RFP) was released October 2016 and Source Selection began December 2016 and is ongoing. FDU Lot 1 will award July 2017 to procure quantity 17 systems.

<sup>(3)</sup> FDU Lot 2 will award July 2018 to procure quantity 15 systems.

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017															
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)															
Cost Elements (Units in Each)							Fiscal Year 2016										Fiscal Year 2017													BALANCE					
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017																		
							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				
1.1.3) Full Deployment Unit (FDU)																																			
	1	2017	NAVY	17	0	17																										A -	-	-	17
	1	2018	NAVY	15	0	15																													15
							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: FY 2018 Navy																				Date: May 2017												
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)												
Cost Elements <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	
1.1.3) Full Deployment Unit (FDU)																																
	1	2017	NAVY	17	0	17	-	-	-	-	-	-	-	-	-	1	1	2	1	1	2	2	2	2	1	1	1				0	
	1	2018	NAVY	15	0	15										A	-	-	-	-	-	-	-	-	-	-	-	1	1	2	11	
							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: FY 2018 Navy																				Date: May 2017													
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)													
Cost Elements (Units in Each)							Fiscal Year 2020													Fiscal Year 2021													BALANCE
O C C O	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			
1.1.3) Full Deployment Unit (FDU)																																	
	1	2017	NAVY	17	17	0																											0
	1	2018	NAVY	15	4	11	1	1	2	1	2	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: FY 2018 Navy									Date: May 2017			
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)			
MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	TBD - TBD	7	19	22	0	0	12	12	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).

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 7: Repair and Test Equipment							<b>P-1 Line Item Number / Title:</b> 4181 / Repair and Test Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M, 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	219.351	14.892	16.969	33.056	8.241	41.297	29.821	42.547	22.609	18.038	-	405.524
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	219.351	14.892	16.969	33.056	8.241	41.297	29.821	42.547	22.609	18.038	-	405.524
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>219.351</b>	<b>14.892</b>	<b>16.969</b>	<b>33.056</b>	<b>8.241</b>	<b>41.297</b>	<b>29.821</b>	<b>42.547</b>	<b>22.609</b>	<b>18.038</b>	-	<b>405.524</b>
<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> )	-	0.204	0.218	0.173	-	0.173	0.176	0.180	0.183	0.187	Continuing	Continuing
Flyaway Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Repair and Test Equipment Budget Line Item provides repair and test equipment consisting of more than 200 different items of equipment required to support the operation and maintenance of USMC ground based weapon systems or major end items. Repair and test equipment includes items such as tool kits, shop sets, manual and automatic test equipment, as well as, metrology 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, Calibration and Maintenance Program (CAMP) and Electronic Maintenance Support System (EMSS) which was renamed MAGTF Logistics Support Systems (MLS2) for FY16 and beyond.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	14.892	15.737	33.056	8.241	41.297	29.821	42.547	22.609	18.038		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	-	1.232	-	-	-	-	-	-	-		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-		
	<b>Total Obligation Authority</b>	<b>14.892</b>	<b>16.969</b>	<b>33.056</b>	<b>8.241</b>	<b>41.297</b>	<b>29.821</b>	<b>42.547</b>	<b>22.609</b>	<b>18.038</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 7: Repair and Test Equipment						<b>P-1 Line Item Number / Title:</b> 4181 / Repair and Test Equipment				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Repair and Test Equipment				- / 219.351	- / 14.892	- / 16.969	- / 33.056	- / 8.241	- / 41.297
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 219.351</b>	<b>- / 14.892</b>	<b>- / 16.969</b>	<b>- / 33.056</b>	<b>- / 8.241</b>	<b>- / 41.297</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> FY2018 Baseline Appropriation Request: \$33.056M (ACTIVE:\$33.056M/RESERVE:\$0.000M)</p> <p>General Purpose Tools and Test Systems (GPT&amp;TS) \$4.754M: Funding will support units for the procurement of GPT&amp;TS. The GPT&amp;TS budget represents a wide variety of Tool Kits, Shop Sets, Electronic Test Equipment, hand-held mechanical test equipment, and large mechanical test equipment contained in shelters or buildings. All of these items are commercial off the shelf or modified commercial off the shelf type equipment that are necessary/required to support the field maintenance effort of USMC ground equipment &amp; weapon systems. These are the tools &amp; test equipment used by Marine maintenance personnel in a field or expeditionary environment.</p> <p>Automatic Test Systems (ATS) \$16.463M: Funding will support procurement of Engineer Change Proposal (ECP) kits to enhance capability and mitigate against obsolescence for Automatic Test Systems (ATS) such as the General Purpose Automatic Test System (GPATS), Ground Radio Maintenance Automatic Test System (GRMATS), and associated applications that enable ATS to test weapon system platforms. These ATS provide mobile automatic testing on Line Replaceable Units (LRU) and Circuit Card Assemblies (CCA), enabling rapid restoration of weapon systems. Equipment consists of hardware and software portable equipment. Specific Application Program Systems (APS) procurements for FY18 include the Light Armored Vehicle Anti-Tank (LAV-AT) LRU APS and the Saber CCA APS.</p> <p>Calibration and Maintenance Program (CAMP) \$0.576M: Funding will support the necessary modifications and updates to the Marine Corps Field Level Calibration Facility (AN/TSM-214A). There are twelve fielded Calibration Facilities, with each consisting of four twenty-foot International Organization for Standardization (ISO) containers and containing a wide variety of Calibration Standards and support equipment. This facility is designed for expeditionary deployments and use in austere environments. Various Calibration Standards, controllers (work stations), and software must be replaced/upgraded over time in order to support &amp; calibrate all the different Test Equipment used by various maintenance personnel working on USMC ground military equipment.</p> <p>MAGTF Logistics Support Systems (MLS2) \$11.263M: Funding will be used to procure Electronic Maintenance Support Systems (EMSS). FY18 funds will procure Commercial Off-The-Shelf (COTS) equipment that comprises the EMSS and technical support for fielded systems. The EMSS provides a Commercial Off-The-Shelf (COTS) hardware device equipped with Built-In-Test/Built- In-Test Equipment (BIT/ BITE) interfaces, and Software Defined Test Instrument (SDTI) that provides capabilities such as 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 sites like Global Combat Support System - Marine Corps (GCSS-MC) in order to facilitate maintenance and supply transactions.</p> <p>The \$16.087M increase in funding from FY17 to FY18 will begin procuring Electronic Maintenance Support System's in support of an Approved Acquisition Objective (AAO) increase; purchase necessary modifications and updates for the twelve (12) Calibration Facilities; procure General Purpose Tools &amp; Test Set assets to fill current AAO shortages; and procure circuit card replacement kits for Ground Radio Maintenance Automatic Test Systems (GRMATS) in order to mitigate obsolescence issues.</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO) Request: \$8.241M</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 7: Repair and Test Equipment		<b>P-1 Line Item Number / Title:</b> 4181 / Repair and Test Equipment
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0206624M
<b>Line Item MDAP/MAIS Code:</b> N/A		
Automatic Test Systems (ATS) funds will be used to procure 8 Virtual Instrument Portable Equipment Repair/Tester (VIPER/T) systems. These systems are used while deployed to field test, align, and repair vehicle components for Special Purpose MAGTFs (SPMAGTF).		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 <sup>(1)</sup>	A		-	-	-	3,635.35	196	0.713	4,383.72	376	1.648	6,499.60	1,241	8.066	-	-	-	6,499.60	1,241	8.066
1.2) Operating Software	A		-	-	-	454.79	273	0.124	676.66	376	0.254	700.00	1,241	0.869	-	-	-	700.00	1,241	0.869
1.3) Technical Support <sup>(2)</sup>	A		-	-	-	-	-	2.733	-	-	1.927	-	-	2.328	-	-	-	-	-	2.328
Subtotal: 1) MAGTF Logistics Support Systems (MLS2)			-	-	0.000	-	-	3.570	-	-	3.829	-	-	11.263	-	-	-	-	-	11.263
2) General Purpose Tools and Test Systems (GPT&TS)																				
2.3) Fire Bottle Refill Shop	A		-	-	-	-	-	-	423,000.00	1	0.423	424,000.00	1	0.424	-	-	-	424,000.00	1	0.424
2.4) Air Compressor (LUBE Unit)	A		21,468.75	32	0.687	21,450.00	16	0.343	-	-	-	21,533.33	15	0.323	-	-	-	21,533.33	15	0.323
2.5) General Mech Tool Kit (GMTK)	A		-	-	-	-	-	-	-	-	-	3,275.00	140	0.458	-	-	-	3,275.00	140	0.458
2.6) Vehicle Automated Diagnostic System (VADS) (MT-Ordnance Eng Version) <sup>(3)</sup>	A		25,519.89	377	9.621	18,763.75	41	0.769	-	-	-	19,235.96	89	1.712	-	-	-	19,235.96	89	1.712
2.7) VADS Instrument Controller (IC) Hardware and Software Refresh <sup>(4)</sup>	A		4,544.39	428	1.945	-	-	-	-	-	-	2,600.00	110	0.286	-	-	-	2,600.00	110	0.286
2.8) Fuel Test Stand, Test Program Sets	A		-	-	-	-	-	-	79,923.08	13	1.039	82,000.00	1	0.082	-	-	-	82,000.00	1	0.082
2.10) VADS Software Integration & Maintenance (GOTS Test Program Sets)	A		-	-	0.509	-	-	0.293	-	-	-	-	-	-	-	-	-	-	-	-
2.11) Training Materials	A		-	-	0.115	-	-	0.089	-	-	-	-	-	-	-	-	-	-	-	-
2.13) VADS, Various TSK Systems; Fielding & Tech Data Support	A		-	-	0.472	-	-	0.453	-	-	0.451	-	-	-	-	-	-	-	-	-
2.14) GSM TMDE Systems Fielding, Training & Calibration Support - FAST Team	A		-	-	0.388	-	-	0.262	-	-	0.263	-	-	0.263	-	-	-	-	-	0.263
2.15) TS&K & GSM TMDE Systems Fielding, Engr & Tech Data Support	A		-	-	0.422	-	-	0.345	-	-	-	-	-	-	-	-	-	-	-	-



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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
2.16) AN/USM-674 Circuit Card Tester (C7501) Fielding, Training & Tech Data	A		-	-	0.218	-	-	0.078	-	-	0.076	-	-	-	-	-	-	-	-	-
2.17) Calibration Analysis of GPT&TS Equipment	A		-	-	0.422	-	-	0.041	-	-	-	-	-	-	-	-	-	-	-	-
2.18) Mobile Mach/ Tire Chang/Fuel Test Stand; Fielding, Train & Tech Data	A		-	-	0.503	-	-	0.326	-	-	-	-	-	-	-	-	-	-	-	-
2.19) GPT&TS Eng/ Soft/ Log Support	A		-	-	6.402	-	-	1.013	-	-	0.874	-	-	1.206	-	-	-	-	-	1.206
Subtotal: 2) General Purpose Tools and Test Systems (GPT&TS)			-	-	21.704	-	-	4.012	-	-	3.126	-	-	4.754	-	-	-	-	-	4.754
3) Automatic Test Systems																				
3.1) Application Program Sets/Test Program Sets (5)	A		-	-	3.627	-	-	3.481	-	-	2.850	-	-	1.700	-	-	-	-	-	1.700
3.2) Automatic Test Equipment (6)	A		-	-	10.141	-	-	3.203	-	-	2.150	-	-	10.894	-	-	8.241	-	-	19.135
3.3) ATS Engineering Support			-	-	3.803	-	-	0.385	-	-	1.753	-	-	1.881	-	-	-	-	-	1.881
3.4) ATS Software Support			-	-	2.448	-	-	-	-	-	1.735	-	-	1.724	-	-	-	-	-	1.724
3.5) ATS Logistic Support			-	-	0.425	-	-	0.241	-	-	0.294	-	-	0.264	-	-	-	-	-	0.264
Subtotal: 3) Automatic Test Systems			-	-	20.444	-	-	7.310	-	-	8.782	-	-	16.463	-	-	8.241	-	-	24.704
4) Calibration & Maintenance Program (CAMP) (7)																				
4.1) Calibration Control Group (8)	A		-	-	-	-	-	-	-	-	-	48,000.00	12	0.576	-	-	-	48,000.00	12	0.576
Subtotal: 4) Calibration & Maintenance Program (CAMP)			-	-	0.000	-	-	-	-	-	-	-	-	0.576	-	-	-	-	-	0.576
5) General Purpose Tools and Test Equipment (GPT&TE) RESERVES																				
5.1) Air Compressor (LUBE Unit)	A		13,483.33	60	0.809	-	-	-	21,500.00	10	0.215	-	-	-	-	-	-	-	-	-
5.2) Vehicles Automated Diagnostic System (VADS) (MT-Ordnance Eng Version)	A		-	-	-	-	-	-	19,233.33	30	0.577	-	-	-	-	-	-	-	-	-
5.3) VADS IC Hardware and Software (Refresh)	A		3,875.00	40	0.155	-	-	-	2,600.00	60	0.156	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy																Date: May 2017				
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
5.4) GPT&TS Eng/ Software/ Log Support	A		-	-	1.762	-	-	-	-	-	0.284	-	-	-	-	-	-	-	-	-
Subtotal: 5) General Purpose Tools and Test Equipment (GPT&TE) RESERVES			-	-	2.726	-	-	-	-	-	1.232	-	-	-	-	-	-	-	-	-
6) Prior Year Cum Funding																				
6.1) Prior Year Cum Funding	A		-	-	174.477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) Prior Year Cum Funding			-	-	174.477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	219.351	-	-	14.892	-	-	16.969	-	-	33.056	-	-	8.241	-	-	41.297

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

**Footnotes:**

- (1) Unit cost increase from FY17 to FY18 is based on the Army's IGCE Maintenance Support Device (MSD) V4 for the EMSS system.
- (2) Technical support increase from FY17 to FY18 to support the AAO increase in systems (2,500 to 10,000 across the FYDP). Additional technical support will provide lifecycle and information assurance support for systems connected to the Marine Corps Enterprise Network (MCEN).
- (3) Unit cost variation due to different components being acquired in that particular year; Test Sets must be tailored to specific Weapon Systems. Examples would be different types of cables, interfaces and data connect boxes.
- (4) FY18 unit cost decreases based on economy of scale.
- (5) Decrease from FY17 to FY18 reflects different unit cost of various Application Program Sets (APS)/Test Program Sets (TPS) being procured within this cost element (i.e. Light Armored Vehicle Anti-Tank (LAV-AT) and Saber CCA).
- (6) FY18 increase will buy-out AAO for Ground Radio Maintenance Automatic Test Systems (GRMATS).
- (7) New Grouping for BLI 4181. Calibration & Maintenance Program (CAMP) funding will refresh and modernize Calibration Facility equipment.
- (8) Calibration Control Group (DACG) consists of a laptop, server and printer.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 9: Other Support (Tel)							<b>P-1 Line Item Number / Title:</b> 4617 / Combat Support System					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0605013M, 0206624M, 0604717M, 0604766M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	117.115	0.942	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> )	117.115	0.942	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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>117.115</b>	<b>0.942</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>Global Combat Support System-Marine Corps (GCSS-MC) is comprised of a number of integrated systems that support the logistics elements of command and control, interoperability, and secure access to, and visibility of, critical data. The GCSS-MC/Logistics Chain Management (LCM) component is the implementation of the modern logistics operational architecture and has been designated as a Major Automated Information System (MAIS). GCSS-MC/LCM Increment 1 is focused on the acquisition and implementation of the initial set of integrated logistics capabilities for the Marine Corps by delivering improved support request and supply and maintenance management services. As the technology centerpiece of the Marine Corps' overall Logistics Modernization effort, GCSS-MC/LCM Increment 1 provides those advanced expeditionary logistics capabilities needed to ensure MAGTF combat efficiency into the future. Increment 1 is an operational Enterprise system (authorized for 36,000 users). The Mobile Field Service (MFS), Enterprise Automated Task Organization (EATO) and Riverbed Steelhead Appliance (RSA) (WAN optimization) will be provided as a deliverable in Increment 1 Release 1.1.1. This release provides limited detached capability (store and forward), automated task organizing, and optimizes WAN throughput.</p> <p>SHARED DATA ENVIRONMENT (SDE) is a component of the GCSS-MC. It supports data warehousing technologies and products to provide one-stop shopping for data supporting Combat Service Support Element SDE (CSSE/SDE) decision-making processes. It stages CSSE/SDE data and integrate Decision Support Tools to enable Command and Control, situational awareness, and total asset visibility at all levels of command, from the Combatant Commander to the Company Commander. The establishment of the CSSE/SDE eliminates the need for individual applications to perform these tasks for themselves and contributes to a more cost-effective, efficient application development environment. Supports hardware infrastructure to refresh hardware purchased in FY09 in support of deployed MAGTF users of GCSS-MC capabilities.</p> <p>THEATER MEDICAL INFORMATION PROGRAM (TMIP) - The TMIP-Joint Family of Systems (FoS) is developed by the Defense for Health Affairs (DHA) in conjunction with the Services. TMIP-MC FoS consists of Joint program software employed in conjunction with Marine Corps Common Hardware Suite infrastructure equipment, which is comprised of hardware, peripheral devices and data networks. It is a comprehensive Information Technology enabler to the USMC Health Services Support and Medical Logistics communities which replaces several medical legacy systems creating an electronic medical record that spans the service member's life. TMIP-MC provides capabilities to the organic USMC Level I &amp; II Medical Treatment Facilities (MTF) and management of war reserve medical logistics, in support of the Marine Air/Ground Task Force (MAGTF) to immediately document injury, illness and treatment and order labs, x-rays and pharmacy. It also electronically records, stores and transmits medical data to the Theater Medical Data Store (TMDS) and Clinical Data Repository (CDR). TMIP-MC FoS provides visibility of patient movement and health surveillance, orders and tracks medical supplies and equipment, and links in-Theater care with DoD and Veterans Affairs MTFs for enhanced medical care and readiness to the warfighter anywhere, anytime, and in support of any mission. TMIP-MC systems capabilities include: outpatient care (AHLTA-T), enterprise management of Class VIII (DMLSS), expeditionary management of Class VIII (DCAM), limited level II+ inpatient care (FRSS or STP), medical surveillance &amp; medical C2 (MSAT).</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 9: Other Support (Tel)		<b>P-1 Line Item Number / Title:</b> 4617 / Combat Support System
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0605013M, 0206624M, 0604717M, 0604766M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>MANPOWER OPERATIONS SYSTEMS (MOS) is a portfolio of enterprise information technology systems and modules that support manpower business operations for the Total Force (active and reserve). The investment funding in the portfolio improves dataflow and increases reliability, functionality, and accuracy of data while reducing the manpower required to operate and maintain these systems/operations. Development is partially driven by regulatory and policy changes mandated by Congress, Department of Defense (DoD), Department of the Navy (DoN), and United States Marine Corps. The systems support all five tiers of Manpower: Individual Marine; Small Unit Leader; Unit, Installation Personnel Administration Center/Disbursing Echelon; Headquarters Marine Corps Manpower and Reserve Affairs/ Department of Finance Accounting Service. The MOS portfolio provides support in functional areas such as Permanent Change of Station assignments, retention, mobilization, manpower planning, line of duty determination, personnel accountability, individual augmentation, personnel records management and maintenance, management of case incidents, civilian professional development planning, pay entitlement determinations, promotion and performance evaluations and self service/ visibility of personnel data. MOS interfaces with other systems to provide manpower data and web services functionality for pay and personnel transactions between systems. Systems in the portfolio include Web-enabled Manpower Assignment Support System, Performance Evaluation System, Total Force Retention System, Optical Digital Imaging-Records Management System, Automated Performance Evaluation System and the Manpower Mobilization Assignment System. Additionally, the portfolio includes Total Force Administration System associated modules: including Drill Management Module and Secure Personnel Accountability Module.</p> <p>RADIO FREQUENCY IDENTIFICATION (RFID) - Effective FY16 this line is consolidated into the MAGTF Logistics Support Systems (MLSS). RFID devices encompass a variety of read and write data storage technologies that are used to improve accuracy, timeliness, and handling. These technologies are key in and provide near-real time Total Asset Visibility data used to influence critical decisions by Operational Commanders. RFID 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). The RFID project provides procurement and life cycle management of the current RFID Infrastructures, and provides RFID Hardware and Software under the Joint Army Product Director Automated Movement and Identification Solutions (PD AMIS) Procurement Office.</p> <p>MANPOWER PLANNING SYSTEMS (MPS) is a portfolio of systems consisting of the legacy Manpower Models and the Total Force Data Warehouse. This portfolio provides the tools and data to support the creation of active and reserve modeling of accession, recruiting, training, classification, retention, promotion, mobilization, distribution, and assignment plans. MPS interfaces with other systems to utilize manpower data in model analysis and future year planning efforts.</p> <p>TRANSPORTATION SYSTEMS PORTOFOLIO (TSP) - Effective FY16 this line is consolidated into Enterprise Logistics Support System (ELSS) with focused procurement for TSP. TSP provides funding that supports the USMC Deployment and Execution Support Systems and the Distribution Management Support Systems and Fair Share costs to Joint Program Management Office Systems. These systems and applications support the planning, deployment, distribution, sustainment and redeployment of supplies, equipment and personnel. The TSP portfolio applications utilize AIT read/write devices, active radio frequency identification (aRFID) tags and satellite tracking systems. TSP applications support In-Transit Visibility (ITV) and Total Asset Visibility (TAV) initiatives to provide commanders with timely and accurate near real-time data on the location and movement of personnel, equipment and supplies that are in-process, in-transit and in-theater.</p> <p>ITEM UNIQUE IDENTIFICATION (IUID) - Provides the necessary hardware to exploit an Item Unique Identification (IUID)-enabled ground fleet inventory of equipment and materiel. This capability will allow for the identification and tracking of tangible items via Unique Item Identifiers (UIIs) use globally as a common key. IUID will enable visibility and traceability of key life cycle events for individual items of equipment and will provide the primary data element for net-centric management of equipment with the Logistics Automated Information Systems (Log AISs). IUID will improve logistics functions for operational commanders, program managers, equipment accountability managers, maintainers and force planners as well as ensure accurate system valuation to support a clean financial audit. As defined by the IUID CDD, the Tactical CONOPS and informed by market surveys conducted during the legacy marking phase of the IUID effort.</p> <p>Funding for this Combat Support Equipment moves to BLI 4620 beginning in FY 2017.</p>		
<p><b>Justification:</b> There are no funds budgeted in FY18 or beyond. All funding for Combat Support Equipment moved to BLI 4620 beginning in FY17.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 9: Other Support (Tel)							<b>P-1 Line Item Number / Title:</b> 4652 / Modification Kits					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	13.515	3.600	2.600	0.000	0.750	0.750	0.000	0.000	0.000	0.000	-	20.465
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	13.515	3.600	2.600	0.000	0.750	0.750	0.000	0.000	0.000	0.000	-	20.465
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>13.515</b>	<b>3.600</b>	<b>2.600</b>	<b>0.000</b>	<b>0.750</b>	<b>0.750</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-</b>	<b>20.465</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>The Biometric Automated Toolset System (BATS) can collect and store biometric information, to include fingerprints, iris scans and facial images and is able to "match" personnel whose biometrics correspond to a record of stored data. Information from networked BAT-Clients is sent to BAT-Servers. The BAT-Servers update other BAT-Servers and provide information to the biometrics intelligence process for further analysis. Funding supports the hardware reset and technical refresh of the Family of Systems Biometrics equipment. The refresh will address hardware technology obsolescence, along with software updates to meet Electronic Biometric Transmission Specification (EBTS) compliance. Biometric identification has become a key capability in counter insurgency warfare in support of ongoing contingency operations. Without this critical capability, the Marine Corps loses the ability to provide the Combatant Commander with required Identity Operations/Biometrics/Forensics capabilities.</p> <p>Expeditionary Forensic Exploitation Capability (EFEC) is a portable, expeditionary laboratory capable of conducting Level I and II forensics analysis of captured enemy material, evidence and information. It is comprised of 4 Table of Authorized Material Control Numbers (TAMCN), which include Chemical, Media, and Site Exploitation, and a Laboratory kit.</p> <p><b>Justification:</b> FY2018 Base Appropriation Request: N/A</p> <p>OCO: FY2018 Overseas Contingency Operations (OCO) Request: \$0.750M</p> <p>Expeditionary Forensic Exploitation Capability (EFEC) will procure hardware for replacement of legacy obsolete IT equipment and other peripherals such as Sabre 5000 Handheld Trace Detectors for explosives, chemical agents and toxic industrial chemicals and narcotics. Forensics Exploitation has become a key capability in counter insurgency (COIN) warfare. This system provides the Marine Corps the ability to provide the Combatant Commander with required Identity Operations/Biometrics/Forensics capabilities identified in COCOM CONOPS, CONPLANS/OPLANS, and Theater Campaign Plans in support of the Joint Force requirement.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4620 / Items under \$5 million (Comm & Elec)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	42.376	9.322	17.933	17.644	0.200	17.844	17.745	15.647	16.411	13.685	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	42.376	9.322	17.933	17.644	0.200	17.844	17.745	15.647	16.411	13.685	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>42.376</b>	<b>9.322</b>	<b>17.933</b>	<b>17.644</b>	<b>0.200</b>	<b>17.844</b>	<b>17.745</b>	<b>15.647</b>	<b>16.411</b>	<b>13.685</b>	<b>Continuing</b>	<b>Continuing</b>
<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 equipment to Fleet Marine Force (FMF) Combat Camera Units and training commands. This imagery acquisition/production equipment is used for collecting, editing and dissemination of imagery used to support the Marine Air Ground Task Force (MAGTF), to include Department of Defense (DoD), Joint and Marine Forces, and supporting establishments. This program standardizes equipment/systems and replaces worn out, unserviceable or obsolete acquisition/production equipment. Procurements are centrally managed and are non-developmental, Commercial/Government Off-the-Shelf (COTS/GOTS).

Public Affairs System (PAS): Public Affairs (PA) provides the MAGTF and the broader Marine Corps the capability to research, understand and affect the information environment. PA Marines and Systems enable commanders at all levels and across the range of military operations to engage domestic and foreign publics whose trust, confidence, and understanding are mission critical. The Public Affairs Systems (PAS) Abbreviated Acquisition Program (AAP) identifies and fields materiel solutions required to research and plan communication initiatives, acquire still and video visual information, produce and disseminate communication products, and assess the effects of communication initiatives within the information environment. The program maintains an evolutionary approach to acquisitions, and leverages commercial industry-standard non-developmental items to provide the best value to the Marine Corps, while keeping PA Marines appropriately equipped to understand and affect the information environment.

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. Program name has changed from Civil Affairs Capability Set and Civil Affairs Information Data Processing System (CIMDPS).

Safety: Risk Management Information (RMI) initiative to deploy a Department of Navy (DON)-wide, web based solution facilitating unit-level Safety Program management and provides aggregate reporting, analysis, and tracking of all hazards and reportable mishaps. IAW 2011 Federal Cloud Computing Strategy and guidance by the DON Chief Information Officer, RMI will involve the fielding of an overarching, single site safety portal or architecture critical for complying with OSD safety reporting requirements and for allowing seamless on-demand access to the pool of existing safety and safety-related databases.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4620 / Items under \$5 million (Comm & Elec)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>MAGTF Logistics Support Systems (MLSS) - Radio Frequency Identification (RFID) devices encompass a variety of read and write data storage technologies that are used to improve accuracy, timeliness, and handling. These technologies are key in and provide near-real time Total Asset Visibility data used to influence critical decisions by Operational Commanders. RFID 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). The RFID project provides procurement and life cycle management of the current RFID Infrastructures, and provides RFID Hardware and Software under the Joint Army Product Director Automated Movement and Identification Solutions (PD AMIS) Procurement Office.</p> <p>Enterprise Logistics Support Systems (ELSS) - Transportation Systems Portfolio (TSP) provides funding that supports the USMC Deployment and Execution Support Systems and the Distribution Management Support Systems and Fair Share costs to Joint Program Management Office Systems. These systems and applications support the planning, deployment, distribution, sustainment and redeployment of supplies, equipment and personnel. The TSP portfolio applications utilize Automated Identification Technology (AIT) read/write devices, aRFID tags and satellite tracking systems. TSP applications support In-Transit Visibility (ITV) and Total Asset Visibility (TAV) initiatives to provide commanders with timely and accurate near real-time data on the location and movement of personnel, equipment and supplies that are in-process, in-transit and in-theater.</p> <p>Night Vision Equipment (NVE) - Consists of multiple optical, Electro-Optical (EO) and laser systems which 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. Current systems typically are comprised of a single operating modality, such as direct viewing of visible wavelengths, low light image intensification (I2), thermal imaging, or short wave infrared (SWIR). Complementary systems, such as near-infrared laser pointers viewable only through I2 devices, provide enhancement of threat identification capabilities. Additionally the portfolio includes procurement of ammunition to support testing and evaluation of night vision equipment; and continue coordination with United States Army on optic, thermal, and night vision technologies.</p> <p>Combat Optics - Previously named Family of Optical Systems (FOS) and Family Of Optical System and Modification (FOSAM). This program encompasses all optical systems providing handheld, helmet and weapons mounted optic systems such as various thermal, image intensifier, magnified optical, laser range-finding, illuminating, short wave infrared, and pointer functionalities. Replaces multiple single-purpose NVE fielded to the Marine Corps. Additionally the portfolio includes procurement of ammunition to support testing and evaluation of night vision equipment; and continue coordination with United States Army on optic, thermal, and night vision technologies.</p> <p>Thermal Weapons Sight (TWS) - The TWS Program supports individual thermal imaging capabilities, such as the AN/PAS-13 TWS, the AN/PAS-22 Long Range Thermal Imager (LRTI), the AN/PAS-27 Individual Weapon Night Sight - Thermal (IWNS-T), the AN/PAS-28 Medium Range Thermal Bi-ocular (MRTB), the AN/PAS-30 Mini Thermal Imager (MTI), and the Squad Thermal System (STS). Thermal imagers operate by discerning the temperature variation between targets and their background and are completely passive devices. 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; and continue coordination with United States Army on optic, thermal, and night vision technologies.</p> <p>Manpower Operations Systems (MOS). MOS is a portfolio of enterprise information technology systems and modules that support manpower business operations for the Total Force (active and reserve). The investment funding in the portfolio improves dataflow and increases reliability, functionality, and accuracy of data while reducing the manpower required to operate and maintain these systems/operations. Development is partially driven by regulatory and policy changes mandated by Congress, DoD, DoN, and USMC. The systems support all five tiers of Manpower: Individual Marine; Small Unit Leader; Unit, Installation Personnel Administration Center/Disbursing Echelon; Headquarters Marine Corps Manpower and Reserve Affairs/ Department of Finance Accounting Service. The MOS portfolio provides support in functional areas such as Permanent Change of Station assignments, retention, mobilization, manpower planning, line of duty determination, personnel accountability, individual augmentation, personnel records management and maintenance, management of case incidents, civilian professional development planning, pay entitlement determinations, promotion and performance evaluations and self service/ visibility of personnel data. MOS interfaces with other systems to provide manpower data and web services functionality for pay and personnel transactions between systems. Systems in the portfolio include Web-enabled Manpower Assignment Support System, Performance Evaluation System, Total Force Retention System, Optical Digital Imaging- Records Management System, Automated Performance Evaluation System and the Manpower Mobilization Assignment System. Additionally, the portfolio includes Total Force Administration System associated modules: including Drill Management Module and Secure Personnel Accountability Module.</p>		



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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4620 / Items under \$5 million (Comm & Elec)				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Item Unique Identification (IUID) - Provides the necessary hardware to exploit an IUID enabled ground fleet inventory of equipment and material. This capability will allow for the identification and tracking of tangible items by using the Unique Item Identifiers (UIIs) used globally as a common key. IUID will improve logistics functions for operational commanders, program managers, equipment accountability managers, maintainers and force planners, as well as, ensure accurate systems valuation to support a clean financial audit.										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.283	17.886	17.598	0.200	17.798	17.697	15.599	16.362	13.635
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.039	0.047	0.046	-	0.046	0.048	0.048	0.049	0.050
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>9.322</b>	<b>17.933</b>	<b>17.644</b>	<b>0.200</b>	<b>17.844</b>	<b>17.745</b>	<b>15.647</b>	<b>16.411</b>	<b>13.685</b>

  

**Justification:**  
FY2018 Base Appropriation Request: \$17.644M

Combat Camera Systems (CCS) \$2.409M: Increase in funding (\$0.566M) from FY17 supports increases in the operating forces and increased AAOs for the Combat Camera Family of Systems. Funds will procure the following in FY18: Expeditionary Deployable Production Systems (EDPS) which equips Marines with a high-powered computing and processing capability to edit, store, retrieve, and transfer operational imagery in multiple formats (40 systems). Expeditionary Combat Photography Systems (ECPS) which enable Marines with imagery acquisition in day or low-light conditions, imagery processing and storage, and production and transfer capability in support of audiovisual communication requirements (13 systems). Expeditionary Combat Video Systems (ECVS) which enables Marines with video acquisition in day or low-light conditions, video processing and storage, and production and transfer capability in support of operational audiovisual communication requirements (41 systems).

Public Affairs System (PAS) \$1.713M (\$1.667M Active; \$0.046M Reserves):Funding provides Public Affairs Content Creation System (PACCS) Next Generation of digital camera system in order to support equipment modernization and obsolescence life cycle. PACCS provides image and video acquisition and editing capabilities for active and reserve component commands. The increase in funding from FY17 to FY18 (\$0.821M) reflects an increase in the AAO of both the Public Affairs Live Media Engagement System (PALMES) and the Public Affairs Laptop (PAL) due to an increase in Public Affairs Officer manpower end strength and the merging of Public Affairs and Combat Camera MOSs into one career field as described in the CMC Future Force 2025 initiative. Funding will procure of 3 PALMES and modernization of currently fielded PALMES. PALMES provides MAGTF and Supporting Establishment commanders the capability to transmit approved Public Affairs products, such as high-resolution video and to conduct live television and media interviews via satellite.

Marine Civil Information Management System (MARCIMS) \$0.235M: Funding will procure virtual private cloud components as part of the expanding capability of MARCIMS across the coalition and joint force, components and support post production integration with other applications and cloud storage. This capability supports real-world operations and overseas contingencies that require a civil military presence, such as humanitarian assistance and disaster relief operations.

Combat Optics - \$12.793M: Funding will support the continued procurement of Sniper Range Finder (SRF) systems. The SRF will allow the scout sniper to rapidly determine range out to the maximum effective range of Marine Corps sniper weapons for North Atlantic Treaty Organization (NATO) standard man and vehicle size targets while the systems is mounted to any of the Marine Corps sniper rifles or to the Scout Sniper Observation Telescope (SSOT). It will also contain an aiming laser capability to give the operator the ability to point to targets at night and conduct boresighting during the day. Funds will also continue to support the procurement of Rifle Combat Optics (RCO) that are damaged beyond economic repair. The \$1.221M increase in funding from FY17 to FY18 will allow the Marine Corps to procure SRF in order to fulfill the USMC requirement and procures up to date depth perception-capable night vision devices for specialized reconnaissance missions to replace systems that are now obsolete.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4620 / Items under \$5 million (Comm & Elec)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Enterprise Logistics Support Systems (ELS2) - \$0.253M: FY18 funding will support the continued Procurement of RFID hardware in support of the migration of aRFID Legacy to RFID Land (MCEITS). Prior to FY18, this funding line was within MAGTF Logistics Support Systems (MLS2).</p> <p>Manpower Operations Systems (MOS) - \$0.241M: FY18 funding will support procurement of IT hardware, software and fielding support for the systems in the MOS portfolio.</p> <p>OCO: FY2018 Overseas Contingency Operations Request: \$0.200M</p> <p>Public Affairs System (PAS) - \$0.200M: FY18 funding will procure one replacement PALMES kit IAW system refresh strategy.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4640 / Air Operations C2 Systems					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M, 0206335M				
<b>Line Item MDAP/MAIS Code:</b> N36												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	299.979	3.021	15.917	18.393	0.000	18.393	7.088	5.056	1.537	1.573	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	299.979	3.021	15.917	18.393	0.000	18.393	7.088	5.056	1.537	1.573	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>299.979</b>	<b>3.021</b>	<b>15.917</b>	<b>18.393</b>	<b>0.000</b>	<b>18.393</b>	<b>7.088</b>	<b>5.056</b>	<b>1.537</b>	<b>1.573</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Joint Cooperative Target Identification-Ground (JCTI-G): The Joint Cooperative Target ID - Ground (JCTI-G) program will address four of the 26 capability gaps identified in the validated Combat ID - Friendly Force Tracker (CID-FFT) Joint Capabilities Document (JCD). A Jun 2010 JFCOM-led AoA concluded, and the USMC concurred, that pursuit of a new material solution and introduction of a new system would not be cost effective. This conclusion was based upon both cost and ability to address the four defined capability gaps in Combat Identification specific to reducing fratricide of U.S. and coalition forces. The AoA evaluated the currently Fielded and Planned Capability Improvements (FPCI) resident within funded projects and existing programs of records across all Services and determined that the most affordable alternative would leverage the FPCI programs by allocating the CID-FFT requirements and funding capability improvements within these existing programs. The AoA further concluded that, in addition to significant cost avoidance, leveraging the FPCI to meet the CID-FFT requirements, as opposed to establishing a new program of record material solution, would have greater impact and achieve a higher percentage of CID-FFT JCD capability gap closure by 2016. In support of a Jan 2010 Memorandum of Understanding between the Vice Chief of Staff of the Army and Assistant Commandant of the Marine Corps (which documents the Army and Marine Corps agreement to support closure of the Fires on Dismounts fratricide mitigation gap), the USMC refocused the program in June 2011 to begin allocation of CID-FFT JCD requirements to the USMC FPCI programs to meet this valid Joint Capabilities Integration and Development System (JCIDS) requirement. Having no previous CID-FFT requirement, these FPCI programs have neither planned for nor been resourced to support the additional requirements of the CID-FFT JCD. As a result of these events, this effort will ensure requirements allocation, traceability and validation within 24 USMC FPCI programs in accordance with the CID-FFT JCD and JCIDS processes and provide resource funding and augment workforce to support the additional unanticipated requirements being levied on FPCI programs. Additionally, it will support aggregation of a time-phased schedule of USMC CID-FFT capabilities and future interoperability engineering/testing between FPCI systems and related modernization efforts necessary to minimize costs and measure attainment of CID-FFT JCD capability gap closure by 2016. The AoA recommendation, accepted by the Services and OSD, is to maintain and enhance the full range of FPCI programs to meet the requirements and mitigate CID-FFT capability gaps identified in the CID-FFT JCD. The intent is to reduce fratricide, uphold the DOD and USMC position on JCTI-G, remain consistent with the AoA recommendations, comply with the purpose of JCTI-G appropriations, and support capability gap closure in accordance with the AoA and OSD led OIPT findings. (RDTE: 0206313M)												
Composite Tracking Network (CTN) - The Composite Tracking Network (CTN) system distributes composite tracking data to Command and Control (C2) and weapon systems participating in a Cooperative Engagement Capability (CEC) network. The system will significantly contribute to real-time situational awareness. The program received ACAT III designation in Nov 01. The program is USMC led with US Navy and US Army cooperation. The CTN program is executing a single-step to full capability acquisition strategy by integrating Commercial Off-the-Shelf (COTS) and Non-Development Item (NDI) subsystems. AAO: 10 systems. 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-143) is an integration effort consisting of an AN/USG-4A and other Marine-unique components. All Marine-unique components are Government Furnished Equipment (GFE) with the exception of the shelter and mast. The components include: Vehicle - M1152A-1 (GFE Marine Corps Systems Command (MCSC), Trailer - M102 LTT-MCC (GFE MCSC), 10 KW Generator -												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4640 / Air Operations C2 Systems
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0206335M
<b>Line Item MDAP/MAIS Code:</b> N36		
<p>MEP 803 (GFE MCSC), Tactical Radio - AN/MRC103 (GFE MCSC), Global Positioning System - DAGR (GFE MCSC), Environmental Control Unit - BOO03 (GFE MCSC), Shelter - S788 (COTS NSWC Crane), and Antenna Mast - TEAMS EXL 195/26-5.4 (COTS Naval Surface Warfare Center Crane). The CTN system will interface with the AN/TPS-59 radar and CAC2S to provide the Marine Air-Ground Task Force (MAGTF) and Joint Task Force Commanders a ground-based sensor netting solution that correlates sensor measurement data (target velocity and position) from local and remote radars that interface in the CEC network. This data will effectively increase Situational Awareness by providing accurate, composite, real-time surveillance tracks. Interfaces with CTN include CAC2S and the Ground/Air Task Oriented Radar (G/ATOR). Procurement of Common Array Block - Expeditionary (CAB-E) to replace obsolete Compact Solid State Antenna (CSSA) to begin FY 2018. (RDTE: 0206313M)</p> <p>Marine Air Command and Control (MACCS) - MACCS Family of Systems (FoS) is organized into tactical agencies and operational facilities, each having different functions, tasks, and equipment suites. These agencies are fielded and supported by squadrons within the Marine Air Control Group (MACG) in support of the Aviation Combat Element (ACE). The tactical agencies are: the Tactical Air Command Center (TACC), the Tactical Air Operations Center (TAOC), and the Direct Air Support Center (DASC). The core MACCS systems consist of: The AN/TYQ-23 Tactical Air Operations Module (TAOM); AN/TYQ-101 Communications Data Link System (CDLS); AN/MRQ-12(V)4 Communications Interface System (CIS); AN/TYQ-87(V)2 Sector Anti Air Warfare Facility; AN/UYQ-3B Direct Air Support Central/Airborne System (DASC/AS); and the AN/MSQ-124 Air Defense Communications Platform (ADCP). The MACCS FoS program office ensures that the TACC, TAOC, and DASC systems remain ready, relevant, and capable until Full Operational Capability (FOC) of Common Aviation Command and Control System (CAC2S). (RDTE: 0206313M)</p> <p>Remote Video Viewing Terminal (RVVT) - Consists of 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 Intelligence, Surveillance and Reconnaissance (ISR) assets. VDL systems are mission critical for coordination of direct and indirect fires and the prevention of fratricide. These systems provide the warfighter with video and metadata from all USMC manned and unmanned aircraft such as the Raven B, Puma, Micro-UAS, Shadow, Predator, Fire Scout, and Litening Pod on P-3, AV8-B, and F/A-18. Data is displayed to Forward Observers (FO), Joint Fires Observers (JFO), Joint Terminal Attack Coordinators (JTAC), and Forward Air Controller (FAC).</p> <p>Theater Battle Management Core System (TBMCS) - Joint mandated Air War planning tool for the generation, dissemination, and execution of the Air Tasking Order (ATO). TBMCS is an Air Force led program, which provides the automated tools necessary to manage tactical air operations, execute area air defense and airspace management in the tactical area of operation, and coordinate operations with components of other military services. TBMCS is located at the Tactical Air Command Center (TACC), with remotes located throughout the Marine Air Ground Task Force (MAGTF). It is scalable, allowing for joint, coalition, and service specific operations. It is an evolutionary acquisition program. (RDTE: 0206313M)</p> <p>Integrated Range Status System (IRSS)- The IRSS is a position location and area status display system that allows range and/or air traffic controllers to update area status information and monitor commercial and military aircraft within special use airspace (SUA) using information, if available, from radars and air and ground position location information (PLI) systems.</p> <p>Common Aviation Command and Control (CAC2S) - Prior year funding resides in this Budget Line Item. Funding for FY 2015 and beyond resides in Budget Line Item 4644. (RDTE: 0206313M, Project 2273 for FY 2014 and prior. PE 0206335M, Project 3373 for FY 2015 and beyond).</p>		
<p><b>Justification:</b> FY 2018 Base Appropriation (\$18.393M):</p> <p>Composite Tracking Network (CTN) \$5.360M - Funds support the procurement of quantity five Common Array Block - Expeditionary (CAB-E) and associated New Equipment Training (NET). Funds also support completion of AN/USG-4B retrofit and fielding. Increase of \$3.845M from FY 2017 to FY 2018 reflects procurement of five CAB-E antennas and associated NET.</p> <p>Marine Air Command and Control (MACCS) \$2.662M - Funds support the procurement of twenty five (25) Multifunctional Information Distribution System (MIDS) Block II Upgrades in accordance with DoD mandate and to ensure participation in any radio frequency Link-16 network. Decrease of \$0.193M in FY18 is due to reduction of field activity support related to procurement of Multifunctional Information Distribution System (MIDS) Block II Upgrades.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 14: Command and Control System (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4640 / Air Operations C2 Systems
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0206335M
<b>Line Item MDAP/MAIS Code:</b> N36		
<p>Theater Battle Management Core System (TBMCS) \$1.902M - Funding continues efforts such as on-site fielding representatives to support updated software and hardware fielding and the incremental procurement of new hardware for TBMCS to maintain cyber security accreditation as well as associated NET. Increase of \$0.603M from FY 2017 to FY 2018 reflects additional funding required for procurement of hardware/software to mitigate obsolescence and avoid cyber security vulnerabilities as well as associated training and implementation costs.</p> <p>Remote Video Viewing Terminal (RVVT) \$8.469M- Funds will procure hardware and ancillary equipment for the integration of the Full Motion Video capability into a user supported viewing platform. The decrease in funding from FY17 to FY18 (\$1.779M) is due to a decreased requirement for MC2 ancillary components and cabling.</p> <p>OCO: FY2018 Overseas Contingency Operations (OCO): N/A</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4650 / Radar Systems					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> 0204460M				<b>Other Related Program Elements:</b> 0204460M, 0206313M				
<b>Line Item MDAP/MAIS Code:</b> 386												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	4	-	-	-	-	-	-	-	-	-	Continuing	Continuing
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	567.330	22.464	17.772	12.411	0.000	12.411	16.252	18.923	19.135	19.523	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	567.330	22.464	17.772	12.411	0.000	12.411	16.252	18.923	19.135	19.523	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>567.330</b>	<b>22.464</b>	<b>17.772</b>	<b>12.411</b>	<b>0.000</b>	<b>12.411</b>	<b>16.252</b>	<b>18.923</b>	<b>19.135</b>	<b>19.523</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	141.833	-	-	-	-	-	-	-	-	-	Continuing	Continuing
<b>Description:</b>												
<p>Long Range Radar (AN/TPS-59) - The AN/TPS-59A(V)3 is a transportable, three dimensional, tactical radar system that provides the Marine Air Ground Task Force (MAGTF) with long-range surveillance. It is the MAGTF's only ground based long range sensor that provides the capability to detect and report Air Breathing Targets (ABT) and track Theater Ballistic Missiles (TBM). The AN/TPS-59A(V)3 Radar System is connected to the AN/TSQ-269 Mobile - TAOM (M-TAOM) or the Common Aviation Command and Control Systems (CAC2S). It provides the air defense controllers data and may be used autonomously to conduct Ground Control Intercept, tactical en-route Air Traffic Control (ATC), or TBM alert operations via the Joint Integrated Air Missile Defense (IAMD) encrypted Link-16. The USMC extended the AN/TPS-59 service life through 2035; therefore, in order to maintain its operational relevance on the battlefield, a number of modernization efforts will be needed. This radar has been continuously deployed in support of Operation Freedom Sentinel (OFS) and contingencies.</p> <p>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-46 Firefinder Radar, the AN/TPQ-49 Lightweight Counter Mortar Radar, and the AN/TSQ-267 Target Processing Set. 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 continue to address system issues that arise due to Diminishing Manufacturing Sources and Material Shortages (DMSMS) items within the FTAS. The USMC assumed the role of Primary Inventory Control Activity (PICA) for the AN/TPQ-49 in FY15 when the Army divested itself from the system.</p> <p>Short/Medium Range Air Defense Radar (SHORAD or AN/TPS-63) - The AN/TPS-63 is a two-dimensional, medium-range, medium altitude, transportable, mobile radar system which is employed as a tactical gap-filler or as an early warning system for deployment into the operational area. It has a 360-degree air surveillance capability at a range of 160 miles and complements the co-employed AN/TPS-59 three dimensional, long-range, air surveillance radar system. The AN/TPS-63 is employed by the Marine Air Control Squadron (MACS) as its Tactical Air Operations Center (TAOC) in support of air surveillance and air control mission objectives. Fielded in 1980, this system supported OFS and is addressing numerous DMS and obsolescence issues until replacement by Ground/Air Task Oriented Radar (G/ATOR AN/TPS-80).</p>												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	19.489	13.897	8.764	-	8.764	10.723	12.147	12.224	12.472		

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy							Date: May 2017			
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: 4650 / Radar Systems					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: 0204460M				Other Related Program Elements: 0204460M, 0206313M			
Line Item MDAP/MAIS Code: 386										
Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.975	3.875	3.647	-	3.647	5.529	6.776	6.911	7.051
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	22.464	17.772	12.411	-	12.411	16.252	18.923	19.135	19.523

## Justification:

FY2018 Base Appropriation Request:

AN/TPS-59 \$8.956M - (Active: \$5.647M, Reserve: \$3.309M) FY18 funding will complete the procurement of Identify Friend or Foe (IFF) Antennas that will increase the performance of the system. It will also procure Uninterruptible Power Supply (UPS) and Modular Azimuth Positioning System (MAPS) Readers to address DMSMS and obsolescence issues to increase operational availability. Decrease of \$5.120M from FY17 to FY18 is due to completion of previously scheduled upgrades and installations.

AN/TPS-63 \$0.720M - (Active: \$0.667M, Reserve: \$0.053M) FY18 funding will procure ECP Modification Kits and address continuing DMSMS issues that arise with a 35 year old radar system, and associated program management, engineering and logistics support. Increase of \$0.008M from FY17 to FY18 is due to increased costs associated with ECP Modification Kit procurement.

FTAS \$2.735M - (Active: \$2.450, Reserve: \$0.285M) FY18 funding will procure ECP Modification Kits and will continue to address DMSMS issues within the FTAS. Decrease of \$0.249M from FY17 to FY18 is due to completion of scheduled upgrades and installations.

OCO:

FY2018 Overseas Contingency Operations (OCO) Request: N/A



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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4655 / Ground/Air Task Oriented Radar (G/ATOR)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> 0204460M, 0506313M				<b>Other Related Program Elements:</b> 0206313M				
<b>Line Item MDAP/MAIS Code:</b> 386												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	2	3	6	3	-	3	6	8	7	6	-	41
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	88.338	125.597	248.258	139.167	0.000	139.167	220.780	270.993	248.694	218.464	91.396	1,651.687
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	88.338	125.597	248.258	139.167	0.000	139.167	220.780	270.993	248.694	218.464	91.396	1,651.687
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>88.338</b>	<b>125.597</b>	<b>248.258</b>	<b>139.167</b>	<b>0.000</b>	<b>139.167</b>	<b>220.780</b>	<b>270.993</b>	<b>248.694</b>	<b>218.464</b>	<b>91.396</b>	<b>1,651.687</b>
<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> )	-	1.572	11.193	16.840	-	16.840	13.175	13.381	13.656	13.945	Continuing	Continuing
Flyaway Unit Cost ( <i>\$ in Millions</i> )	44.169	39.368	37.067	38.380	-	38.380	32.729	32.156	33.801	34.603	-	37.122
Gross/Weapon System Unit Cost ( <i>\$ in Millions</i> )	44.169	41.866	41.376	46.389	-	46.389	36.797	33.874	35.528	36.411	-	40.285
<b>Description:</b> Ground/Air Task Oriented Radar (G/ATOR AN/TPS-80) - The Ground/Air Task Oriented Radar is a multi-role, ground-based, expeditionary radar that replaces five legacy radar systems for the Marine Air Ground Task Force. It satisfies the Marine Air Command and Control System (G/ATOR Block 1) and the Ground Counter Fire/Counter Battery (G/ATOR Block 2) capabilities. The G/ATOR replaces the AN/TPS-63 and complements the AN/TPS-59 long range radar and will provide mobile, multi-functional, three-dimensional surveillance of air breathing targets, detection of cruise missiles and UAS, and the cueing of air defense weapons. The G/ATOR contributes to the extension of Sea Shield/Sea Strike by surveillance and detection of enemy air threats not seen by Navy sensors in the littorals by participating in a cooperative engagement network of sensors and shooters; G/ATOR enables Integrated Fire Control (IFC) and provides 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. Prior year funding and quantities for the G/ATOR program can be found in BLI 4650 - Radar Systems.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	3	6	3	-	3	2	4	7	6		
	Total Obligation Authority	125.597	248.258	139.167	-	139.167	100.476	148.231	248.694	218.464		
NR	Quantity	-	-	-	-	-	4	4	-	-		
	Total Obligation Authority	-	-	-	-	-	120.304	122.762	-	-		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-		
	<b>Total Obligation Authority</b>	<b>125.597</b>	<b>248.258</b>	<b>139.167</b>	-	<b>139.167</b>	<b>220.780</b>	<b>270.993</b>	<b>248.694</b>	<b>218.464</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4655 / Ground/Air Task Oriented Radar (G/ATOR)				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> 0204460M, 0506313M			<b>Other Related Program Elements:</b> 0206313M			
<b>Line Item MDAP/MAIS Code:</b> 386										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-5	1 / Ground/Air Task Oriented Radar (G/ATOR)	P-5a, P-21			2 / 88.338	3 / 125.597	6 / 248.258	3 / 139.167	- / 0.000	3 / 139.167
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>2 / 88.338</b>	<b>3 / 125.597</b>	<b>6 / 248.258</b>	<b>3 / 139.167</b>	<b>- / 0.000</b>	<b>3 / 139.167</b>
*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.										
<p><b>Justification:</b>  FY2018 Base Appropriation Request:  AN/TPS-80 G/ATOR \$139.167M - FY18 funding will procure three (3) Gallium Nitride (GaN) LRIP G/ATOR systems and provide funding for support associated with the procurement of Systems, Hardware, Program Management and Logistics required for G/ATOR fielding related activities. The decrease in funding (\$109.091M) from FY17 to FY18 primarily reflects the decrease (\$101.289M) in G/ATOR Systems from six (6) to three (3) and an associated decrease (\$4.964M) in Systems Engineering Management due to three (3) less systems. Additionally, there's a decrease (\$10.507M) from FY17 to FY18 for Communications Equipment Group (CEG) Shelters, as the increase in FY17 funding was necessary to relieve a CEG Shelter shortfall, created by a capability requirements change. Funding increases (\$6.202M) from FY17 to FY18 in Logistics Support as G/ATOR moves deeper into the Production &amp; Deployment acquisition phase and prepares for Full Rate Production (FRP). With G/ATOR being post Milestone C, program management support continues to migrate from RDT&amp;E to PMC funding in FY18. The increase of \$2.479M in FY18 has a corresponding decrease in the RDT&amp;E appropriation. G/ATOR's product support strategy employs Contractor Logistics Support (CLS) for the LRIP systems through Developmental Test (DT). Interim Contactor Logistics Support (ICLS) will be established in FY17 to support the initial fielding of G/ATOR systems and capture the necessary usage data in preparation for Performance Based Logistics, monitor DMS issues, update and complete a validation/verification of the Interactive Electronic Training Manual (ITEM) and preparation for and conduct of thirteen (13) training events. The total quantity of G/ATORs that will be supported by a combination of both CLS and ICLS in FY17 is four (4) and in FY18 is eight (8).</p> <p>OCO:  FY2018 Overseas Contingency Operations (OCO) Request: N/A</p>										

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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017					
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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				2		3		6		3		-		3				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				88.338		125.597		248.258		139.167		0.000		139.167				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				88.338		125.597		248.258		139.167		0.000		139.167				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				88.338		125.597		248.258		139.167		0.000		139.167				
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																		
Initial Spares <i>(\$ in Millions)</i>				-		1.572		11.193		16.840		-		16.840				
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>				44.169		41.866		41.376		46.389		-		46.389				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) <sup>(1)</sup>	32.511	2	65.022	33.764	3	101.292	32.800	6	196.800	31.837	3	95.511	-	-	-	31.837	3	95.511
1.1.2) Systems Engineering/Program Management (SEPM) (Active) <sup>(1)</sup>	-	-	13.574	-	-	15.080	-	-	19.732	-	-	14.768	-	-	-	-	-	14.768
Subtotal: Recurring Cost	-	-	78.596	-	-	116.372	-	-	216.532	-	-	110.279	-	-	-	-	-	110.279
Non Recurring Cost																		
1.2.1) Engineering Change Orders (ECO) (Active) <sup>(2)</sup>	-	-	9.742	-	-	1.732	-	-	5.872	-	-	4.860	-	-	-	-	-	4.860
Subtotal: Non Recurring Cost	-	-	9.742	-	-	1.732	-	-	5.872	-	-	4.860	-	-	-	-	-	4.860
Subtotal: Flyaway - G/ATOR - Active (PE 0204460M ) & Reserve (PE 0506313M) Cost	-	-	88.338	-	-	118.104	-	-	222.404	-	-	115.139	-	-	-	-	-	115.139
Hardware - G/ATOR - Active (PE 0204460M ) Cost																		
Recurring Cost																		
2.1.1) G/ATOR Shelters <sup>(3)</sup>	-	-	-	-	-	3.679	-	-	15.025	-	-	4.518	-	-	-	-	-	4.518
Subtotal: Recurring Cost	-	-	-	-	-	3.679	-	-	15.025	-	-	4.518	-	-	-	-	-	4.518

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<b>Exhibit P-5, Cost Analysis: FY 2018 Navy</b>										<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 15					<b>P-1 Line Item Number / Title:</b> 4655 / Ground/Air Task Oriented Radar (G/ATOR)					<b>Item Number / Title [DODIC]:</b> 1 / Ground/Air Task Oriented Radar (G/ATOR)			

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :										<b>MDAP/MAIS Code:</b>			
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Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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>	-	-	-	-	-	3.679	-	-	15.025	-	-	4.518	-	-	-	-	-	4.518
Support - G/ATOR - Support Active (PE 0204460M) Cost																		
3.1) Program Management Support <sup>(4)</sup>	-	-	-	-	-	2.703	-	-	2.750	-	-	5.229	-	-	-	-	-	5.229
3.2) Logistics Support (Shelters)	-	-	-	-	-	1.111	-	-	0.856	-	-	0.496	-	-	-	-	-	0.496
3.3) Logistics Support (CLS/ICLS) <sup>(5)</sup>	-	-	-	-	-	-	-	-	7.223	-	-	13.785	-	-	-	-	-	13.785
<i>Subtotal: Support - G/ATOR - Support Active (PE 0204460M) Cost</i>	-	-	-	-	-	3.814	-	-	10.829	-	-	19.510	-	-	-	-	-	19.510
<b>Gross/Weapon System Cost</b>	<b>44.169</b>	<b>2</b>	<b>88.338</b>	<b>41.866</b>	<b>3</b>	<b>125.597</b>	<b>41.376</b>	<b>6</b>	<b>248.258</b>	<b>46.389</b>	<b>3</b>	<b>139.167</b>	-	-	<b>0.000</b>	<b>46.389</b>	<b>3</b>	<b>139.167</b>

<sup>(†)</sup> indicates the presence of a P-5a

**Footnotes:**

<sup>(1)</sup> The decrease in prime vendor SEPM between FY17 and FY18 is based on the awarded GaN LRIP contract costs and the production build schedule. The FY17 SEPM is higher, compared to FY16 and FY18, as it supports the acceleration of three additional systems in FY17 in order to provide G/ATOR systems to the training commands in one fielding thus allowing full throughput of trained Marines at both school-houses, MCCES and Ft. Sill.

<sup>(2)</sup> In FY18, ECO funding will address emergent corrective actions from both DT1C/OA and DT1D/OA testing, as well as diminishing manufacturing sources/material shortages and user community feedback to improve Human Systems Integration (HSI). ECO funding will reduce the number of material/electronic obsolesce issues and ultimately improve future Marine Forces readiness.

<sup>(3)</sup> This new requirement is derived from Change 4 of G/ATOR Block 2 Capabilities Development Document. The increase of \$11.346M from FY16 to FY17 procures Communications Equipment Group (CEG) Shelters and their associated components in support of LRIP Systems.

<sup>(4)</sup> With G/ATOR being post Milestone C, program management support continues to migrate from RDT&E to PMC funding in FY18. The increase of \$2.479M in FY18 has a corresponding decrease in the RDT&E appropriation.

<sup>(5)</sup> G/ATOR's product support strategy employs a combination of Contractor Logistics Support (CLS) and Interim Contactor Logistics Support (ICLS) until Performance Based Logistics/Depot Maintenance is established during the Full Rate Production phase. Contractor Logistics Support (CLS) will be used for the LRIP systems through the testing phase. Interim Contactor Logistics Support (ICLS) will be established in late FY17 to support the initial fielding of G/ATOR systems and capture the necessary usage data in preparation for Performance Based Logistics, monitor DMS issues, update and complete a validation/verification of the Interactive Electronic Training Manual (ITEM) and preparation for and conduct of thirteen (13) training events. The total quantity of G/ATORs supported by a combination of both CLS and ICLS in FY17 is four (4) and in FY18 is eight (8).

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Navy</b>								<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 15				<b>P-1 Line Item Number / Title:</b> 4655 / Ground/Air Task Oriented Radar (G/ATOR)				<b>Item Number / Title [DODIC]:</b> 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 (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) G/ATOR System (Active) <sup>(†)</sup>		2015 <sup>(6)</sup>	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) <sup>(†)</sup>		2016 <sup>(7)</sup>	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) <sup>(†)</sup>		2017 <sup>(8)</sup>	Northrop Grumman / Linthicum, MD	SS / FPIF	Quantico, VA	Mar 2017	Mar 2019	6	32.800	Y		Oct 2015
1.1.1) G/ATOR System (Active) <sup>(†)</sup>		2018 <sup>(9)</sup>	Northrop Grumman / Linthicum, MD	SS / FPIF	Quantico, VA	Mar 2018	Mar 2020	3	31.837	Y		Oct 2015

<sup>(†)</sup> indicates the presence of a P-21

## Footnotes:

- <sup>(6)</sup> Date of FY15 First Delivery is based on the G/ATOR LRIP contract awarded in March 2015.
- <sup>(7)</sup> Date of FY16 First Delivery is incentivized based on the G/ATOR GaN LRIP contract awarded in August 2016.
- <sup>(8)</sup> Date of FY17 First Delivery is based on the G/ATOR GaN LRIP contract option incentivised to award by 31 March 2017.
- <sup>(9)</sup> Date of FY18 First Delivery is based on the G/ATOR GaN LRIP contract option award anticipated by 30 March 2018.

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Exhibit P-21, Production Schedule: FY 2018 Navy																			Date: May 2017														
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	PROC QTY	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	2015	NAVY		2	0	2						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
	2	2016	NAVY		3	0	3																							A -	-	3	
	2	2017	NAVY		6	0	6																									6	
	2	2018	NAVY		3	0	3																									3	
								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: FY 2018 Navy																				Date: May 2017													
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	2015	NAVY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1										0	
	2	2016	NAVY	3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	
	2	2017	NAVY	6	0	6							A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	
	2	2018	NAVY	3	0	3																		A	-	-	-	-	-	-	-	3	
							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: FY 2018 Navy																				Date: May 2017														
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 (Units in Each)							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			
1.1.1) G/ATOR System (Active)																																		
	1	2015	NAVY		2	2	0																										0	
	2	2016	NAVY		3	2	1	-	1																									0
	2	2017	NAVY		6	0	6	-	-	-	-	-	1	-	1	-	1	-	1	-	1											0		
	2	2018	NAVY		3	0	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Navy				<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 15			<b>P-1 Line Item Number / Title:</b> 4655 / Ground/Air Task Oriented Radar (G/ATOR)			<b>Item Number / Title [DODIC]:</b> 1 / Ground/Air Task Oriented Radar (G/ATOR)	

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	8	9	0	5	31	36	0	5	26	31
2	Northrop Grumman - Linthicum, MD	2	8	9	0	10	23	33	0	5	24	29

"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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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4737 / RQ-21 UAS					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0305239M, 0305234N				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	3	3	4	4	-	4	-	-	-	-	-	14
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	149.304	77.916	89.177	77.841	8.400	86.241	0.000	0.000	0.000	0.000	-	402.638
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	149.304	77.916	89.177	77.841	8.400	86.241	0.000	0.000	0.000	0.000	-	402.638
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>149.304</b>	<b>77.916</b>	<b>89.177</b>	<b>77.841</b>	<b>8.400</b>	<b>86.241</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-</b>	<b>402.638</b>
<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> )	-	4.070	5.812	11.027	-	11.027	-	-	-	-	-	20.909
Flyaway Unit Cost ( <i>\$ in Dollars</i> )	41,310K	22,054K	20,261K	16,426K	-	16,426K	-	-	-	-	-	24,060K
Gross/Weapon System Unit Cost ( <i>\$ in Dollars</i> )	49,768K	25,972K	22,294K	19,460K	-	21,560K	-	-	-	-	-	28,760K
<p><b>Description:</b> In FY 2019, the program is transitioning to Aircraft Procurement, Navy (AP,N).</p> <p>The requirement for the RQ-21A Unmanned Aircraft System is defined in a Capability Development Document, dated 18 November 2008 and further defined in the Capability Production Document, dated 15 February 2013. The RQ-21A program entered the Engineering and Manufacturing Development (EMD) phase of the acquisition process as an Acquisition Category III program on 26 July 2010. On 19 August 2014 RQ-21A was designated and Acquisition Category II program.</p> <p>The RQ-21A system provides the Marine Expeditionary Force and subordinate commands (divisions and regiments) a dedicated Intelligence, Surveillance, and Reconnaissance system capable of delivering intelligence products directly to the tactical commander in real time. The RQ-21A system is capable of providing actionable intelligence and communications relay for 12-hour continuous operations per day with a short surge capability of 24-hours continuous operations for 10 days. The system has an operating radius of 50 nautical miles, further extendable through hub and spoke operations. The Air Vehicle is capable of airspeeds up to 80 nautical miles per hour with a service ceiling of 15,000 feet.</p> <p>An RQ-21A system consists of five air vehicles, two ground control stations, modular multi-mission plug and play payloads, one launcher, one recovery system, and support equipment. Standard payloads include a turret mounted EO/IR camera and a communications relay package with automated identification ship capability, carried in the payload bay.</p> <p>The RQ-21A system will continue to evolve and upgrade capabilities to satisfy capability shortfalls, new requirements, and reliability, maintainability, and safety issues. Upgraded capabilities may include Command and Control integration, weapons, heavy fuel engine, laser designator, frequency agile communications relay, digital common data link, and cyclic refresh of the Electro-Optical/Infrared camera.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 15: Radar + Equipment (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4737 / RQ-21 UAS				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0305239M, 0305234N				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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-21A UAS	P-5a, P-21			3 / 149.304	3 / 77.916	4 / 89.177	4 / 77.841	- / 8.400	4 / 86.241
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>3 / 149.304</b>	<b>3 / 77.916</b>	<b>4 / 89.177</b>	<b>4 / 77.841</b>	<b>- / 8.400</b>	<b>4 / 86.241</b>
*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:**

FY2018 Base Appropriation Request: \$77.841M

FY2018 will procure four (4) RQ-21A systems with associated ancillary equipment, one (1) ship install, and Interim Contractor Support.

The funding decrease from FY17 to FY18 is due to a realignment of Interim Contractor Support (ICS) into the PMC Spares line as well as decreased requirement in the Ancillary Equipment line.

## OCO:

FY2018 Overseas Contingency Operations (OCO) Request: \$8.4M

Funding will procure replacements for 7 AVs lost during OCO operations.

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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017								
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15							P-1 Line Item Number / Title: 4737 / RQ-21 UAS						Item Number / Title [DODIC]: 1 / RQ-21A UAS								
ID Code (A=Service Ready, B=Not Service Ready) :										MDAP/MAIS Code:											
Resource Summary				Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Procurement Quantity <i>(Units in Each)</i>				3			3			4			4			-			4		
Gross/Weapon System Cost <i>(\$ in Millions)</i>				149.304			77.916			89.177			77.841			8.400			86.241		
Less PY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Net Procurement (P-1) <i>(\$ in Millions)</i>				149.304			77.916			89.177			77.841			8.400			86.241		
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-			-			-			-			-			-		
Total Obligation Authority <i>(\$ in Millions)</i>				149.304			77.916			89.177			77.841			8.400			86.241		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)																					
Initial Spares <i>(\$ in Millions)</i>				-			4.070			5.812			11.027			-			11.027		
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>				49,768K			25,972K			22,294K			19,460K			-			21,560K		
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																					
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) RQ-21A Prior Years <sup>(1)</sup>	8,500K	1	8.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1.1.2) RQ-21A Systems <sup>(†)</sup> (2)	11,635K	6	69.812	10,782K	3	32.345	11,259K	4	45.037	12,872K	4	51.490	-	-	-	12,872K	4	51.490			
1.1.3) Ancillary Equipment <sup>(3)</sup>	-	-	8.429	-	-	5.913	-	-	14.664	-	-	4.610	-	-	-	-	-	4.610			
1.1.4) ECO <sup>(4)</sup>	-	-	3.087	-	-	1.429	-	-	1.158	-	-	0.742	-	-	-	-	-	0.742			
Subtotal: Recurring Cost	-	-	89.828	-	-	39.687	-	-	60.859	-	-	56.842	-	-	-	-	-	56.842			
Non Recurring Cost																					
1.2.1) ICS <sup>(5)</sup>	-	-	24.116	-	-	21.364	-	-	17.568	-	-	6.553	-	-	-	-	-	6.553			
1.2.2) Ship Installation <sup>(6)</sup>	-	-	9.986	-	-	5.111	-	-	2.616	-	-	2.311	-	-	-	-	-	2.311			
Subtotal: Non Recurring Cost	-	-	34.102	-	-	26.475	-	-	20.184	-	-	8.864	-	-	-	-	-	8.864			
Subtotal: Flyaway Cost	-	-	123.930	-	-	66.162	-	-	81.043	-	-	65.706	-	-	-	-	-	65.706			
Hardware Cost																					
Non Recurring Cost																					
2.1.1) Attrition Air Vehicles <sup>(†)</sup> (7)	-	-	-	-	-	-	-	-	-	1,200K	3	3.600	1,200K	7	8.400	1,200K	10	12.000			
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	3.600	-	-	8.400	-	-	12.000			

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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017					
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15						P-1 Line Item Number / Title: 4737 / RQ-21 UAS						Item Number / Title [DODIC]: 1 / RQ-21A UAS						
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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: Hardware Cost	-	-	-	-	-	-	-	-	-	-	-	3.600	-	-	8.400	-	-	12.000
Support Cost																		
3.1) Product Engineering Support	-	-	16.083	-	-	8.295	-	-	5.606	-	-	5.955	-	-	-	-	-	5.955
3.2) Other ILS	-	-	9.291	-	-	3.459	-	-	2.528	-	-	2.580	-	-	-	-	-	2.580
Subtotal: Support Cost	-	-	25.374	-	-	11.754	-	-	8.134	-	-	8.535	-	-	-	-	-	8.535
Gross/Weapon System Cost	49,768K	3	149.304	25,972K	3	77.916	22,294K	4	89.177	19,460K	4	77.841	-	-	8.400	21,560K	4	86.241

(†) indicates the presence of a P-5a

**Footnotes:**

(1) In FY13 the program procured one system based on the 2008 Insitu Commercial Integrator baseline cost. System costs increased from FY13 costs due to upgrades from the 2008 Commercial Integrator baseline. Upgrades included a communications relay package, EMI hardening, turret upgrades, C2 encryption, and additional datalink, and reliability upgrades.

(2) An RQ-21A system consists of five air vehicles, two ground control stations, multi-mission (plug and play) payloads, one launcher and recovery system, and peculiar support equipment. Air Vehicles are procured with an Electro Optical / Infrared turret. Additional payloads are carried within the payload bay and include a communications relay package and automated identification system. Launch and recovery systems are procured with associated peculiar support equipment. Peculiar support equipment includes the AV fueling system, AV starter, battery charging station, transportation assemblies, cooling systems, shore power assemblies, AV scale system, and associated cabling. Marine Corps unit costs increase in FY18 as Navy completes procurement eliminating the cost sharing benefits between services combined with material costs increases associated with capability enhancements. In FY18 RQ-21 systems are procured with an upgraded EO/IR turret which provides a National Image Interpretability Rating Scale (NIIRS) rating of 7.0 or better at altitudes above 7,000 feet. The incorporation of the improved turret corrects the major IOT&E deficiency for the RQ-21 Blackjack program. Unit cost increase in FY18 is due to USN not procuring any systems, which aided with cost sharing, and also due to the fact of increased cost related to the updated EO/IR Turret.

(3) Ancillary equipment includes all program procured equipment to support a Marine Corps RQ-21A system. This equipment includes, but is not limited to: ITEG II 25kw generators, MEP 531A 2kw generators, the Mission Training Device, Tactical Intelligence, Surveillance and Reconnaissance Processing Exploitation and Dissemination System (TIPS), Wireless Communication System, DAGRs, PRC-117G radios, X203 tents, and associated lights and cables. Ship installation equipment and labor is captured in a separate non-recurring flyaway cost element. In the FY15 President's Budget and prior, ship installation equipment was included within ancillary equipment. FY18 is the last year of TIPS procurement. In prior years each RQ-21 system was procured with two TIPS systems. In FY16 the Marine Corps changed the TIPS procurement strategy and intends to procure a fixed number of TIPS systems Marine Unmanned Aerial Vehicle Squadron (VMU), reducing the number of systems the RQ-21 program procures. The Marine Corps updated RQ-21 Concept of Operations to focus primarily on support for Marine Expeditionary Unit (MEU) deployments. The shift to MEU focused operations facilitated the reduction in the number of TIPS systems procured.

(4) Engineering Change Orders (ECO) represent program office estimates for diminishing manufacturing sources associated with component obsolescence and funds the integration of updated components into the RQ-21A system.

(5) RQ-21 utilizes an Interim Contractor Support (ICS) strategy to sustain RQ-21A systems prior to material support date (MSD) in accordance with Financial Management Regulations. ICS is funded within procurement appropriation prior to MSD. ICS includes logistics support for existing and newly procured RQ-21A systems and funds prime contractor logistics support, field service representatives, repair of repairables, and mobile training teams. ICS transitions to organic support in 4QFY18 after which logistics support for fielded systems will be funded with O&M.

(6) Ship Installation includes the procurement of infrastructure hardware and equipment, and labor costs associated with actual amphibious ship class installations in support of the RQ-21A program. Ship hardware and equipment consists of directional and omni-directional antennas, amplifiers, antenna interface modules, monitors, cross domain solution, power distribution panels, associated cables and fiber optics lines, operational system racks, cabinets, and connectors. Labor associated with ship installation includes the contracted Alteration Installation Team conducting the ship installation and OEM post install

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

## Footnotes:

- (1) In FY13 the program procured one system based on the 2008 Insitu Commercial Integrator baseline cost. System costs increased from FY13 costs due to upgrades from the 2008 Commercial Integrator baseline. Upgrades included a communications relay package, EMI hardening, turret upgrades, C2 encryption, and additional datalink, and reliability upgrades.
- (2) An RQ-21A system consists of five air vehicles, two ground control stations, multi-mission (plug and play) payloads, one launcher and recovery system, and peculiar support equipment. Air Vehicles are procured with an Electro Optical / Infrared turret. Additional payloads are carried within the payload bay and include a communications relay package and automated identification system. Launch and recovery systems are procured with associated peculiar support equipment. Peculiar support equipment includes the AV fueling system, AV starter, battery charging station, transportation assemblies, cooling systems, shore power assemblies, AV scale system, and associated cabling. Marine Corps unit costs increase in FY18 as Navy completes procurement eliminating the cost sharing benefits between services combined with material costs increases associated with capability enhancements. In FY18 RQ-21 systems are procured with an upgraded EO/IR turret which provides a National Image Interpretability Rating Scale (NIIRS) rating of 7.0 or better at altitudes above 7,000 feet. The incorporation of the improved turret corrects the major IOT&E deficiency for the RQ-21 Blackjack program. Unit cost increase in FY18 is due to USN not procuring any systems, which aided with cost sharing, and also due to the fact of increased cost related to the updated EO/IR Turret.
- (3) Ancillary equipment includes all program procured equipment to support a Marine Corps RQ-21A system. This equipment includes, but is not limited to: ITEG II 25kw generators, MEP 531A 2kw generators, the Mission Training Device, Tactical Intelligence, Surveillance and Reconnaissance Processing Exploitation and Dissemination System (TIPS), Wireless Communication System, DAGRs, PRC-117G radios, X203 tents, and associated lights and cables. Ship installation equipment and labor is captured in a separate non-recurring flyaway cost element. In the FY15 President's Budget and prior, ship installation equipment was included within ancillary equipment. FY18 is the last year of TIPS procurement. In prior years each RQ-21 system was procured with two TIPS systems. In FY16 the Marine Corps changed the TIPS procurement strategy and intends to procure a fixed number of TIPS systems Marine Unmanned Aerial Vehicle Squadron (VMU), reducing the number of systems the RQ-21 program procures. The Marine Corps updated RQ-21 Concept of Operations to focus primarily on support for Marine Expeditionary Unit (MEU) deployments. The shift to MEU focused operations facilitated the reduction in the number of TIPS systems procured.
- (4) Engineering Change Orders (ECO) represent program office estimates for diminishing manufacturing sources associated with component obsolescence and funds the integration of updated components into the RQ-21A system.
- (5) RQ-21 utilizes an Interim Contractor Support (ICS) strategy to sustain RQ-21A systems prior to material support date (MSD) in accordance with Financial Management Regulations. ICS is funded within procurement appropriation prior to MSD. ICS includes logistics support for existing and newly procured RQ-21A systems and funds prime contractor logistics support, field service representatives, repair of repairables, and mobile training teams. ICS transitions to organic support in 4QFY18 after which logistics support for fielded systems will be funded with O&M.
- (6) Ship Installation includes the procurement of infrastructure hardware and equipment, and labor costs associated with actual amphibious ship class installations in support of the RQ-21A program. Ship hardware and equipment consists of directional and omni-directional antennas, amplifiers, antenna interface modules, monitors, cross domain solution, power distribution panels, associated cables and fiber optics lines, operational system racks, cabinets, and connectors. Labor associated with ship installation includes the contracted Alteration Installation Team conducting the ship installation and OEM post install

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<b>Exhibit P-5, Cost Analysis: FY 2018 Navy</b>		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 15	<b>P-1 Line Item Number / Title:</b> 4737 / RQ-21 UAS	<b>Item Number / Title [DODIC]:</b> 1 / RQ-21A UAS
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>
<p>system integration test support. In FY18 RQ-21 program will complete installations onboard LPD 27 in FY18. During a comprehensive review of Marine Expeditionary Unit (MEU) operations, the Marine Corps determined that RQ-21 Blackjack can satisfy all MEU requirements while operating solely from the LPD class ship, reducing costs associated with ship installation.</p> <p><sup>(7)</sup> Procures air vehicles with EO/IR turret to replace air vehicles lost during operations. Attrition rates were estimated based on actual attrition from a similar system combined with RQ-21A flight hour and reliability estimates. OCO represents actual losses and the base represent expected losses based on estimates. FY18 procures 3 attrition air vehicles (baseline) and 7 (OCO).</p>		

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Navy</b>								<b>Date: May 2017</b>				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 15				<b>P-1 Line Item Number / Title:</b> 4737 / RQ-21 UAS				<b>Item Number / Title [DODIC]:</b> 1 / RQ-21A UAS				

<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
1.1.2) RQ-21A Systems <sup>(†)</sup>		2016 <sup>(8)</sup>	INSITU, Inc / Bingen, WA	SS / FFP	NAVAIR Patuxent River, MD	May 2016	Dec 2016	3	10,782K	Y		Sep 2015
1.1.2) RQ-21A Systems <sup>(†)</sup>		2017 <sup>(9)</sup>	INSITU, Inc / Bingen, WA	SS / FFP	NAVAIR Patuxent River, MD	Jan 2017	Aug 2017	4	11,259K	Y		Sep 2015
1.1.2) RQ-21A Systems <sup>(†)</sup>		2018 <sup>(10)</sup>	INSITU, Inc / Bingen, WA	SS / FFP	NAVAIR Patuxent River, MD	Mar 2018	Oct 2018	4	12,872K	Y		Sep 2015
2.1.1) Attrition Air Vehicles <sup>(†)</sup>		2018 <sup>(11)</sup>	INSITU, Inc / Bingen, WA	SS / FFP	NAVAIR Patuxent River, MD	Mar 2018	Feb 2019	3	1,200K	Y		Sep 2017
2.1.1) Attrition Air Vehicles <sup>(†)</sup>	✓	2018	INSITU, Inc / Bingen, WA	SS / FFP	NAVAIR Patuxent River, MD	Mar 2018	Feb 2019	7	1,200K	Y		Sep 2017

<sup>(†)</sup> indicates the presence of a P-21

**Footnotes:**

<sup>(8)</sup> Combined contract with Navy for a total of 6 systems.

<sup>(9)</sup> Combined contract with Navy for a total of 8 systems.

<sup>(10)</sup> The Prime Contractor's minimum sustainment rate is six (6). Due to current program level funding; RQ-21A is procuring below minimum sustainment. The Prime Contractor is looking at Direct Commercial Sales to make up the delta.

<sup>(11)</sup> FY18 Attrition Air Vehicles will award on the FY18 Full Rate Production Contract.



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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017																		
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4737 / RQ-21 UAS										Item Number / Title [DODIC]: 1 / RQ-21A UAS																		
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2016										Fiscal Year 2017										BALANCE											
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017																					
							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) RQ-21A Systems <sup>(2)</sup>																																						
Prior Years Deliveries: 6																																						
	1	2016	NAVY	3	0	3											A -	-	-	-	-	-	-	1	1	1											0	
	1	2017	NAVY	4	0	4																					A -	-	-	-	-	-	-	-	-	1	1	2
	1	2018	NAVY	4 <sup>(12)</sup>	0	4																															4	
2.1.1) Attrition Air Vehicles <sup>(7)</sup>																																						
	2	2018	NAVY	3	0	3																															3	
✓	2	2018	NAVY	7	0	7																															7	
							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: FY 2018 Navy																				Date: May 2017																	
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 15										P-1 Line Item Number / Title: 4737 / RQ-21 UAS										Item Number / Title [DODIC]: 1 / RQ-21A UAS																	
Cost Elements <i>(Units in Each)</i>							Fiscal Year 2018										Fiscal Year 2019													BALANCE							
O C C O	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						
1.1.2) RQ-21A Systems <sup>(2)</sup>																																					
Prior Years Deliveries: 6																																					
	1	2016	NAVY	3	3	0																													0		
	1	2017	NAVY	4	2	2	1	1																												0	
	1	2018	NAVY	4 <sup>(12)</sup>	0	4						A -	-	-	-	-	-	-	1	1	1	1													0		
2.1.1) Attrition Air Vehicles <sup>(7)</sup>																																					
	2	2018	NAVY	3	0	3						A -	-	-	-	-	-	-	-	-	-	3														0	
✓	2	2018	NAVY	7	0	7						A -	-	-	-	-	-	-	-	-	-	2	5														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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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Navy								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 15				<b>P-1 Line Item Number / Title:</b> 4737 / RQ-21 UAS				<b>Item Number / Title [DODIC]:</b> 1 / RQ-21A UAS			

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	INSITU, Inc - Bingen, WA	6	8	12	0	6	10	16	0	0	7	7
2	INSITU, Inc - Bingen, WA	30	40	60	0	6	6	12	0	4	10	14

"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:**

<sup>(12)</sup> The Prime Contractor's minimum sustainment rate is six (6). Due to current program level funding; RQ-21A is procuring below minimum sustainment. The Prime Contractor is looking at Direct Commercial Sales to make up the delta.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4616 / GCSS-MC					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	0.000	0.000	1.089	1.990	0.000	1.990	9.594	9.205	1.230	1.256	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	0.000	0.000	1.089	1.990	0.000	1.990	9.594	9.205	1.230	1.256	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>0.000</b>	<b>0.000</b>	<b>1.089</b>	<b>1.990</b>	<b>0.000</b>	<b>1.990</b>	<b>9.594</b>	<b>9.205</b>	<b>1.230</b>	<b>1.256</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Global Combat Support System - Marine Corps/Logistics Chain Management (GCSS-MC/LCM) Family of Systems (FoS) serves as primary technology enabler for the Marine Corps Logistics Modernization strategy. GCSS-MC/LCM provides the backbone for all logistics information required by the 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 from the battlefield. Increment 1 replaced 5 legacy supply and maintenance information technology systems and currently supports ~22,000 users world-wide. 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.												
<b>Justification:</b> FY2018 Base Appropriation Request: \$1.990M Funding will continue support to the technology refresh of hardware and software of GCSS-MC/LCM Increment 1. Funding increase from FY2017 to FY2018 of \$0.896M is for hardware and software refresh.												

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy										Date: May 2017																			
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																													

<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	335.403	10.917	13.258	22.260	0.050	22.310	22.236	6.354	6.051	14.613	-	431.142
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	335.403	10.917	13.258	22.260	0.050	22.310	22.236	6.354	6.051	14.613	-	431.142
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>335.403</b>	<b>10.917</b>	<b>13.258</b>	<b>22.260</b>	<b>0.050</b>	<b>22.310</b>	<b>22.236</b>	<b>6.354</b>	<b>6.051</b>	<b>14.613</b>	<b>-</b>	<b>431.142</b>
<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:**

Fire Support Mods (FSM): FSM supports a set of Joint Service and Marine Corps unique PMC efforts to address critical operational and logistics deficiencies in existing fielded artillery fire weapons and fire direction control systems and equipment such as Ground Counter Fire System (GCFS), Improved Position and Azimuth Determining Systems (IPADS), Joint Terminal Attack Controller Laser Target Designator (JTAC LTD), Global Positioning System Survey Replacement (GPSSR), Portable Lightweight Designator Rangefinder (PLDR), Thermal Laser Spot Imager (TLSI), Marine Artillery Survey Set (MASS), and the Modeled Meteorological Information Manager (MMIM).

Common Laser Range Finder (CLRF): The CLRF Integrated Capability (CLRF IC) integrates laser targeting capabilities to provide lightweight man portable targeting systems consistent with Strategy & Vision 2025 and the Commandant's Planning Guidance. The CLRF IC strategy includes a near term (FY17-20) replacement of the AN/PEQ-13 which increases capability and reduces weight by 60%. An Interim Targeting Systems (ITS) which is a cost effective replacement of the AN/PEQ-19 to address quantity shortages and obsolescence and a Future Targeting System (FTS) (FY22-24) which replaces the AN/PEQ-17 and AN/PEQ-25. This strategy will result in two affordable systems that will support operational targeting requirements well into the 2030 timeframe and provide significant reductions in weight and power requirements.

<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	10.417	10.734	21.592	0.050	21.642	21.167	5.643	5.324	13.883
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.500	2.524	0.668	-	0.668	1.069	0.711	0.727	0.730
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Obligation Authority</b>	<b>10.917</b>	<b>13.258</b>	<b>22.260</b>	<b>0.050</b>	<b>22.310</b>	<b>22.236</b>	<b>6.354</b>	<b>6.051</b>	<b>14.613</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4733 / Fire Support System				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206623M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Fire Support System				- / 335.403	- / 10.917	- / 13.258	- / 22.260	- / 0.050	- / 22.310
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 335.403</b>	<b>- / 10.917</b>	<b>- / 13.258</b>	<b>- / 22.260</b>	<b>- / 0.050</b>	<b>- / 22.310</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										
<p><b>Justification:</b>  FY 2018 Base Appropriation Request: \$22.260M</p> <p>FSM - \$4.064M IPADS - funding will support control and display unit fielding. Funding provides support for modernization and upgrades to currently fielded systems. These systems are fielded to both the active (\$3.396M) and reserve (\$0.668M) components. The increase of \$0.512M from FY17 to FY18 is due to shift in funding and capability of Modeled Meteorological Manager (MMIM) to Fire Support Mods (FSM).</p> <p>CLRF - \$18.196M Funding will continue to procure and field CLRF Integrated Capability (IC), full rate production systems to replace the current capability with enhanced targeting abilities and reduced system weight. The increase of \$8.978M from FY17 to FY18 procures additional units according to the baseline plan and in support of the current Approved Acquisition Objective (AAO).</p> <p>OCO:  FY 2018 Overseas Contingency Operations (OCO) Request: \$0.050M  Funding resets 1 MMIM system (\$0.034M) and resets 4 Aiming Circles (\$0.016M) for Special Purpose Marine Air Ground Task Force Crisis Response.</p>										



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<b>Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy</b>															<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 16								<b>P-1 Line Item Number / Title:</b> 4733 / Fire Support System							<b>Aggregated Items Title:</b> Fire Support System				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 - FRP Units Active <sup>(1)</sup>	A		-	-	0.035	37,500.00	118	4.425	37,500.00	170	6.375	37,500.00	420	15.750	-	-	-	37,500.00	420	15.750
1.2) CLRF - Active Procurement Support	A		-	-	3.821	-	-	3.492	-	-	0.971	-	-	2.446	-	-	-	-	-	2.446
1.3) CLRF Active LRIP	A		48,557.69	104	5.050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) CLRF - FRP Units Reserve <sup>(2)</sup>	A		-	-	-	-	-	-	37,500.00	42	1.575	-	-	-	-	-	-	-	-	-
1.5) CLRF Reserve Procurement Support	A		-	-	0.336	-	-	-	-	-	0.297	-	-	-	-	-	-	-	-	-
1.6) CLRF - Reserve LRIP	A		48,543.48	46	2.233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) CLRF			-	-	11.475	-	-	7.917	-	-	9.218	-	-	18.196	-	-	-	-	-	18.196
2) FSM																				
2.1) FSM - Active	A		-	-	54.434	-	-	2.268	-	-	3.019	-	-	3.396	-	-	0.050	-	-	3.446
2.2) FSM - Reserve	A		-	-	3.106	-	-	0.500	-	-	0.533	-	-	0.668	-	-	-	-	-	0.668
Subtotal: 2) FSM			-	-	57.540	-	-	2.768	-	-	3.552	-	-	4.064	-	-	0.050	-	-	4.114
3) MMIM																				
3.1) MMIM - Active	A		-	-	8.933	-	-	0.232	-	-	0.369	-	-	-	-	-	-	-	-	-
3.2) MMIM - Reserve	A		-	-	0.078	-	-	-	-	-	0.119	-	-	-	-	-	-	-	-	-
Subtotal: 3) MMIM			-	-	9.011	-	-	0.232	-	-	0.488	-	-	-	-	-	-	-	-	-
4) Prior Year Cumulative Funding																				
4.1) Prior Year Cum Funding	A		-	-	257.377	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Prior Year Cumulative Funding			-	-	257.377	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	335.403	-	-	10.917	-	-	13.258	-	-	22.260	-	-	0.050	-	-	22.310

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

**Footnotes:**

- <sup>(1)</sup> CLRF IC unit cost and quantities updated.  
<sup>(2)</sup> CLRF IC unit cost and quantities updated.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4747 / Intelligence Support Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206625M, 0502511M, 0506625M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	398.188	36.849	123.874	55.759	3.000	58.759	65.726	35.686	32.030	37.779	-	788.891
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	398.188	36.849	123.874	55.759	3.000	58.759	65.726	35.686	32.030	37.779	-	788.891
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>398.188</b>	<b>36.849</b>	<b>123.874</b>	<b>55.759</b>	<b>3.000</b>	<b>58.759</b>	<b>65.726</b>	<b>35.686</b>	<b>32.030</b>	<b>37.779</b>	<b>-</b>	<b>788.891</b>
<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> )	-	0.656	0.316	0.356	-	0.356	0.425	0.369	0.374	0.381	Continuing	Continuing
Flyaway Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>This budget line item includes Military Intelligence Program (MIP) funds for Marine Corps Intelligence capabilities necessary to support Marines and Marine Air-Ground Task Forces (MAGTFs) through all phases of operation.</p> <p>Persistent Intelligence, Surveillance and Reconnaissance (PISR) Ground Collection Systems: PISR is a comprehensive strategy that synchronizes organic and external ISR assets in support of MAGTF operations. This capability involves sensing the operational environment through a variety of systems, from satellites overhead to reconnaissance Marines on the ground. PISR incorporates terrestrial sensing capability from the following ground collection systems.</p> <p>Communication Emitter Sensing and Attacking System (CESAS) is the sole USMC high power, man-packable, and ground mobile Electronic Attack (EA) asset. CESAS supports the Marine Air-Ground Task Force (MAGTF) Commander in the execution of his Electronic Warfare (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 EA 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.</p> <p>Counter Intelligence and Human Intelligence (CI/HUMINT) Equipment Program (CIHEP) provides each Marine Counterintelligence/Human Intelligence (CI/HUMINT) Company within the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISRE) with an integrated, standardized, and interoperable suite of information and communication systems. The CIHEP program encompasses this specialized equipment that is lightweight, modular, and tailorable, in deployable packages to conduct full spectrum, tactical CI and HUMINT activities, to include Technical Surveillance Countermeasures (TSCM) operations. TSCM operations use techniques to detect, neutralize, and exploit 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 Marine Air-Ground Task Force 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 ten modules of commercial and government off the-shelf equipment. Different components are selected for refresh each year in order 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.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4747 / Intelligence Support Equipment
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206625M, 0502511M, 0506625M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Ground Based Operational Surveillance System (G-BOSS) is an expeditionary, ground-based, self-contained, multi-spectral sensor-oriented, persistent surveillance system used to observe, collect, detect, identify, classify, track, and report on contacts, objects of interest, and assessed threats twenty-four hours a day utilizing a fused video and sensor data display. System variants will allow mobility, transportability, scalability and modularity, and will be capable of independent employment or as part of a network. All G-BOSS variants may be integrated into mutually supporting, closed networks. The G-BOSS variants are: G-BOSS Light (GBL): A tripod-mounted variant that provides short-range surveillance support. It is employed when surveillance support is required, but location and operational requirements are impractical to employ either of the two other variants. G-BOSS Medium (GBM): A trailer-mounted variant that provides longer range surveillance and is transported using a light trailer and tactical vehicle while in support of mobile combat operations, convoy security, temporary security operations, etc. G-BOSS Heavy (GBH): The 80-foot tall tower configuration, Heavy variant provides surveillance support of a more permanent nature. It is employed when operations are static, displacements are few, and longer surveillance ranges are desired.</p> <p>MAGTF Secondary Imagery Dissemination System (MSIDS) provides organic tactical digital imagery collection, transmission and receiving capability to the MAGTF Commander. MSIDS is comprised of components necessary to enable Marines to capture, manipulate, annotate, transmit or receive images in Near Real Time (NRT), internally with subordinate commands that are widely separated throughout the area of operations and externally with higher and adjacent commands. The MSIDS capability resides with the MAGTF G/S-2 sections and Ground Reconnaissance Battalions, Infantry Battalion Scout Sniper Platoons and Marine Corps Forces Special Operations Command. The MSIDS Family of Systems (FoS) extends the digital imaging capability to all echelons within the MEF, down to and including battalions and squadrons. Captured images are capable of being forwarded throughout the MAGTF through the use of Base Station Workstation/Communication Interface (BW/CI), Outstation Workstation/Communication Interface (OW/CI) or existing C4ISR architecture. Images can also be transmitted to the Tactical Exploitation Group (TEG) for more detailed processing and analysis. The Video Exploitation Workstation (VEW) is used to import, manipulate, annotate still and video imagery, create intelligence products, lift still frames from video, view multi-format TV signals and provide a field briefing capability.</p> <p>Tactical Remote Sensor System (TRSS) provides all-weather direction, location determination, targeting, and tactical indications and warning of enemy activity in the MAGTF Commander's Area of Interest. Upgrades to the system provide imagers with a remotely changeable field of view; more reliable, networked communications that provide higher-quality imagery; and smaller, power-efficient, magnetic detectors with improved target-detection range. The cumulative impact of these changes enable the system to provide higher discrimination of threats in a more reliable and timely manner. As the program proceeds, the upgrade of individual system components will continue to occur as needed as threats, technologies, and system requirements evolve. Enhancements to the current baseline will improve sensor monitoring systems and include a magnetic sensor upgrade. It will also provide for a Common Sensor Radio, self-networking communications for sensors and retransmission devices.</p> <p>Tactical Signal Intelligence (SIGINT) Collection System (TSCS) provides modular, lightweight and team/man transportable/portable systems and components which provide signal intercept, collection, Direction-Finding (DF), reporting and collection management capability to the MAGTF Commander. It provides the MAGTF Commander with a modular and scalable carry on/carry off suite of equipment which exploits information from more technically advanced target sets. TSCS uses rapid technology insertion processes and procedures to incorporate advanced SIGINT technology to allow the MAGTF Commander to maintain technological parity with the adversary.</p> <p>Processing, Exploitation, Analysis and Production: Processing, exploitation, analysis and production actions of the Intelligence process enables us to understand the all-source information/data revealed by PISR. The Distributed Common Ground System - Marine Corps (DCGS-MC) Enterprise (BLI 4767) will serve as the Marine Corps ISR Enterprise (MCISRE) backbone, migrating select capabilities into a single, integrated, net-centric baseline via clearly defined capability drops.</p> <p>Intelligence Analysis System (IAS) FoS is the All-Source Fusion Center that provides interoperable, scalable, semi-automated capabilities to receive, analyze, display, and disseminate all-source intelligence, including imagery, to support timely, tactical decision-making across the MAGTF.</p> <p>Technical Control Analysis Center (TCAC) FoS consists of the AN/UYQ-83 TCAC Remote Analysis Workstation (RAWS), AN/MYQ-9 TCAC Transportable Workstation, and Cross Domain Solution (CDS), and is the focal point of Radio Battalions (RADBN), Marine Corps Forces Special Operations Command (MARFORSOC), and Fixed Wing Marine Electronic Attack Squadron (VMAQ) Signals Intelligence (SIGINT) operations. TCAC automatically collects, stores, retrieves and plays back digital audio signals, and fuses and analyzes SIGINT data from tactical, theater and national collectors and databases for dissemination to tactical commanders. TCAC provides SIGINT analysis applications to deployable MAGTF units capable of directing and managing the technical and operational functions of other RADBN SIGINT/Electronic Warfare (EW) assets. TCAC provides termination of national, theater and tactical data networks for data exchange with tactical SIGINT/EW assets, the Intelligence Analysis System (IAS) and national databases. TCAC also enables the transfer of USMC tactical SIGINT collection and analytical data into the Real-Time Regional Gateway (RT-RG) and into the Distributed Common Ground System - Marine Corps (DCGS-</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4747 / Intelligence Support Equipment				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206625M, 0502511M, 0506625M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<p>MC). The system provides ground processing of Electronic Warfare (EW) information, including Electronic Warfare Support (EWS) and Electronic Attack (EA) data collected by the RADBN and WMAQ-EA-6B aircraft. The system is capable of correlating, fusing, and evaluating radar emitter identification and location data from the EA-6B with other National and theater sources.</p> <p>Intelligence Dissemination and Utilization (IDU): The IDU capability set performs the dissemination and integration functions of the Intelligence process. Dissemination connects the Intelligence product to the Commander who "operationalizes" these products through informed decisions.</p> <p>The Intelligence Broadcast Receiver (IBR) acquisition program is a family of terminals that conform to the Department of Defense (DoD) Integrated Broadcast Service (IBS) objectives of interoperability and commonality to receive and process near-real time multi-intelligence data. The IBR family of terminals provide MAGTF Commanders with the only direct access to IBS data via Ultra High Frequency (UHF) Satellite Communications (SATCOM) broadcast channels. The IBR program is an evolving, multi-Service architecture designed to keep pace with Commanders' targeting and information requirements and conforms to the Department of Defense Integrated Broadcast Service (IBS) objectives of interoperability and commonality, which is currently accomplished using the Universal Serial Bus (USB) Embedded National Tactical Receiver (ENTR). The ENTR Version 4 (V4) will supplement and replace the USB ENTR which is no longer in production. The ENTR V4 provides a 50% weight reduction and doubles the life expectancy of the battery compared to the USB ENTR. The IBR family of terminals receive Blue Force Tracker data, which is a key element in developing and maintaining situational awareness as it relates to the common threat/common operating picture. The IBR provides NRT strategic, theater, and tactical sensor-to-shooter connectivity as well as NRT Theater Missile Defense indications and warnings. Additionally, the IBR provides connectivity to IBS Common Interactive Broadcast and IBS Alternative Path.</p> <p>Intelligence Equipment Readiness (IER) project provides a responsive capability to alleviate Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISRE) systems shortfalls as a result of rapidly evolving missions and threats associated with overseas contingency operations (OCO) and expeditionary military, humanitarian assistance, and disaster relief operations. IER's primary effort is the horizontal integration of Marine Corps intelligence systems to achieve interoperability and integration into the Distributed Common Ground/Surface System-MC (DCGS-MC) framework.</p> <p>Joint Worldwide Intelligence Communications System (JWICS) is the Top Secret Sensitive Compartmented Information (TS/SCI) portion of the Defense Information System Network. It incorporates advanced networking technologies that permit point-to-point or multi-point information exchange involving voice, text, graphics, data and video teleconferencing within the Department of Defense (DoD) Intelligence Community. JWICS provides Marine Forces with special intelligence that significantly enhances the detail and quality of intelligence support that intelligence organizations provide to operating forces.</p> <p>Sensitive Compartmented Information Communications (SCI COMMS) - is a Super-High Frequency (SHF) multi-band satellite communications terminal, available in a transit case configuration that provides dedicated tactical communications capability at the Top Secret/Sensitive Compartmented Information (TS/SCI) and Secret Collateral levels to USMC intelligence units. TROJAN SPIRIT terminals provide connectivity into Joint Worldwide Intelligence Communications System (JWICS), National Security Agency Network (NSANET) and Secret Internet Protocol Router Network (SIPRNET) via the TROJAN Network Control Center.</p>										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	36.024	123.874	54.753	3.000	57.753	64.654	34.590	30.910	36.639
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.825	-	1.006	-	1.006	1.072	1.096	1.120	1.140
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>36.849</b>	<b>123.874</b>	<b>55.759</b>	<b>3.000</b>	<b>58.759</b>	<b>65.726</b>	<b>35.686</b>	<b>32.030</b>	<b>37.779</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4747 / Intelligence Support Equipment				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206625M, 0502511M, 0506625M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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				- / 398.188	- / 36.849	- / 123.874	- / 55.759	- / 3.000	- / 58.759
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 398.188</b>	<b>- / 36.849</b>	<b>- / 123.874</b>	<b>- / 55.759</b>	<b>- / 3.000</b>	<b>- / 58.759</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> FY 2018 Base Appropriation Request: \$55.759M</p> <p>CESAS: \$9.223M will procure Communication Emitter Sensing and Attacking System (CESAS II) ground electronic attack systems, Electromagnetic Spectrum Operations Range (EMSOR) hardware, Light Armored Vehicle Electronic Warfare (LAV-EW) Platform Integration Kit (PIK) components and initial support. These procurements will provide required ground mobile electronic attack capability and a unit-employable capability that replicates a radio frequency portion of the electromagnetic operating environment at training ranges to meet planned production schedule. Decrease of \$3.020M from FY17 to FY18 aligns funding to procurement schedule for CESAS II.</p> <p>CIHEP: \$3.525M will procure equipment such as components for the Tactical Surveillance Counter Measures (TSCM), Broadband Global Area Network (BGAN) Antenna, and Commercial SATCOM Set (CSCS) equipment. Decrease of \$25.867M from FY17 to FY18 reflects completed procurement of Data Processing Module components and aligns funding to the procurement plan for TSCM.</p> <p>G-BOSS: \$1.200M will provide sensors and other hardware in support of the tech refresh for current systems. This refresh address portions of all three G-BOSS variants (G-BOSS Light (GBL), G-BOSS Medium (GBM), G-BOSS Heavy (GBH). Prior to FY2018, GBOSS had Overseas Contingency Operations PMC funding for FY2012, FY2013, and FY2016 in BLI 6438, Physical Security Equipment.</p> <p>IAS: \$7.390M Active; \$1.006M Reserves will procure fielding and technical support for the Tier III Intelligence Workstation and complete procurement of software enhancements for the Advanced Analytics capability. The Intelligence Workstation is required for receiving, parsing, analyzing and disseminating fused all-source intelligence data. Decrease \$13.930M from FY17 to FY18 reflects completion of Tier III Workstation refresh and software enhancements for Advanced Analytics capability in FY18.</p> <p>IBR: \$6.697M will procure Embedded National Tactical Receiver (ENTR) Version 4 systems, components and software. These systems, supporting eight (8) battalions, will be fielded to the company-level, and provide the capability of strategic, theater and tactical sensor-to-shooter intelligence data to the tactical edge of the battlefield. Increase of \$5.277M from FY17 to FY18 procures ENTR v4 systems to support increase AAO for intelligence collection and fusion at the tactical level.</p> <p>JWICS: \$4.098M will procure garrison and tactical equipment and integration costs for SCI Enterprise Office (SEO) and the Marine Corps Intelligence, Surveillance and Reconnaissance Enterprise (MCISRE) Fixed Site located at the Marine Corps Intelligence Activity (MCIA). Funding will procure garrison hardware such as desktops, laptops, servers, routers, switches, maintenance of equipment, technical refreshes of hardware, Electronic Key Management System (EKMS) for SEO services and Storage Area Network (SAN/NAS). Decrease from FY17 to FY18 is primarily due to FY17 OCO in the amount of \$25.865M.</p> <p>MSIDS: \$2.503M will procure imagery transmission components such as laptops, ancillary equipment, and support to comply with the Microsoft Windows 10 DoD mandate in providing MAGTF commander the ability to transmit video and sill imagery from eyes-on-target ashore in remote/austere locations from MSIDS outstation terminals to the Command Operations Center to support intelligence imagery gathering requirements. Increase \$1.003M from FY17 to FY18 for imagery transmission components, new equipment training and fielding support.</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4747 / Intelligence Support Equipment
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206625M, 0502511M, 0506625M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>SCI COMMS: \$6.402M will procure updated network packages and monitoring and configuration devices as part of the security-based product improvements for the Sensitive Compartmented Information Kit. Decrease of \$.734M from FY17 to FY18 reflects completion of HBSI-PT AAO procurement.</p> <p>TRSS: \$2.638M will provide for the initial procurement of the Common Sensor Radio (CSR), which will allow for sensors to be interoperable with other Marine Corps sensors (such as GBOSS) and Joint sensors. Funding will also provide for the initial procurement of Air Delivered Unattended Ground Sensors (ADUGS) components. Increase of \$1.102M from FY17 to FY18 procures CSRs and ADUGS components.</p> <p>TCAC: \$1.581M will provide for delivery and new equipment training in support of TCAC v4.6 (RAWS/CDS) hardware refresh to all three MEFs (Radio Battalions), MARSOC, and VMAQ. Decrease of \$3.293M from FY17 base to FY18 base aligns with procurement schedule.</p> <p>TSCS: \$9.496M will procure Legacy Signals of Interest (SOI) capability enhancements such as Digital Network Intelligence (DNI)/Dual Receiver Replacement (DRR) receiver upgrades and technology inserts. Legacy SOI will provide increased capability to SIGINT units while DNI/DRR enhancements will expand the software defined radio capability making use of common hardware. Decrease of \$3.988M from FY17 to FY18 reflects funding aligned with procurement plan and refresh schedule.</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO) Request: \$3.000M</p> <p>TCAC: \$3.000M will provide training, labor, and logistics support enabling a complete refresh of the Transportable Workstation (TWS) AAO in support of Radio Battalions support to OEF and OIR as well as MARSOC support to OEF and OIR.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Intelligence Analysis System (IAS) (122398) - Hardware																				
1.3) Command System, Tactical Tier III	A		-	-	7.461	-	-	-	3,685.09	2,715	10.005	-	-	-	-	-	-	-	-	-
Subtotal: 1) Intelligence Analysis System (IAS) (122398) - Hardware			-	-	7.461	-	-	-	-	-	10.005	-	-	-	-	-	-	-	-	-
2) Intelligence Analysis System (IAS) (122398) - Software																				
2.1) Software Enhancement (Reserve)	A		-	-	-	-	-	-	-	-	-	-	-	0.741	-	-	-	-	-	0.741
2.2) Software Enhancement <sup>(1)</sup>	A		-	-	12.112	-	-	-	-	-	10.500	-	-	5.006	-	-	-	-	-	5.006
Subtotal: 2) Intelligence Analysis System (IAS) (122398) - Software			-	-	12.112	-	-	-	-	-	10.500	-	-	5.747	-	-	-	-	-	5.747
3) Intelligence Analysis System (IAS) (122398) - Support																				
3.1) Fielding Support			-	-	6.984	-	-	0.775	-	-	-	-	-	0.898	-	-	-	-	-	0.898
3.2) Fielding Support (Reserves)	A		-	-	-	-	-	0.050	-	-	-	-	-	-	-	-	-	-	-	-
3.3) Program Technical Support			-	-	17.334	-	-	4.003	-	-	1.821	-	-	1.486	-	-	-	-	-	1.486
3.4) Program Technical Support (Reserves)	A		-	-	-	-	-	0.775	-	-	-	-	-	0.265	-	-	-	-	-	0.265
Subtotal: 3) Intelligence Analysis System (IAS) (122398) - Support			-	-	24.318	-	-	5.603	-	-	1.821	-	-	2.649	-	-	-	-	-	2.649
4) Intelligence Broadcast Receiver (IBR) (122700) - Hardware																				
4.1) IBR ENTR Version 4 <sup>(2)</sup>	A		-	-	-	-	-	-	46,000.00	10	0.460	46,000.00	100	4.600	-	-	-	46,000.00	100	4.600
4.2) IBR ENTR Version 4 Components and Accessories	A		-	-	-	-	-	-	-	-	0.060	-	-	1.400	-	-	-	-	-	1.400
Subtotal: 4) Intelligence Broadcast Receiver (IBR) (122700) - Hardware			-	-	0.000	-	-	-	-	-	0.520	-	-	6.000	-	-	-	-	-	6.000
5) Intelligence Broadcast Receiver (IBR) (122700) - Software																				
5.1) Software	A		-	-	-	-	-	-	-	-	0.861	-	-	0.697	-	-	-	-	-	0.697
Subtotal: 5) Intelligence Broadcast Receiver (IBR) (122700) - Software			-	-	0.000	-	-	-	-	-	0.861	-	-	0.697	-	-	-	-	-	0.697
6) Intelligence Broadcast Receiver (IBR) (122700) - Support																				
6.1) Program Support IBR			-	-	3.223	-	-	0.053	-	-	0.039	-	-	-	-	-	-	-	-	-
Subtotal: 6) Intelligence Broadcast Receiver (IBR) (122700) - Support			-	-	3.223	-	-	0.053	-	-	0.039	-	-	-	-	-	-	-	-	-



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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
7) Technical Control and Analysis Center (TCAC) (120698) - Hardware																				
7.1) RAWS Server	A		-	-	4.084	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.2) TWS Laptop	A		-	-	-	-	-	1.200	-	-	-	-	-	-	-	-	-	-	-	-
7.3) Cross Domain Solution (CDS)	A		-	-	3.409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.4) Peripherals/ Printers/Monitor Refresh	A		4,791.67	72	0.345	-	-	0.101	-	-	1.953	-	-	-	-	-	-	-	-	-
7.5) RAWS, CDS, TWS HW Fielding	A		-	-	1.525	-	-	0.823	-	-	-	-	-	-	-	-	-	-	-	-
7.6) HDD Fielding	A		-	-	-	-	-	0.024	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) Technical Control and Analysis Center (TCAC) (120698) - Hardware			-	-	9.363	-	-	2.148	-	-	1.953	-	-	-	-	-	-	-	-	-
8) Technical Control and Analysis Center (TCAC) (120698) - Support																				
8.1) Contractor Engineering, Tech and Mgmt Support			-	-	12.732	-	-	4.853	-	-	2.921	-	-	1.581	-	-	3.000	-	-	4.581
Subtotal: 8) Technical Control and Analysis Center (TCAC) (120698) - Support			-	-	12.732	-	-	4.853	-	-	2.921	-	-	1.581	-	-	3.000	-	-	4.581
9) Technical Control and Analysis Center (TCAC) (120698) - Software																				
9.3) New SW License for RAWS, CDS, TWS	A		-	-	-	-	-	1.426	-	-	-	-	-	-	-	-	-	-	-	-
9.4) Shared Windows License	A		-	-	-	-	-	0.103	-	-	-	-	-	-	-	-	-	-	-	-
9.5) Initial Integration for CDS	A		-	-	-	-	-	1.166	-	-	-	-	-	-	-	-	-	-	-	-
9.6) RAWS, CDS, TWS SW Fielding	A		-	-	-	-	-	1.506	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 9) Technical Control and Analysis Center (TCAC) (120698) - Software			-	-	0.000	-	-	4.201	-	-	-	-	-	-	-	-	-	-	-	-
10) Sensitive Compartmented Information Communications (SCI COMMS) (120398) - Hardware																				
10.1) HBSI-PT (Palletized) (3)	A		344,722.22	36	12.410	333,510.61	3	1.001	340,541.12	13	4.427	-	-	-	-	-	-	-	-	-
10.3) Network Package Refresh	A		-	-	-	-	-	-	-	-	1.024	-	-	2.311	-	-	-	-	-	2.311
10.4) Coalition Network Packages	A		-	-	-	-	-	-	-	-	-	-	-	3.279	-	-	-	-	-	3.279
Subtotal: 10) Sensitive Compartmented Information Communications (SCI COMMS) (120398) - Hardware			-	-	12.410	-	-	1.001	-	-	5.451	-	-	5.590	-	-	-	-	-	5.590

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) SCI COMMS (120398) - Support																				
11.1) Fielding and Initial Support	A		-	-	1.480	-	-	0.354	-	-	1.685	-	-	0.812	-	-	-	-	-	0.812
Subtotal: 11) SCI COMMS (120398) - Support			-	-	1.480	-	-	0.354	-	-	1.685	-	-	0.812	-	-	-	-	-	0.812
12) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware																				
12.1) Ground Electronic Attack System <sup>(4)</sup>	A		691,750.00	4	2.767	-	-	-	686,112.00	7	4.803	635,000.00	8	5.080	-	-	-	635,000.00	8	5.080
12.2) FY17 Amended Ground Electronic Attack System	A		-	-	-	-	-	-	686,112.00	10	6.861	-	-	-	-	-	-	-	-	-
12.3) Component Parts For CESAS II	A		-	-	-	-	-	0.101	-	-	-	-	-	-	-	-	-	-	-	-
12.5) LAV-EW PiK Components	A		-	-	-	-	-	-	-	-	-	-	-	1.280	-	-	-	-	-	1.280
12.6) Electromagnetic Spectrum Operations Range (EMSOR)	A		-	-	-	-	-	-	-	-	-	-	-	2.500	-	-	-	-	-	2.500
Subtotal: 12) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Hardware			-	-	2.767	-	-	0.101	-	-	11.664	-	-	8.860	-	-	-	-	-	8.860
13) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Support																				
13.1) Program Support			-	-	0.645	-	-	-	-	-	0.284	-	-	-	-	-	-	-	-	-
13.2) Fielding, Initial & Production Support	B		-	-	0.224	-	-	0.741	-	-	0.102	-	-	0.350	-	-	-	-	-	0.350
13.3) FY17 Amended Fielding, Initial & Production Support	A		-	-	-	-	-	-	-	-	0.193	-	-	0.013	-	-	-	-	-	0.013
Subtotal: 13) Communication Emitter Sensing and Attacking System (CESAS) (360204) - Support			-	-	0.869	-	-	0.741	-	-	0.579	-	-	0.363	-	-	-	-	-	0.363
15) Tactical Remote Sensor System (TRSS) (121198) - Hardware																				
15.1) TRSS Components - Common Sensor Radio (CSR) <sup>(5)</sup>	A		-	-	-	-	-	-	-	-	-	2,500.00	1,000	2.500	-	-	-	2,500.00	1,000	2.500
15.2) TRSS Air Delivered Unattended Ground Sensors (ADUGS) Components	A		-	-	-	-	-	-	-	-	-	-	-	0.138	-	-	-	-	-	0.138

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
15.3) TRSS Hardware Components (various) (6)	A		-	-	-	-	-	0.671	-	-	1.511	-	-	-	-	-	-	-	-	-
Subtotal: 15) Tactical Remote Sensor System (TRSS) (121198) - Hardware			-	-	0.000	-	-	0.671	-	-	1.511	-	-	2.638	-	-	-	-	-	2.638
16) Tactical Remote Sensor System (TRSS) (121198) - Support																				
16.1) Program Support	A		-	-	-	-	-	0.177	-	-	0.025	-	-	-	-	-	-	-	-	-
Subtotal: 16) Tactical Remote Sensor System (TRSS) (121198) - Support			-	-	0.000	-	-	0.177	-	-	0.025	-	-	-	-	-	-	-	-	-
17) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698) - H																				
17.1) CIHEP Data Processing Module Components	A		-	-	-	-	-	-	-	-	2.127	-	-	-	-	-	-	-	-	-
17.2) CIHEP Technical Surveillance Countermeasures Equipment Components (7)	A		-	-	-	-	-	1.415	-	-	3.500	-	-	1.867	-	-	-	-	-	1.867
17.3) CIHEP Commercial Handheld Satellite Communication Set Components	A		-	-	-	-	-	0.276	-	-	-	-	-	-	-	-	-	-	-	-
17.5) CIHEP Technical Surveillance Module (TSM)	A		-	-	-	59,437.00	13	0.773	-	-	-	-	-	-	-	-	-	-	-	-
17.6) CIHEP MEDEX-Light	A		33,536.23	69	2.314	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.7) CIHEP Commercial Satellite Communication Set (CSCS) Components	A		-	-	-	-	-	-	-	-	-	-	-	1.125	-	-	-	-	-	1.125
17.9) CIHEP HP/GETAC/Surface Pro Laptops	A		-	-	-	-	-	0.019	-	-	-	-	-	-	-	-	-	-	-	-
17.10) CIHEP Router Bundles	A		-	-	-	-	-	0.201	-	-	-	-	-	-	-	-	-	-	-	-
17.11) (PB17-A) CIHEP Technical Surveillance Countermeasures Equipment	A		-	-	-	-	-	-	2,530K	9	22.770	-	-	-	-	-	-	-	-	-
17.12) CIHEP Broadband Global Area Network Antenna	A		-	-	-	-	-	-	-	-	-	-	-	0.533	-	-	-	-	-	0.533

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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: 17) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698) - H			-	-	2.314	-	-	2.684	-	-	28.397	-	-	3.525	-	-	-	-	-	3.525
18) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698)- S																				
18.1) Software	A		-	-	-	-	-	0.378	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 18) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698)- S			-	-	0.000	-	-	0.378	-	-	-	-	-	-	-	-	-	-	-	-
19) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698) - S																				
19.1) CIHEP Technical/Logistics Support			-	-	3.277	-	-	0.869	-	-	0.995	-	-	-	-	-	-	-	-	-
Subtotal: 19) Counter Intelligence and Human Intelligence (CI/HUMINT) Equip. Program (CIHEP) (122698) - S			-	-	3.277	-	-	0.869	-	-	0.995	-	-	-	-	-	-	-	-	-
20) JWICS (120206) - Hardware																				
20.1) Servers, Storage and Network equipment	A		640,333.33	6	3.842	-	-	1.765	-	-	4.549	-	-	1.601	-	-	-	-	-	1.601
20.2) JPED - Servers, Storage and Network Equipment	A		-	-	-	-	-	-	-	-	12.500	-	-	-	-	-	-	-	-	-
Subtotal: 20) JWICS (120206) - Hardware			-	-	3.842	-	-	1.765	-	-	17.049	-	-	1.601	-	-	-	-	-	1.601
21) JWICS (120206) - Software																				
21.1) JPED - Software	A		-	-	-	-	-	-	-	-	3.190	-	-	-	-	-	-	-	-	-
21.2) Software	A		-	-	9.903	-	-	1.765	-	-	3.693	-	-	1.632	-	-	-	-	-	1.632
Subtotal: 21) JWICS (120206) - Software			-	-	9.903	-	-	1.765	-	-	6.883	-	-	1.632	-	-	-	-	-	1.632
22) JWICS (120206) - Support																				
22.1) Hardware & Software Integration			-	-	5.281	-	-	0.877	-	-	5.031	-	-	0.865	-	-	-	-	-	0.865
22.2) JPED - Hardware & Software Integration			-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	-	-	-	-
Subtotal: 22) JWICS (120206) - Support			-	-	5.281	-	-	0.877	-	-	6.031	-	-	0.865	-	-	-	-	-	0.865
23) Tactical SIGINT Collection System (TSCS) (120514) - Hardware																				
23.1) TPCS Collection Receiver Upgrade (DNI)	A		74,878.79	33	2.471	89,900.00	36	3.236	-	-	-	-	-	-	-	-	-	-	-	-
23.2) Advanced Collection Receiver Refresh	A		8,095.24	42	0.340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
23.3) Technology Inserts - Dual Receiver Module (DRR) <sup>(8)</sup>	A		74,888.89	36	2.696	89,900.00	33	2.967	-	-	-	-	-	-	-	-	-	-	-	-
23.4) TPCS Mods Block 0 - Workstation	A		-	-	-	-	-	1.462	6,666.67	3	0.020	-	-	-	-	-	-	-	-	-
23.5) Modular Case - Combat Equipment Replacement	A		-	-	-	-	-	-	100,000.00	1	0.100	-	-	-	-	-	-	-	-	-
23.6) RREP Direction Finding Kit and Basic Collection Kit Components	A		118,050.00	20	2.361	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.7) TPCS Special Purpose Receiver Refresh	A		-	-	-	-	-	-	81,477.52	29	2.363	82,000.00	18	1.476	-	-	-	82,000.00	18	1.476
23.8) RREP Special Purpose Receiver Refresh	A		-	-	-	-	-	-	81,750.00	42	3.434	-	-	-	-	-	-	-	-	-
23.10) TSCS Server Sleeves	A		-	-	-	-	-	-	100,000.00	69	6.900	-	-	1.836	-	-	-	-	-	1.836
23.11) TPCS Legacy Signals of Interest	A		-	-	-	-	-	-	-	-	-	-	-	1.715	-	-	-	-	-	1.715
23.12) TPCS Locate Case	A		-	-	-	-	-	-	84,000.00	1	0.084	-	-	-	-	-	-	-	-	-
23.13) Wide Band Receiver	A		-	-	-	-	-	-	49,000.00	1	0.049	-	-	-	-	-	-	-	-	-
23.14) Modular Case 2.0 Refresh <sup>(9)</sup>	A		-	-	-	-	-	-	-	-	-	145,000.00	28	4.060	-	-	-	145,000.00	28	4.060
23.15) TSCS DNI Carrier	A		-	-	-	-	-	-	109,000.00	1	0.109	-	-	-	-	-	-	-	-	-
23.16) SL-3 Advance Case	A		-	-	-	230,000.00	1	0.230	-	-	-	-	-	-	-	-	-	-	-	-
23.17) SL-3 Modular Case with ANS Sleeve	A		-	-	-	367,000.00	1	0.367	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 23) Tactical SIGINT Collection System (TSCS) (120514) - Hardware			-	-	7.868	-	-	8.262	-	-	13.059	-	-	9.087	-	-	-	-	-	9.087
24) Tactical SIGINT Collection System (TSCS) (120514) - Support																				
24.1) Program Support			-	-	0.266	-	-	-	-	-	0.097	-	-	0.150	-	-	-	-	-	0.150
24.2) Fielding and Initial Support			-	-	0.353	-	-	0.346	-	-	0.328	-	-	0.259	-	-	-	-	-	0.259

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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: 24) Tactical SIGINT Collection System (TSCS) (120514) - Support			-	-	0.619	-	-	0.346	-	-	0.425	-	-	0.409	-	-	-	-	-	0.409
25) MAGTF Secondary Imagery Dissemination System (MSIDS) - 122198 - Hardware																				
25.1) MSIDS Imagery Transmission Components	A		-	-	-	-	-	-	-	-	1.500	-	-	1.599	-	-	-	-	-	1.599
Subtotal: 25) MAGTF Secondary Imagery Dissemination System (MSIDS) - 122198 - Hardware			-	-	0.000	-	-	-	-	-	1.500	-	-	1.599	-	-	-	-	-	1.599
26) MAGTF Secondary Imagery Dissemination System (MSIDS) - 122198 - Support																				
26.1) New Equipment Training and Fielding Support <sup>(10)</sup>	A		-	-	-	-	-	-	-	-	-	-	-	0.904	-	-	-	-	-	0.904
Subtotal: 26) MAGTF Secondary Imagery Dissemination System (MSIDS) - 122198 - Support			-	-	0.000	-	-	-	-	-	-	-	-	0.904	-	-	-	-	-	0.904
27) G-BOSS - Hardware																				
27.1) Cameras, Radar, and Support Equipment	A		-	-	-	-	-	-	-	-	-	-	-	1.200	-	-	-	-	-	1.200
Subtotal: 27) G-BOSS - Hardware			-	-	0.000	-	-	-	-	-	-	-	-	1.200	-	-	-	-	-	1.200
28) Prior Years Cumulative Funding																				
28.1) Prior Years Cumulative Funding	A		-	-	278.349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 28) Prior Years Cumulative Funding			-	-	278.349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	398.188	-	-	36.849	-	-	123.874	-	-	55.759	-	-	3.000	-	-	58.759
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
Footnotes:																				
<sup>(1)</sup> IAS FY17 update reflects accurate plan to increase funding to complete Tier III Intelligence Workstation refresh for the Active component during FY17 and spread procurement of the Advanced Analytics Software Enhancement priority across FY17-18. Decrease from FY17 to FY18 reflects completion of Tier III Workstation refresh and software enhancements for Advanced Analytics capability.																				
<sup>(2)</sup> FY17 IBR update reflects accurate plan to fund procurement of the IBR ENTR Version 4 and the IBR ENTR Version 4 Components and Accessories.																				
<sup>(3)</sup> SCI COMMS: FY16-FY17 HBSI-PT unit cost increase reflects final negotiated pricing from current contract (no volume discounts); ~2% unit cost increase per Fiscal Year.																				
<sup>(4)</sup> CESAS: FY18 decrease for CESAS II unit cost is based on most current activity estimate for new contract award expected Feb 2018. Overall decrease from FY17 to FY18 for CESAS program aligns with procurement schedule.																				
<sup>(5)</sup> TRSS: Increase from FY17 base to FY18 base aligns to the program plan to procure Common Sensor Radios and Air Delivered Unattended Ground Sensors components.																				
<sup>(6)</sup> TRSS: Decrease from FY17 to FY18 is due to OCO.																				
<sup>(7)</sup> FY18 CIHEP funding procures various equipment to replace obsolete components for Technical Surveillance Countermeasures Equipment (TSCM) to bring partially operational and deadlined suites to full operational capability.																				
<sup>(8)</sup> FY17 TSCS Change: Removed Qty (1) due to receipt of FY16 funding which procured items																				
<sup>(9)</sup> FY18 TSCS unit cost for Mod Case 2.0 refresh reflects current procuring activity estimate.																				

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy		Date: May 2017
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
<div>(10) FY18 MSIDS increase supports new equipment training and fielding support to complete refresh of Imagery Transmission components.</div>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4757 / Unmanned Air Systems					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0305232M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	96.870	13.430	19.293	10.154	0.000	10.154	2.757	2.868	2.977	3.002	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	96.870	13.430	19.293	10.154	0.000	10.154	2.757	2.868	2.977	3.002	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>96.870</b>	<b>13.430</b>	<b>19.293</b>	<b>10.154</b>	<b>0.000</b>	<b>10.154</b>	<b>2.757</b>	<b>2.868</b>	<b>2.977</b>	<b>3.002</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>The Small Unit Remote Scouting System (SURSS) - The SURSS program procures unmanned aircraft systems (UAS) to provide battalion/company/detachment level units with scalable airborne reconnaissance and surveillance to aid in detecting, identifying, engaging, or avoiding enemy units. Multiple systems, to include RQ-12 Wasp, RQ-11 Raven, RQ-20 Puma and various Nano/VTOL UAS's are required to meet operational requirements delineated in the Operational Requirements Document. The SURSS program also conducts Field User Evaluations (FUEs) to support Universal Urgent Needs Statements (UUNS) that inform future USMC system procurement and ensure Marines have the most current technology available.</p> <p>RQ-12 Wasp (Block 0) - Wasp is a small, all environment UAS with a wingspan of 3.3 feet weight of 2.25 pounds and endurance of 60 minutes. The payload consists of a gimbaled turret with Electro Optical/Infrared (EO/IR) sensor. It allows maximum portability and provides near real time reconnaissance required by the platoon and rifle squad which reduces the Intelligence, Surveillance, and Reconnaissance (ISR) request-to-response timeframe and eliminates delays or denials for coverage due to an imbalance of unmanned air systems to requests. Wasp is used for remote reconnaissance and surveillance, force protection, convoy security, target acquisition, and battle damage assessment. A Wasp system consists of two air vehicles, two Ground Control Stations (GCSs), and one reconnaissance, surveillance, and target acquisition (RSTA) kit.</p> <p>RQ-11 Raven (Block 1) - Raven is a small UAS with a wingspan of 4.6 feet, weight of 5 pounds and endurance of 90 minutes. The Raven employs a gimbaled EO/IR sensor. The Raven can be carried by personnel on foot and provides the company level unit an organic near real time ISR capability that facilitates rapid battlefield decision making. A Raven system consists of three air vehicles, two GCS, and one RSTA kit.</p> <p>RQ-20 Puma (Block 2) - Puma is an all environment UAS with a wingspan of 9.2 feet, weight of 13 pounds and endurance of 2.5 hours. The PUMA has demonstrated ranges up to 28 kilometers. The standard payload consists of a gimbaled turret with an EO/IR sensor. A Signals Intelligence payload is also available. The PUMA provides an organic, persistent ISR capability to battalion level units. Additionally, it has been used extensively by Route Clearance Platoons (RCP) and Combat Logistics Patrols (CLP) to enhance force protection and detect Improvised Explosive Devices (IEDs). A Puma system consists of two air vehicles, two GCSs, and one RSTA kit.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4757 / Unmanned Air Systems
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0305232M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Long Endurance Small UAS - LE SUAS is an organic Group 1-2 UAS operated and maintained by a ground or similar tactical unit. It includes Vertical Take Off and Landing (VTOL) kit capability, quiet electric motor/hybrid fuel cell technology, high definition electro optic/infrared/laser (marker or designator) payload, and long range antenna kit. The air vehicle travels at an altitude of about 500-1000 feet about ground level at an approximate speed of 35 knots with an endurance of greater than eight hours with a fuel cell, and four hours with battery. It can be launched with an optional VTOL kit or with a launcher system. Mission sets include real-time full motion video for airborne intelligence, surveillance, reconnaissance (AISR), force protection, targeting, pattern of life observation, high value target tracking, control of indirect fires, full motion video to support target analysis, target package development, counter small UAS, spectrum operations (e.g. SIGINT/Cyber/EW) and communications relay/extension. A system consists of three air vehicles, one ground control station, and associated equipment. Additionally, this system and similar organic small UAS require system modifications and integration to adapt for Field User Evaluations (FUE).</p>		
<p><b>Justification:</b>  FY 2018 Base Appropriation Request: \$10.154M  The decrease from FY17 to FY18 is due to the procurement of 10 Long Endurance Small UAS, and the realignment of \$3.951M to BLI 4787 UAS Payloads.  \$6.605M procures 26 RQ-20 PUMA systems.  \$0.529M procures 31 Single Operator Man-Portable Ground Control Stations.  \$3.020M procures 40 Laser Markers.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4767 / Distributed Common Ground System (DCGS-MC)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0305208M, 0502511M, 0505208M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	45.512	1.947	15.031	13.462	0.000	13.462	14.542	11.516	10.775	11.043	-	123.828
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	45.512	1.947	15.031	13.462	0.000	13.462	14.542	11.516	10.775	11.043	-	123.828
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>45.512</b>	<b>1.947</b>	<b>15.031</b>	<b>13.462</b>	<b>0.000</b>	<b>13.462</b>	<b>14.542</b>	<b>11.516</b>	<b>10.775</b>	<b>11.043</b>	<b>-</b>	<b>123.828</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
<p>Distributed Common Ground/Surface System Marine Corps (DCGS-MC) Enterprise is a Family of Systems (FoS) providing all source analysis and production within garrison and deployed Marine Corps organizations. DCGS-MC will comply with the Department of Defense (DOD) DCGS Enterprise interoperability and information sharing requirements by migrating select processing, exploitation, analysis, and production capabilities into a single, integrated, net-centric baseline within the Marine Corps Intelligence, Surveillance and Reconnaissance Enterprise (MCISRE). This baseline will enable MCISRE analysts to deliver tactically focused, operational and strategic intelligence at the tactical edge throughout all phases of operations and will provide relevant, precise decision support for Joint Task Force (JTF), Marine Air Ground Task Force (MAGTF), and subordinate Marine units. The DoD DCGS Enterprise provides worldwide garrison, and forward projection of tactical ISR capabilities at the JTF level and below. The DoD DCGS Enterprise enhances intelligence sharing within the Joint Services, the Intelligence Community, and Coalition Forces throughout all phases of operations. Each individual Military Service DCGS Program of Record provides unique and distinct capabilities to the overall DoD DCGS Enterprise. DCGS-MC Geospatial Intelligence( DCGS-MC GEOINT) consists of GEOINT Imagery and Topographic Production Capability (TPC), Tactical Exploitation Group (TEG), Enterprise DCGS Integration Backbone Services (EDS), Virtual Imagery Processing - Marine Corps (VIP-MC), Target Material Production (TMP) Full Motion Video - Optical Navigation Exploitation (FMV-ONE), and Moving Target Indicator (MTI) systems. These capabilities will provide the USMC GEOINT analysts with the capability to process, disseminate, exploit, analyze, and produce intelligence. Future capabilities and enhancements will be delivered via clearly defined Engineering Change Proposals (ECPs). The specific content of each ECP will be determined by an integrated assessment of user needs, technology readiness, risk mitigation, and affordability.</p>												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	1.947	14.498	13.462	-	13.462	14.542	11.516	10.775	11.043		
NR	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	-	0.533	-	-	-	-	-	-	-	-	
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-	-	
	<b>Total Obligation Authority</b>	<b>1.947</b>	<b>15.031</b>	<b>13.462</b>	<b>-</b>	<b>13.462</b>	<b>14.542</b>	<b>11.516</b>	<b>10.775</b>	<b>11.043</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4767 / Distributed Common Ground System (DCGS-MC)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0305208M, 0502511M, 0505208M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<b>Justification:</b> FY 2018 Base Appropriation Request: \$13.462M (active) Funding will procure a subset of Geospatial (TPC) and Imagery (TEG) hardware assets as part of an incremental equipment refresh. Funding also supports efforts such as Geodetic Survey Sets (GSS) fielding, Commercial Joint Mapping Tool Kit (CJMTK) software integration into DCGS-MC Servers, Advanced Imagery Exploitation SW capability enhancements, as well as ECP's across the DCGS-MC portfolio of systems. Decrease of \$1.569M from FY17 to FY18 reflects completed OCO procurement of hardware, software and support for ECPs supporting Joint Processing, Exploitation, and Dissemination (JPED) expansion.		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4787 / UAS Payloads					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0305242M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	0.000	0.000	2.971	14.193	0.000	14.193	4.140	0.037	2.247	3.031	-	26.619
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	0.000	0.000	2.971	14.193	0.000	14.193	4.140	0.037	2.247	3.031	-	26.619
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>0.000</b>	<b>0.000</b>	<b>2.971</b>	<b>14.193</b>	<b>0.000</b>	<b>14.193</b>	<b>4.140</b>	<b>0.037</b>	<b>2.247</b>	<b>3.031</b>	<b>-</b>	<b>26.619</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>The Unmanned Aerial Systems (UAS) Payloads integration program will alleviate Marine Corps Intelligence, Surveillance and Reconnaissance (ISR) capability gaps caused by rapidly changing missions, threats and technologies. It will provide responsive capability to integrate and support rapid fielding of ISR payloads for all UAS within the Marine Corps. Sensor payloads will increase the effectiveness and versatility of the Marine Corps UAS currently planned to have the Electro-Optic(EO) / Infrared (IR) collection, communications relay, and automatic identification capabilities. Upgrades include, but are not limited to, Signals Intelligence (SIGINT)/ Electronic Warfare Support (ES), Synthetic Aperture Radar (SAR) / Moving Target Indicator (MTI), and Wide Area and Hyperspectral Imagery collection.</p> <p>In FY18 the UAS Payloads procurement line was expanded to include funding for Marine Corps Group I UAS system intelligence payloads. P-5 cost elements were broken out to reflect the payload procurement in support of Group III and Group I UAS.</p> <p>Group I and III SIGINT/ES payloads will fill current capability gaps for the Marine Corps Intelligence, Surveillance and Reconnaissance (ISR) mission and is required as part of the Marine Corps mission to locate and target adversary Signals of Interest (SOI).</p> <p>Group I Mobile Ad-hoc Networks (MANET) provide the RQ-11 RAVEN and the RQ-20 PUMA 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.</p> <p>Group III Synthetic Aperture Radar (SAR) with Moving Target Indicator (MTI) will be integrated for Marine Corps small tactical UAS. This capability fills current capability gaps for the ISR mission and will allow Marine Corps ISR assets to locate and track ground targets that cannot effectively be located or tracked with the current ground based sensor technology. The ability to locate and track moving ground targets from small tactical UAVs is an essential capability that facilitates the six functions of Marine Corps Aviation and the Marine Corps ISR Enterprise across the range of military operations.</p> <p>Group III Wide Area Persistent Surveillance (WAS) provides the Marine Air Ground Task Force (MAGTF) with organic airborne Wide Area Surveillance. The Wide Area Surveillance (WAS) payload collects and records Electro Optical / Infrared (EO/IR) images over a wide area in order to conduct persistent surveillance of large areas of interest, in near real time, while recording data to enable forensics. The WAS payload will provide the Marine Corps the ability to disseminate multiple high resolution sub-sampled imagery windows to multiple users.</p>												
<p><b>Justification:</b></p> <p>FY2018 Base Appropriation Request: \$14.193M</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 16: Intell/Comm Equipment (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4787 / UAS Payloads
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0305242M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>\$14.193M procures 8 Group III Spectral Bat Signals Intelligence (SIGINT) payloads, 6 Group III UAS Synthetic Aperture Radar/Moving Target Indicator (SAR/MTI), 50 Group I UAS SIGINT payloads, and 345 Group I UAS Mobile Ad-Hoc Network (MANET) payloads. The increase of \$11.222M from FY2017 to FY2018 provides newly developed payloads to address capability gaps caused by rapidly changing missions, threats, and technologies. In addition, there was an increase due to the expansion of this BLI to include Group I payloads realigned from BLI 4757 (\$3.951M).</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO)Request: N/A</p>		

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy									Date: May 2017			
Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 18: Other Comm/Elec Equipment (Non-Tel)							P-1 Line Item Number / Title: 4930 / Night Vision 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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	1,503.768	1.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,505.448
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	1,503.768	1.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,505.448
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority ( <i>\$ in Millions</i> )	1,503.768	1.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,505.448
(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:												
NIGHT VISION EQUIPMENT (NVE) - Consists of multiple optical, Electro-Optical (EO) and laser systems which 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. Current systems typically are comprised of a single operating modality, such as direct viewing of visible wavelengths, low light image intensification (I2), thermal imaging or short wave infrared (SWIR). Complementary systems, such as near-infrared laser pointers viewable only through I2 devices, provide enhancement of threat identification capabilities. Additionally the portfolio includes procurement of ammunition to support testing and evaluation of night vision equipment; and continue coordination with United States Army on optic, thermal, and night vision technologies.												
COMBAT OPTICS - Previously named Family of Optical Systems (FOS) and Family of Optical Systems and Modifications (FOSAM). This program encompasses all optical systems providing handheld, helmet and weapons mounted optic systems such as various thermal, image intensifier, magnified optical, laser range-finding, illuminating, short wave infrared, and pointer functionalities. Replaces multiple single-purpose NVE fielded to the Marine Corps. Additionally the portfolio includes procurement of ammunition to support testing and evaluation of various Combat Optics; and continue coordination with United States Army on optic, thermal, and night vision technologies.												
THERMAL WEAPON SIGHT (TWS) - The TWS Program supports individual thermal imaging capabilities, such as the AN/PAS-13 TWS, the AN/PAS-22 Long Range Thermal Imager (LRTI), the AN/PAS-27 Individual Weapon Night Sight - Thermal (IWNS-T), the AN/PAS-28 Medium Range Thermal Bi-ocular (MRTB), the AN/PAS-30 Mini Thermal Imager (MTI), and the Squad Thermal System (STS). Thermal imagers operate by discerning the temperature variation between targets and their background and are completely passive devices. 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; and continue coordination with United States Army on optic, thermal, and night vision technologies.												
FAMILY OF INFANTRY WEAPONS SYSTEMS (FIWS) - Procures NVE Principle End Item (PEI) systems lost or damaged beyond economical repair. The focus of PEI Reprocurement is to support those items that have no active procurement program to meet urgent requirements due to combat losses and increased usage.												
Funding for Night Vision Equipment moves to BLI 4620 beginning in FY 2017.												
Justification: Funding for Night Vision Equipment moved to BLI 4620 beginning in FY 2017.												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4625 / Next Generation Enterprise Service					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0208550M, 0505550M, 0206313M, 0206312M				
<b>Line Item MDAP/MAIS Code:</b> MN61												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	2.052	77.561	76.302	98.511	0.000	98.511	97.737	87.299	80.859	85.168	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	2.052	77.561	76.302	98.511	0.000	98.511	97.737	87.299	80.859	85.168	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>2.052</b>	<b>77.561</b>	<b>76.302</b>	<b>98.511</b>	<b>0.000</b>	<b>98.511</b>	<b>97.737</b>	<b>87.299</b>	<b>80.859</b>	<b>85.168</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>NEXT GENERATION ENTERPRISE NETWORK (NGEN) is a Department of the Navy (DON) enterprise program (ACAT IAC) which provides secure, net-centric data and services to Navy and Marine Corps personnel. NGEN forms the foundation for the DON's future Naval Networking Environment (NNE), is interoperable with and leverages other DOD provided Net-Centric Enterprise Services and supports the Joint Information Environment (JIE). For the Marine Corps, NGEN is a Government Owned/Government Operated (GO/GO) model augmented by NGEN contractors with the garrison Marine Corps Enterprise Network (MCEN) representing NGEN Marine Corps management domain. NGEN (USMC) supports the Marine Corps Enterprise Network (MCEN) using a regionalized model, executed through Marine Forces Cyberspace Command, Marine Corps Cyberspace Operations Group (formerly Marine Corps Network Operations and Support Center (MCNOSC) and MAGTF IT Support Centers (MITSCs). The NGEN (USMC) program provides personnel to the field through contractor support for the operation and support of the MCEN Non-secure Internet Protocol Router Network (MCEN-N) and the use of multiple contracts that provide support to the MCEN-N through equipment technical refresh and hardware/software license and warranty generating lifecycle support services enabling Cyber/Information Technology (CYBER/IT) capabilities in accordance with the NGEN Acquisition Strategy. This includes enterprise infrastructure, end-user workstations, service desk, and network operations centers at Marine Corps base/post/stations and regional installation commands CONUS and OCONUS (Hawaii, Japan, Germany, and Korea). The NGEN period of performance began April 2014 and coordination activities are underway for the follow on contract which will begin in FY 2018.</p> <p>NGEN will deliver an end-to-end hosting solution to consolidate and replace End-Of-Life (EOL) Hardware/Software (HW/SW) and infrastructure that currently provides enterprise network services (email, file storage, security services, identity management, etc.) to the Marine Corps Enterprise Network NIPRNet (MCEN-N) users (CONUS and OCONUS) and to provide High Availability/Disaster Recovery (HA/DR) capabilities that are not currently available in support of USMC Continuity of Operations requirements. The requirement also includes the delivery of a Wide Area Network (WAN) transport solution based upon the JIE and Joint Regional Security Stack (JRSS) construct to consolidate and replace EOL HW/SW, and infrastructure that currently provides enterprise network WAN transport services to the MCEN-N network users. As the consolidated upgraded solution is developed the program will continue to tech refresh end user devices, servers, routers, switches, network storage, software, initial equipment warranties, and defensive cyberspace capabilities (intrusion prevention systems, firewalls, etc.). The hardware and software for this refresh differs in quantities and costs based on varying requirements including the current pricing, the quantities that are ordered based on hardware/software end of service/life and the operational balance between security and risk management. Tech Refresh includes the design, configuration, functional testing and integration of commercial or non-developmental network solutions to resolve and mitigate network security vulnerabilities in conjunction with insertion of newer technology to improve reliability, improve maintainability, reduce cost, and/or add minor performance enhancement.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4625 / Next Generation Enterprise Service				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0208550M, 0505550M, 0206313M, 0206312M				
<b>Line Item MDAP/MAIS Code:</b> MN61										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-5	1 / Next Generation Enterprise Service	P-5a, P-21			- / 2.052	- / 77.561	- / 76.302	- / 98.511	- / 0.000	- / 98.511
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 2.052</b>	<b>- / 77.561</b>	<b>- / 76.302</b>	<b>- / 98.511</b>	<b>- / 0.000</b>	<b>- / 98.511</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b></p> <p>FY18 Baseline Appropriation Request: \$98.511M funding will procure services, hardware and software supporting end user devices and network infrastructure technical refresh. Tech refresh supports the MCEN Unification Campaign Plan, Cyberspace Operations requirements, the Marine Corps' implementation of the Joint Information Environment (JIE), which includes NIPR Installation Processing Nodes (IPN) critical design and site configuration. Tech Refresh includes the design, configuration, functional testing and integration of commercial or non-developmental network solutions to resolve and mitigate network security vulnerabilities in conjunction with insertion of newer technology to improve reliability, improve maintainability, reduce cost, and/or add minor performance enhancement.</p> <p>The FY18 \$22.209M increase of which \$18.000M is required for the procurement of Wireless Local Area Network (LAN) equipment to be installed in hangers and maintenance bays. This equipment wirelessly extends MCEN services to maintainers in order to increase readiness across the Marine Corps. The additional \$4.209M increase executes the USMC legacy network consolidation strategy and the installation processing nodes tech refresh for the enterprise. This will result in an integrated modernization of the USMC network.</p>										

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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19						P-1 Line Item Number / Title: 4625 / Next Generation Enterprise Service						Item Number / Title [DODIC]: 1 / Next Generation Enterprise Service						
ID Code (A=Service Ready, B=Not Service Ready) :									MDAP/MAIS Code:									
Resource Summary				Prior Years		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				-		-		-		-		-		-				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				2.052		77.561		76.302		98.511		0.000		98.511				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				2.052		77.561		76.302		98.511		0.000		98.511				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				2.052		77.561		76.302		98.511		0.000		98.511				
(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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) End User Devices Tech Refresh <sup>(†)</sup> <sup>(1)</sup>	-	-	-	1,075.57	28,000	30.116	1,079.16	25,000	26.979	1,096.51	23,500	25.768	-	-	-	1,096.51	23,500	25.768
1.1.2) Network Equipment Tech Refresh <sup>(2)</sup>	-	-	2.052	-	-	47.445	-	-	48.823	-	-	54.243	-	-	-	-	-	54.243
1.1.3) Wireless Local Area Network <sup>(3)</sup>	-	-	-	-	-	-	-	-	-	-	-	18.000	-	-	-	-	-	18.000
Subtotal: Recurring Cost	-	-	2.052	-	-	77.561	-	-	75.802	-	-	98.011	-	-	-	-	-	98.011
Subtotal: Hardware Cost	-	-	2.052	-	-	77.561	-	-	75.802	-	-	98.011	-	-	-	-	-	98.011
Software Cost																		
Recurring Cost																		
2.1.1) Technology Refresh/Software Purchases	-	-	-	-	-	-	-	-	0.500	-	-	0.500	-	-	-	-	-	0.500
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	0.500	-	-	0.500	-	-	-	-	-	0.500
Subtotal: Software Cost	-	-	-	-	-	-	-	-	0.500	-	-	0.500	-	-	-	-	-	0.500
Gross/Weapon System Cost	-	-	2.052	-	-	77.561	-	-	76.302	-	-	98.511	-	-	0.000	-	-	98.511
(†) indicates the presence of a P-5a																		

<sup>(†)</sup> indicates the presence of a P-5a

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<b>Exhibit P-5, Cost Analysis: FY 2018 Navy</b>		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 19	<b>P-1 Line Item Number / Title:</b> 4625 / Next Generation Enterprise Service	<b>Item Number / Title [DODIC]:</b> 1 / Next Generation Enterprise Service
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>
<p><b>Footnotes:</b></p> <p>(1) End user Devices Tech Refresh consists of the refresh of one fourth of the end user hardware per year.</p> <p>(2) Network Equipment Tech Refresh consists of all network and server hardware and software for the 94,000 user Next Generation Enterprise Network (NGEN) the design, configuration, functional testing and integration of commercial or non-developmental network solutions to resolve and mitigate network security vulnerabilities in conjunction with insertion of newer technology to improve reliability, improve maintainability, reduce cost, and/or add minor performance enhancement. The total cost of hardware is determined using asset values and standard life-cycle technology refresh rates. The specific quantities and unit prices are determined at the time of procurement during the year of execution and these figures are based on availability of specific end-item warranties and compliance with the Defense Information Systems Agency (DISA) approved products list. The FY18 increase is required for the procurement of infrastructure tech refresh hardware to complete the USMC IPN implementation planning and execute the USMC legacy network consolidation strategy. This will result in an integrated modernization of the USMC network. FY16 increased by \$10.7M due to an Above Threshold Reprogramming which provided funding for an Urgent Universal Need Statement for Network Access Control, Compliance &amp; Remediation (NAACR).</p> <p>(3) Wireless LAN provides wireless access to MCEN services across hangers and maintenance bays IOT increase readiness across the Marine Corps. This task starts in FY18 and will be completed in 3 fiscal years.</p>		

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<b>Exhibit P-5a, Procurement History and Planning:</b> FY 2018 Navy								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 19				<b>P-1 Line Item Number / Title:</b> 4625 / Next Generation Enterprise Service				<b>Item Number / Title [DODIC]:</b> 1 / Next Generation Enterprise Service			

<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
1.1.1) End User Devices Tech Refresh <sup>(†)</sup>		2016 <sup>(4)</sup>	CDW Government LLC / Vernon Hills, IL	C / IDIQ	MCSC, Quantico, VA	May 2016	Jun 2016	28,000	1,075.57	Y		Feb 2016
1.1.1) End User Devices Tech Refresh <sup>(†)</sup>		2017 <sup>(5)</sup>	CDW Government LLC / Vernon Hills, IL	C / IDIQ	MCSC, Quantico, VA	Feb 2017	Mar 2017	25,000	1,079.16	Y		
1.1.1) End User Devices Tech Refresh <sup>(†)</sup>		2018 <sup>(6)</sup>	TBD / TBD	C / IDIQ	MCSC, Quantico, VA	May 2018	Jun 2018	23,500	1,096.51	Y		

<sup>(†)</sup> indicates the presence of a P-21

**Footnotes:**

<sup>(4)</sup> Unit cost has been updated to actuals after contract award.

<sup>(5)</sup> Unit costs have decreased to match the actuals in FY 2016 plus inflation.

<sup>(6)</sup> Unit costs have decreased to match the actuals in FY 2016 plus inflation.

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Exhibit P-21, Production Schedule: FY 2018 Navy																				Date: May 2017													
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19								P-1 Line Item Number / Title: 4625 / Next Generation Enterprise Service												Item Number / Title [DODIC]: 1 / Next Generation Enterprise Service													
Cost Elements <i>(Units in Thousands)</i>								Fiscal Year 2016										Fiscal Year 2017												B A L A N C E			
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	Calendar Year 2016										Calendar Year 2017																
							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) End User Devices Tech Refresh <sup>(1)</sup>																																	
	1	2016	NAVY	28.000	.000	28.000							A -	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800	2.800							.000			
	1	2017	NAVY	25.000	.000	25.000													A -	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	2.500	7.500			
	2	2018	NAVY	23.500	.000	23.500																											23.500
							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: FY 2018 Navy																				Date: May 2017															
Appropriation / Budget Activity / Budget Sub Activity: 1109N / 04 / 19										P-1 Line Item Number / Title: 4625 / Next Generation Enterprise Service										Item Number / Title [DODIC]: 1 / Next Generation Enterprise Service															
Cost Elements (Units in Thousands)								Fiscal Year 2018										Fiscal Year 2019												B A L A N C E					
O C C O	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) End User Devices Tech Refresh <sup>(1)</sup>																																			
	1	2016	NAVY	28.000	28.000	.000																												.000	
	1	2017	NAVY	25.000	17.500	7.500	2.500	2.500	2.500																										.000
	2	2018	NAVY	23.500	.000	23.500								A -	2.350	2.350	2.350	2.350	2.350	2.350	2.350	2.350	2.350	2.350								.000			
							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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<b>Exhibit P-21, Production Schedule:</b> FY 2018 Navy								<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 19				<b>P-1 Line Item Number / Title:</b> 4625 / Next Generation Enterprise Service				<b>Item Number / Title [DODIC]:</b> 1 / Next Generation Enterprise Service			

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	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	TBD	TBD	TBD	0	0	0	0	0	0	0	0
2	TBD - TBD	TBD	TBD	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:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)	<b>P-1 Line Item Number / Title:</b> 4630 / Common Computer Resources
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0206623M, 0206624M, 0303150M, 0604766M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	306.356	30.836	51.709	66.894	0.000	66.894	70.894	72.237	44.212	45.817	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	306.356	30.836	51.709	66.894	0.000	66.894	70.894	72.237	44.212	45.817	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>306.356</b>	<b>30.836</b>	<b>51.709</b>	<b>66.894</b>	<b>0.000</b>	<b>66.894</b>	<b>70.894</b>	<b>72.237</b>	<b>44.212</b>	<b>45.817</b>	<b>Continuing</b>	<b>Continuing</b>
<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:

MARINE CORPS COMMON HARDWARE SUITE (MCHS) provides Commercial-Off-The-Shelf (COTS) laptops, workstations, software, servers and other information technology (IT) hardware 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.

FY16 and 17 Programs of Record rolled under MCHS that include: Marine Corps Common Hardware Suite (MCHS), Organization Messaging Service (OMS), AN/TPS-59 Mods, General Purpose Tools and Test Systems (GPTTS), M88A2 Hercules Mod (IRV) (Baseline and Reserves), Formal Schools Technical Refresh (FSTR), Marine Air Ground Task Force (MAGTF) Tactical Warfare Simulation (MTWS), MC Training Info Management System (MCTIMS), Marine Corps Distance Learning (MCDL), Paperless Office/Acquisition (PA, Marine Corps Recruiting Info Support Sys (MCRISS), Specialized Skills Training (SST), Technology Services Organization (TSO).

Beginning in FY18, the Programs of Record listed above have been moved to their respective BLI's for execution and will not be included under the MCHS Program of Requirements (POR) in this exhibit.

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 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.

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 and provides the environment to access enterprise shared data and services while improving operational flexibility responsiveness and effectiveness) to operating forces and the supporting establishment based on a common infrastructure and shared services. MCEITS allows for achievement of architectural standardization, consolidated management, seamless interoperability, and access to

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4630 / Common Computer Resources
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0206623M, 0206624M, 0303150M, 0604766M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>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. Additionally, MCEITS has a secondary, fail-over site located in Camp Lejeune, North Carolina, a System Integration Environment (SIE), and two Distributed Platforms. Procurement funding provides for various computers, network gear, racks, etc., and associated installation costs.</p> <p>MARINE CORPS RECRUITING INFORMATION SUPPORT SYSTEM (MCRISS) is an enterprise level system to automate administrative procedures for the 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.</p> <p>TOTAL FORCE STRUCTURE MANAGEMENT SYSTEM (TFSMS) is the Marine Corps authoritative data source for force structure data and provider of the Marine Corps Tables of Organization and Equipment. TFSMS defines present and future Marine Corps force structure, establishes the Marine Corps baseline for readiness reporting, justifies resource requirements and allocation, and enables Marine Corps compliance with the Joint Staff and Office of the Secretary of Defense initiative to standardize force structure representation by providing the Marine Corps Global Force Management Organizational Server. TFSMS is a web-based system built on the Oracle E-Business suite and employs Cognos Report Net Business Intelligence software for the development of standard and ad-hoc queries.</p> <p>MARINE CORPS CYBERSPACE OPERATIONS GROUP (MCCOG) (formerly MCNOSC) executes Marine Corps Global Information Grid Operations and Marine Corps Defensive Cyber Operations in support of Marine Corps operational requirements in order to enhance freedom of action across all warfighting domains, while denying the efforts of adversaries to degrade or disrupt this advantage through cyberspace. MCCOG is the Network Operations (NETOPS) component of Marine Corps Forces Cyberspace Command and provides network situational awareness, command and control, and technical support to Marine Corps operating forces and supporting establishment organizations, both in garrison and while deployed. MCCOG is the primary DOD Computer Network Defense Service Provider for the U.S. Marine Corps and directs Service actions to prevent and respond to security incidents. The MCCOG delivers numerous enterprise services for the Marine Corps, to include mainframe computer services management, Defense Message System (DMS), DOD Public Key Infrastructure (PKI), and Active Directory/Global Address List. The MCCOG is responsible for the operations and defense of MCEITS, which delivers data center services to the Marine Corps. Finally, MCCOG provides technical expertise to HQMC, Marine Corps Combat Development Command (MCCDC), Marine Corps Systems Command (MCSC), and Marine Corps organizations around the world in support of Information Technology initiatives undertaken within the Marine Corps and DOD. The PMC funding will support Core Competencies in the Computer Networks Defense and Network Ops areas with skilled cyber-warriors (24x7x365). The added responsibilities and network security events have required continued operational employment of current assets and personnel. PMC funding is based on increased mission requirements dictated by DoD/USSTRATCOM/USCYBERCOM Operations to defend the network. The procurement funding will be used to refresh the MCCOG Alternate Network Operations Security Center, USMC Site R refresh, Network Common Operational Picture Tools, Host Based Security Systems, Secure Configuration Compliance Validation Initiative and Secure Configuration Remediation Initiative (SCCVI/SCRI), Intrusion Prevention and scanning tools, Virtual Private Network, and other operations and defense tools.</p> <p>SECURE OPERATIONAL NETWORK INFRASTRUCTURE AND COMMUNICATIONS (SONIC) program provides funding to procure and support hardware, software, infrastructure and services necessary to support and improve critical C2 network operations. This funding enables central management of refresh and sustainment of hardware, software, and infrastructure necessary to provide network services on the USMC Garrison SIPRNET. This ensures enterprise architecture goals and standards are established and maintained and takes advantage of quantity-related discounts. The SIPRNET provides Marine Corps garrison 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, functional testing and integration of commercial or non-developmental network solutions to resolve and mitigate network security vulnerabilities.</p> <p>MARINE CORPS INFORMATION OPERATION PROGRAM (MCIOP) supports DOD capabilities based analysis (CBA) to address emerging Marine Air Ground Task Force C2 program and cyberspace requirements. MCIOP supports Information Operations (IO) Range research/modeling/simulation conducted by Marine Corps Warfighting Lab (MCWL), industry, and/or academia to explore existing and emergent Information Operations initiatives and cyber technologies.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4630 / Common Computer Resources				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0206623M, 0206624M, 0303150M, 0604766M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<p>UNITED STATES MARINE CORPS FORCES CYBERSPACE COMMAND (MARFORCYBER) is currently working a MILCON project to construct a 148,000 sq ft facility on the East Campus at Fort Meade. The facility will serve as MARFORCYBER's HQs. Construction is expected to complete in September 2017 with IT Fit-up immediately following. IT fit-up consists of the installation of cable infrastructure and various hardware and software systems to support secure and non-secure data, voice, and video networks. IT fit-up is scheduled as a six-month effort. MARFORCYBER will procure hardware and software for Deployable Mission Support Systems (DMSS), DMSS kits maintained with hardware support and software renewals, and refresh perpetual software licenses for DMSS kits.</p> <p>PAPERLESS ACQUISITION (PA) SYSTEMS is 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 and 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.</p> <p>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.</p>										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	30.827	51.699	66.894	-	66.894	70.894	72.237	44.212	45.817
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.009	0.010	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>30.836</b>	<b>51.709</b>	<b>66.894</b>	<b>-</b>	<b>66.894</b>	<b>70.894</b>	<b>72.237</b>	<b>44.212</b>	<b>45.817</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4630 / Common Computer Resources				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0206623M, 0206624M, 0303150M, 0604766M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Common Computer Resources				- / 306.356	- / 30.836	- / 51.709	- / 66.894	- / -	- / 66.894
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 306.356</b>	<b>- / 30.836</b>	<b>- / 51.709</b>	<b>- / 66.894</b>	<b>- / 0.000</b>	<b>- / 66.894</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> FY18 Justifications:</p> <p>MARINE CORPS COMMON HARDWARE SUITE (MCHS) Programs of Record listed in the description have been moved to their respective BLIs starting in FY18 for execution and will not be included under the MCHS POR in this exhibit (See Program Description for full list of programs).</p> <p>Marine Corps Common Hardware (MCHS) FY18 Base Appropriation Request: \$1.514M supports the purchase of Hardware/Software for Marine Forces Europe/Marine Forces Korea (MARFORE/MARFORK)and the Enterprise Staging &amp; Warehousing effort (ES&amp;W) that includes the receipt, inventory, imaging, kitting and shipping (RIKS) of IT hardware to MFE/MFA, MFK and OPFORs (shipped in a standard configuration ready to use). The \$14.751M decrease between FY17 and FY18 is the Programs of Record listed above have been moved to their respective BLI's for execution and will not be included under the MCHS Program of Requirements (POR) in this exhibit.</p> <p>FORMALIZED SCHOOLS TECHNICAL REFRESH (FSTR) FY18 Base Appropriation Request: \$6.551M funding will support TECOM classroom refresh and tablet procurement. In FY17 funding for Specialized Skill Training (SST) and Formal School Tech Refresh (FSTR) was requested under the MCHS POR in this budget line item. Beginning in FY18 Formal School Tech Refresh (FSTR) includes funding for Specialized Skill Training (SST) (Military Occupational Specialty Schools).</p> <p>SECURE OPERATIONAL NETWORK INFRASTRUCTURE AND COMMUNICATIONS (SONIC) FY18 Base Appropriation Request: \$25.017M will support the refresh of end user equipment and system level infrastructure. Tech refresh of existing equipment including workstations, servers, routers, switches, encryptors and software will be accomplished across the Marine Corps SIPRNET environment and infrastructure. The \$7.025M increase from FY17 to FY18 will fund Classification Marking Software, a network security modernization initiative and will support procurement of tactical end user equipment for a newly established Approved Acquisition Objective (AAO) for the Marine Air Ground Taskforce organizations dispersed around the world.</p> <p>MARINE CORPS ENTERPRISE IT SERVICES (MCEITS) FY18 Base Appropriation Request: \$11.036M will continue to support scaling of 1st and 2nd MCEITS IT Center infrastructures to host additional applications planned for migration and to procure hardware for an Application and Development/test environment. Funding will also support Engineering Change Proposal (ECP) procurements for both MCEITS IT Centers. The \$7.879M increase from FY17 to FY18 will support capacity expansion of the Zone B Application Development and Test environment for Non-MCEITS Hosted applications and systems.</p> <p>MARINE CORPS RECRUITING INFORMATION SUPPORT SYSTEM (MCRISS) FY18 Base Appropriation Request: \$0.049M will provide mission critical hardware required to support the needs of Marine Corps Recruiting Information Support System.</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4630 / Common Computer Resources
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0206623M, 0206624M, 0303150M, 0604766M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>MARINE CORPS INFORMATION OPERATION PROGRAM (MCIOP) FY18 Base Appropriation Request: \$0.398M will provide mission critical hardware and software that is specific to the needs of the intelligence environment. Modeling and simulation explores existing and emergent Information Operations (IO) initiatives and cyber technologies. The \$0.486M decrease in funding from FY17 to FY18 is due to the hardware refresh schedule.</p> <p>PAPERLESS ACQUISITION (PA) SYSTEMS FY18 Base Appropriation Request: \$0.122M 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). The \$0.122M increase in funding from FY17 to FY18 supports the PA Systems hardware refresh schedule.</p> <p>TECHNOLOGY SERVICES ORGANIZATION (TSO) FY18 Base Appropriation request: \$1.305M will support laptop and server refresh to include hardware and software supporting the development of Marine Corps enterprise HRM and Financial Management systems. The \$.464M increase from FY17 to FY18 is the result of additional demand for hardware and software in support of transitioning the DON General Fund Accounting System, SABRS, to a modern data platform in order to eliminate the risk associated with an aging and expensive technology with dwindling number of technical experts. This Technical refresh/upgrade of SABRS database technology from ADABAS to a newer database architecture provides a modern and well-supported database technology that ultimately enables the normalization of Marine Corps financial data in a true relational database.</p> <p>MARINE CORPS CYBERSPACE OPERATIONS GROUP (MCCOG): FY18 Base Appropriation Request: \$3.228M will procure hardware and software for Defensive Cyber Operations Support remote forensics solutions and Hunt Deployable suites. It will also complete the USMC Unified Communications project items such as Distributed Computing Equipment, Video Teleconferencing and Multi-Media Equipment, Network Hardware, Telephone Equipment, and Telepresence Content Server. The decrease of \$1.088M from FY17 to FY18 is due to the current plan for completion of a earlier than anticipated Command hardware refresh schedule to comply with WIN10 upgrades.</p> <p>MARFORCYBER: FY18 Base Appropriation Request: \$17.674M of which \$10.022M will complete MARFORCYBER's headquarters MILCON facility on the East Campus at Fort Meade. It will also complete the FY14 MILCON project number P001 items such as Distributed Computing Equipment, Video Teleconferencing and Multi-media Equipment, Network Hardware, Telephone Equipment, Cable Infrastructure, Wireless Center and Operations Center. \$.7652M will procure hardware and software for Deployable Mission Support Systems (DMSS). DMSS kits are maintained with hardware support, software renewals, and refresh perpetual software licenses. DMSS kits are required in order for MARFORCYBER to support Marine units all across the globe. The increase of \$8.589M from FY17 to FY18 is due to the current plan for completion of MILCON project number P001 and the procurement of hardware and software for DMSS kits.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) & Programs of Record																				
1.1) MCHS Laptops	A		1.204	56,871	68.455	1.595	1,994	3.180	1.595	7,332	11.695	1.595	435	0.694	-	-	-	1.595	435	0.694
1.2) MCHS Workstations	A		1.168	17,545	20.501	1.413	825	1.166	1.413	1,221	1.725	-	-	-	-	-	-	-	-	-
1.3) MCHS Servers	A		8.756	2,090	18.300	7.751	306	2.372	7.751	303	2.349	-	-	-	-	-	-	-	-	-
1.4) MCHS Other IT Equipment (cables, infrastructure, storage devices, etc)	A		2.630	746	1.962	2.632	119	0.313	2.632	112	0.295	-	-	-	-	-	-	-	-	-
1.5) Enterprise Staging & Warehousing (ES&W)	A		-	-	-	-	-	0.188	-	-	0.201	-	-	0.220	-	-	-	-	-	0.220
1.6) MCHS 5th Gen MAGTF Wargaming Devices	A		-	-	-	-	-	-	-	-	-	-	-	0.600	-	-	-	-	-	0.600
Subtotal: 1) MARINE CORPS COMMON HARDWARE SUITE (MCHS) & Programs of Record			-	-	109.218	-	-	7.219	-	-	16.265	-	-	1.514	-	-	-	-	-	1.514
2) Formal Schools Technical Refresh (FSTR)																				
2.1) FSTR Refresh <sup>(1)</sup>	A		-	-	-	-	-	-	-	-	-	-	-	2.551	-	-	-	-	-	2.551
2.2) FSTR Tablets/ Modernization <sup>(2)</sup>	A		-	-	-	-	-	-	-	-	-	-	-	4.000	-	-	-	-	-	4.000
Subtotal: 2) Formal Schools Technical Refresh (FSTR)			-	-	0.000	-	-	-	-	-	-	-	-	6.551	-	-	-	-	-	6.551
3) MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS)																				
3.1) Kansas City Sys Integration Env (SIE) Scaling <sup>(3)</sup>	A		-	-	8.381	-	-	0.096	-	-	0.501	-	-	8.971	-	-	-	-	-	8.971
3.2) Kansas City Sys Integration Env (SIE) Refresh	A		-	-	6.018	-	-	0.148	-	-	0.801	-	-	0.235	-	-	-	-	-	0.235
3.3) Kansas City Enterprise IT Center Scaling	A		-	-	8.756	-	-	0.202	-	-	0.700	-	-	0.709	-	-	-	-	-	0.709
3.4) Kansas City Enterprise IT Center Refresh	A		-	-	12.815	-	-	7.138	-	-	0.603	-	-	0.465	-	-	-	-	-	0.465
3.5) 2nd Enterprise IT Center Procurement/ Scaling	A		-	-	18.646	-	-	1.381	-	-	0.552	-	-	0.533	-	-	-	-	-	0.533
3.6) 2nd Enterprise IT Center Refresh	A		-	-	1.382	-	-	-	-	-	-	-	-	0.123	-	-	-	-	-	0.123
Subtotal: 3) MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS)			-	-	55.998	-	-	8.965	-	-	3.157	-	-	11.036	-	-	-	-	-	11.036

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy																Date: May 2017				
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
4) TOTAL FORCE STRUCTURE MANAGEMENT SYSTEM (TFSMS) - Hardware																				
4.1) Hardware	A		-	-	7.307	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) TOTAL FORCE STRUCTURE MANAGEMENT SYSTEM (TFSMS) - Hardware			-	-	7.307	-	-	0.001	-	-	-	-	-	-	-	-	-	-	-	-
5) MARINE CORPS CYBERSPACE OPERATIONS GROUP (MCCOG)																				
5.1) DMSS	A		-	-	-	-	-	2.240	-	-	-	-	-	-	-	-	-	-	-	-
5.2) Network Operations Infrastructure(Refresh/Upgrades)	A		-	-	50.364	-	-	0.280	-	-	1.706	-	-	0.028	-	-	-	-	-	0.028
5.3) Computer Network Defense	A		-	-	9.387	-	-	0.086	-	-	1.500	-	-	3.200	-	-	-	-	-	3.200
5.4) AltNOSC Infrastructure Upgrade	A		-	-	5.233	-	-	-	-	-	0.467	-	-	-	-	-	-	-	-	-
5.5) Command IT Refresh	A		-	-	4.119	-	-	0.961	-	-	0.643	-	-	-	-	-	-	-	-	-
Subtotal: 5) MARINE CORPS CYBERSPACE OPERATIONS GROUP (MCCOG)			-	-	69.103	-	-	3.567	-	-	4.316	-	-	3.228	-	-	-	-	-	3.228
6) Secure Operational Network Infrastructure and Communications (SONIC) <sup>(4)</sup>																				
6.1) Workstations <sup>(5)</sup>	A		-	-	5.525	-	-	1.462	-	-	5.133	-	-	12.952	-	-	-	-	-	12.952
6.2) Network Devices	A		-	-	4.472	-	-	1.235	-	-	3.728	-	-	2.385	-	-	-	-	-	2.385
6.3) Network Infrastructure	A		-	-	5.370	-	-	2.637	-	-	3.947	-	-	4.125	-	-	-	-	-	4.125
6.4) Cryptographic Equipment	A		-	-	0.159	-	-	-	-	-	2.756	-	-	2.228	-	-	-	-	-	2.228
6.5) Network Modernization <sup>(6)</sup>	A		-	-	21.003	-	-	2.543	-	-	2.428	-	-	1.000	-	-	-	-	-	1.000
6.6) Various Software <sup>(7)</sup>	A		-	-	0.627	-	-	-	-	-	-	-	-	2.327	-	-	-	-	-	2.327
Subtotal: 6) Secure Operational Network Infrastructure and Communications (SONIC)			-	-	37.156	-	-	7.877	-	-	17.992	-	-	25.017	-	-	-	-	-	25.017
7) MARINE CORPS INFORMATION OPERATION PROGRAM (MCIOP)																				
7.1) Workstations	A		-	-	5.252	-	-	0.093	-	-	0.884	-	-	0.398	-	-	-	-	-	0.398
Subtotal: 7) MARINE CORPS INFORMATION OPERATION PROGRAM (MCIOP)			-	-	5.252	-	-	0.093	-	-	0.884	-	-	0.398	-	-	-	-	-	0.398
8) MARINE FORCES CYBER COMMAND																				
8.1) Deployable Mission Support Systems (DMSS)	A		-	-	-	-	-	-	-	-	7.104	-	-	7.652	-	-	-	-	-	7.652

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
8.2) Distributed Computing Equipment (8)	A		-	-	3.518	-	-	-	-	-	-	-	-	1.210	-	-	-	-	-	1.210
8.3) Video Teleconferencing and Multi-media Equipment (9)	A		-	-	5.946	-	-	-	-	-	-	-	-	2.026	-	-	-	-	-	2.026
8.4) Network Hardware (10)	A		-	-	6.050	-	-	-	-	-	-	-	-	2.070	-	-	-	-	-	2.070
8.5) Telephone Equipment (11)	A		-	-	0.230	-	-	-	-	-	-	-	-	0.080	-	-	-	-	-	0.080
8.6) Cable Infrastructure (12)	A		-	-	3.612	-	-	-	-	-	-	-	-	1.230	-	-	-	-	-	1.230
8.7) Wireless Center IT Equipment	A		-	-	2.093	-	-	-	-	-	-	-	-	0.710	-	-	-	-	-	0.710
8.8) Operations Center IT Equipment	A		-	-	-	-	-	-	-	-	1.981	-	-	2.696	-	-	-	-	-	2.696
Subtotal: 8) MARINE FORCES CYBER COMMAND			-	-	21.449	-	-	-	-	-	9.085	-	-	17.674	-	-	-	-	-	17.674
9) Reserves																				
9.1) IRV Reserves - Panasonic Toughbook Computers	A		-	-	0.025	-	-	0.009	-	-	0.010	-	-	-	-	-	-	-	-	-
Subtotal: 9) Reserves			-	-	0.025	-	-	0.009	-	-	0.010	-	-	-	-	-	-	-	-	-
10) Paperless Acquisition (PA) Systems																				
10.1) WebMethod Licenses	A		-	-	-	-	-	3.105	-	-	-	-	-	-	-	-	-	-	-	-
10.2) Hardware	A		-	-	-	-	-	-	-	-	-	-	-	0.122	-	-	-	-	-	0.122
Subtotal: 10) Paperless Acquisition (PA) Systems			-	-	0.000	-	-	3.105	-	-	-	-	-	0.122	-	-	-	-	-	0.122
11) Marine Corps Recruiting Information Support System (MCRISS)																				
11.1) Hardware	A		-	-	-	-	-	-	-	-	-	-	-	0.049	-	-	-	-	-	0.049
Subtotal: 11) Marine Corps Recruiting Information Support System (MCRISS)			-	-	0.000	-	-	-	-	-	-	-	-	0.049	-	-	-	-	-	0.049
12) Technology Services Organization (TSO)																				
12.1) Hardware	A		-	-	-	-	-	-	-	-	-	-	-	0.250	-	-	-	-	-	0.250
12.2) Laptop Refresh	A		-	-	-	-	-	-	-	-	-	-	-	0.132	-	-	-	-	-	0.132
12.3) Tech Refresh	A		-	-	-	-	-	-	-	-	-	-	-	0.468	-	-	-	-	-	0.468
12.4) Various Software	A		-	-	-	-	-	-	-	-	-	-	-	0.455	-	-	-	-	-	0.455



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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
Subtotal: 12) Technology Services Organization (TSO)			-	-	0.000	-	-	-	-	-	-	-	-	1.305	-	-	-	-	-	1.305
13) Prior Year Cumulative																				
13.1) Prior Year		A	-	-	0.848	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 13) Prior Year Cumulative			-	-	0.848	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	306.356	-	-	30.836	-	-	51.709	-	-	66.894	-	-	-	-	-	66.894

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

**Footnotes:**

- (1) Prior to FY18, funding was captured under MCHS cost element.
- (2) Prior to FY18, funding was captured under MCHS cost element.
- (3) Funding increase in FY18 will support capacity expansion of the Zone B Application Development and Test environment for non-MCEITS Hosted applications and systems.
- (4) Funds support regular hardware refresh and emerging hardware requirements.
- (5) Increase from FY17 to FY18 will support procurement of tactical end user equipment for a newly established Approved Acquisition Objective (AAO). These assets are needed for the Marine Air Ground Taskforce organizations dispersed around the world.
- (6) FY18 will fund Trusted Proxy solution to provide the ability to authenticate, track , and manage users access.
- (7) FY2018 funding will provide Classification Marking Tool which will provide software licenses to meet DoD Policy to classify, protect, and confidently share information on SIPRNET for the Marine Corps Operating Forces and professional services to include user training, configuration, and Enterprise deployment.
- (8) Various items being procured at various costs such as PCs (SIPR, NIPR,TS), monitors, KVMs, readers (CAC, token), headsets, printers, plotters, MFDs, Media converters, and consumables (toner, ink)
- (9) Various items being procured at various costs such as VTC suites, Desktop VTCs, A/V Systems, Media Wall Systems and Ancillary Displays
- (10) Various equipment being procured at various costs such as WAN(routers, crypto), LAN(switches), telephony(switches), video(MCUs, Bridges), servers and circuit costs.
- (11) Various equipment will be procured at various costs such as secure and non-secure phones, Ploycom devices, fax machines and STEs
- (12) Various items will be procured at various costs such as Vertical and Horizontal cable plants and system hardware

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)							<b>P-1 Line Item Number / Title:</b> 4631 / Command Post Systems					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M, 0506313M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	687.337	33.546	90.924	186.912	5.777	192.689	91.555	71.389	53.258	44.779	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	687.337	33.546	90.924	186.912	5.777	192.689	91.555	71.389	53.258	44.779	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>687.337</b>	<b>33.546</b>	<b>90.924</b>	<b>186.912</b>	<b>5.777</b>	<b>192.689</b>	<b>91.555</b>	<b>71.389</b>	<b>53.258</b>	<b>44.779</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>Networking On The Move (NOTM) - Provides a command and control (C2) capability by integrating tactical data systems with on the move satellite communications (SATCOM) for beyond line-of-sight ability that allows battlefield commanders to have uninterrupted two-way access to digital data, anywhere on the battlefield. NOTM provides Marine Air-Ground Task Force (MAGTF) commanders and staffs with full Common Operational Picture (COP) access, virtually unlimited situational awareness and a powerful ability to issue digital orders (fires, maneuver, planning) to Ground Combat Element (GCE), Air Combat Element (ACE) and Logistics Combat Element (LCE) units at all echelons while on-the-move or at-the-halt. NOTM also provides Marine units the capability to link with and extend Defense Information System Network (DISN) services; SIPRNet, NIPRNet, and Defense Switched Networks (DSN). Integrated full motion video (receipt and retransmission), tactical voice communications plus three options for secure wireless local area network (LAN) connectivity between staff members makes this amphibious capability a crucial asset to all elements of the MAGTF. Currently the USMC has three variants depending on the type of transportation being used; the NOTM, NOTM-Internally Transportable Vehicle (NOTM-ITV), and NOTM-Airborne (NOTM-A).</p> <p>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 aircraft, ground vehicles and dismounted personnel.</p> <p>Global Command and Control System - Tactical Combat Operations System (GCCS-TCO) is the principal tool within the MAGTF for situational awareness through distribution of the Common Tactical Picture (CTP). It supports tactical operations providing information via high speed computer systems in a timely manner and includes the Tactical COP Workstations/Servers. Procurement funding allows for system refresh and replacements to match the program's acquisition objective.</p> <p>Advanced Field Artillery Tactical Data Family of Systems (AFATDS FoS) - AFATDS FoS consists of three programs: AFATDS, Back Up Computer System (BUCS) and Mobile Tactical Shelter (MTS). The AFATDS automates the fire planning, tactical fire direction, and fire support coordination required to support maneuver from the sea and subsequent operations ashore. AFATDS integrates all supporting arms assets within the MAGTF such as mortars, cannon artillery, rockets and missiles, close air support, and naval surface fire support systems. BUCS is a hand-held computer system designed to provide a backup to the AFATDS in computing ballistic firing solutions, as well as provide survey and meteorological functions in support of artillery. Additionally, BUCS is the primary ballistic firing solution system during Ship To Objective Maneuver (STOM) and for the Expeditionary Fire Support System (EFSS). The MTS is a Lightweight Multi-purpose Shelter (LMS) mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV) which protects both the AFATDS and operators from the environment. MTS enables rapid emplacement and displacement of fire support elements and provides networked communications on the move.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4631 / Command Post Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0506313M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<p>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 Fire Support platforms and Target Locating Devices designed for the Forward Air Controllers (FACs), Forward Observers (FOs), Fire Support Teams (FSTs), Firepower Control Teams (FCTs), Tactical Air Control Parties (TACPs), and Reconnaissance Teams. The THS provides the ability 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).</p> <p>Marine Corps Information Operation Program (MCIOP) - provides MAGTF commanders and the Marine Corps a responsive and effective full-spectrum information operations (IO) planning and psychological operations delivery capability by means of deployable support teams and a comprehensive general support IO reach-back capability in order to integrate IO into Marine Corps operations. Multiple classification levels require separate Information Technology (IT) infrastructure to support each classification level in accordance with National Security Agency and Defense Intelligence Agency standards. This includes equipment necessary for connecting internal MCIOC IT infrastructure (voice, video, and data) with the existing Marine Corps Base Quantico support infrastructure.</p> <p>Combat Operations Center (COC) - AN/TSQ-239(V)1/2/3/4 is a deployable, self-contained, modular, centralized and scalable facility ((V)1 MEF-size, (V)2 MSC/Div-size, (V)3 Regiment-size, (V)4 Battalion-size) which provides digital, shared Command and Control/Situational Awareness functionalities to enhance the Common Operational Picture (COP) for the Command Element, Ground Command Element, Air Combat Element, and Logistics Combat Element. It is a commercial-off-the-shelf integrated hardware solution using unit provided radios, re-hosted tactical data systems, and available Marine Corps prime movers to transport the system.</p>										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	33.546	88.467	185.463	5.777	191.240	88.932	68.720	50.188	42.419
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	2.457	1.449	-	1.449	2.623	2.669	3.070	2.360
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>33.546</b>	<b>90.924</b>	<b>186.912</b>	<b>5.777</b>	<b>192.689</b>	<b>91.555</b>	<b>71.389</b>	<b>53.258</b>	<b>44.779</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4631 / Command Post Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0506313M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Command Post Systems				- / 687.337	- / 33.546	- / 90.924	- / 186.912	- / 5.777	- / 192.689
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 687.337</b>	<b>- / 33.546</b>	<b>- / 90.924</b>	<b>- / 186.912</b>	<b>- / 5.777</b>	<b>- / 192.689</b>
*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.										
<p><b>Justification:</b>  FY2018 Base Appropriation Request: \$186.912M (\$185.463M Active; \$1.449M Reserves)</p> <p>Networking On The Move (NOTM) \$105.740M - FY18 funding will support procuring additional follow-on production systems to satisfy the revised Approved Acquisition Objective (AAO) that was approved in the 1st QTR of FY15. In addition, funding will be used for system refresh, equipment upgrades and post production support. Increase of \$68.279M from FY17 to FY18 will be used to complete Size, Weight and Power (SWaP) reduction retrofit, engineering change proposals (ECPs) for fielded systems and procure and field NOTM-A systems for use on MV-22's.</p> <p>Global Command and Control System - Tactical Combat Operations (GCCS-TCO) \$2.875M Active; \$0.389M Reserves - Decrease of \$2.741M funding from FY17 to 18 is due to required procurement needs in accordance with approved schedule. FY17 funding will procure 100% technical refresh of "servers" across the operational forces whereas FY18 funding will procure 100% technical refresh of "workstations" (laptops) across the operational forces.</p> <p>Joint Battle Command - Platform Family of Systems (JBC-P FoS) \$29.740M- FY18 funding continues to provide support for items such as, software and hardware integration, hardware refresh, ancillary equipment, NET and field support, and procures mounted family of computer systems (MFOCS). Decrease of \$4.818M from FY17 to FY18 is aligned to the schedule for MFOCS, hardware refresh, and associated fielding support.</p> <p>Advanced Field Artillery Tactical Data Systems (AFATDS) \$15.520M - FY18 funds will procure a modernized, common shelter that will fulfill the requirements of the Mobile Tactical Shelter (MTS) and the Target Processing Set (TPS). Increase of \$12.694M will be used to procure a common shelter for MTS and TPS requirements.</p> <p>Target Hand-off System (THS) \$22.350M - FY18 increase of \$22.350M will be used to replace AN/PRC-117F radios with AN/PRC-117G radios. This upgrade will enable THS to operate on the ANW2 network providing THS digital interoperability with AFATDS and multiple air platforms that will enable Fires Controllers to perform target acquisition, location, and digital hand-off of targets to air and ground weapon platforms.</p> <p>Marine Corps Information Operation Program (MCIOP) \$0.110M - FY18 funding will provide tactical server refresh.</p> <p>Combat Operations Center (COC) - \$9.129M Active; \$1.059M Reserves - FY18 funds required for fielding the (V)1-4 hardware refresh in support of a common hardware baseline. Funding will also be used to align the COC software baseline with systems currently hosted within the COC (AFATDS, DDS-M) in order to manage software growth and interoperability. Supporting the existing software baseline is necessary to maintain Authority To Operate (ATO) and integration with Tactical Service Oriented Architecture (TSOA), Joint Tactical Command Operational Picture (COP) Workstation (JTCW) and Command and Control Personal Computer (C2PC).</p> <p>OCO:  FY2018 Overseas Contingency Operations (OCO) Request: \$5.777M</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4631 / Command Post Systems
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0506313M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Advanced Field Artillery Tactical Data Systems (AFATDS) - \$0.177M - FY18 OCO funds will procure replacement assets pulled from artillery units to be prepositioned on ships.</p> <p>Networking On The Move (NOTM) \$5.600M - FY18 OCO funds will procure NOTM-ITV systems. This equipment is being used in a forward deployed environment as a result of the new Special Purpose Marine Air Ground Task Force (SPMAGTF) Crisis Response mission set. Funds will be used to procure (5) NOTM-ITV variants for use overseas in U.S. Central Command (CENTCOM) and Horn of Africa.</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) MCIOP																				
1.1) Tactical Server Refresh	A		-	-	0.608	-	-	0.639	-	-	0.247	-	-	0.110	-	-	-	-	-	0.110
Subtotal: 1) MCIOP			-	-	0.608	-	-	0.639	-	-	0.247	-	-	0.110	-	-	-	-	-	0.110
2) AFATDS																				
2.1) Fielding Support			-	-	6.950	-	-	0.700	-	-	0.669	-	-	0.800	-	-	-	-	-	0.800
2.2) Mobile Tactical Shelter Modernization	A		-	-	41.955	-	-	-	-	-	0.765	-	-	6.200	-	-	-	-	-	6.200
2.3) Hardware Refresh - Active	A		-	-	9.273	-	-	-	-	-	-	-	-	6.213	-	-	0.177	-	-	6.390
2.4) Ancillary Hardware Components	A		-	-	-	-	-	1.995	-	-	1.392	-	-	2.307	-	-	-	-	-	2.307
Subtotal: 2) AFATDS			-	-	58.178	-	-	2.695	-	-	2.826	-	-	15.520	-	-	0.177	-	-	15.697
3) THS																				
3.1) Hardware Procurement	A		-	-	5.552	-	-	3.961	-	-	-	-	-	-	-	-	-	-	-	-
3.2) Hardware Refresh <sup>(1)</sup>	A		-	-	10.200	-	-	-	-	-	-	-	-	21.770	-	-	-	-	-	21.770
3.3) Hardware/ Software Integration	A		-	-	3.771	-	-	-	-	-	-	-	-	0.580	-	-	-	-	-	0.580
Subtotal: 3) THS			-	-	19.523	-	-	3.961	-	-	-	-	-	22.350	-	-	-	-	-	22.350
4) JBC-P																				
4.1) Mounted Family of Computer Systems (MFoCS)	A		-	-	-	-	-	8.083	-	-	26.313	-	-	16.160	-	-	-	-	-	16.160
4.2) Ancillary Hardware Components	A		-	-	2.714	-	-	0.490	-	-	0.373	-	-	0.500	-	-	-	-	-	0.500
4.3) Hardware/ Software Integration, NET and Fielding Support <sup>(2)</sup>			-	-	9.801	-	-	3.853	-	-	7.872	-	-	8.839	-	-	-	-	-	8.839
4.4) Hardware Refresh	A		-	-	-	-	-	-	-	-	-	-	-	4.241	-	-	-	-	-	4.241
Subtotal: 4) JBC-P			-	-	12.515	-	-	12.426	-	-	34.558	-	-	29.740	-	-	-	-	-	29.740
5) GCCS-TCO																				
5.1) Refresh-Reserves	A		-	-	0.253	-	-	-	-	-	0.338	-	-	0.389	-	-	-	-	-	0.389
5.2) Hardware/ Software Refresh	A		-	-	10.159	-	-	-	-	-	5.667	-	-	2.875	-	-	-	-	-	2.875
Subtotal: 5) GCCS-TCO			-	-	10.412	-	-	-	-	-	6.005	-	-	3.264	-	-	-	-	-	3.264
6) NOTM																				

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<b>Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy</b>															<b>Date:</b> May 2017				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 19								<b>P-1 Line Item Number / Title:</b> 4631 / Command Post Systems							<b>Aggregated Items Title:</b> Command Post Systems				

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) NOTM Reserves Refresh	A		-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	0.001
6.2) System Refresh/ Equipment Upgrades (3)	A		-	-	26.957	-	-	5.209	-	-	11.740	-	-	34.454	-	-	-	-	-	34.454
6.3) Production Systems (4)	A		1,479K	10	14.792	-	-	-	1,513K	17	25.721	1,507K	20	30.140	-	-	-	1,507K	20	30.140
6.4) NOTM-A Systems (5)	A		-	-	-	2,154K	4	8.616	-	-	-	2,198K	10	21.980	-	-	-	2,198K	10	21.980
6.5) NOTM-A Ancillary Equipment (6)	A		-	-	-	-	-	-	-	-	-	-	-	19.165	-	-	-	-	-	19.165
6.6) NOTM-ITV Systems	A		-	-	-	-	-	-	-	-	-	-	-	0.000	1,120K	5	5.600	1,120K	5	5.600
<b>Subtotal: 6) NOTM</b>			-	-	<b>41.749</b>	-	-	<b>13.825</b>	-	-	<b>37.461</b>	-	-	<b>105.740</b>	-	-	<b>5.600</b>	-	-	<b>111.340</b>
<b>7) COC</b>																				
7.1) Program Management Support (V)1-4 (7)	A		-	-	-	-	-	-	-	-	0.123	-	-	2.051	-	-	-	-	-	2.051
7.2) COC Refresh	A		-	-	-	-	-	-	-	-	7.585	-	-	7.078	-	-	-	-	-	7.078
7.3) Reserves COC Refresh	A		-	-	-	-	-	-	-	-	2.119	-	-	1.059	-	-	-	-	-	1.059
<b>Subtotal: 7) COC</b>			-	-	<b>0.000</b>	-	-	-	-	-	<b>9.827</b>	-	-	<b>10.188</b>	-	-	-	-	-	<b>10.188</b>
<b>8) Prior Year Cumulative Funding</b>																				
8.1) Prior Year Cumulative Funding	A		-	-	544.352	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal: 8) Prior Year Cumulative Funding</b>			-	-	<b>544.352</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>			-	-	<b>687.337</b>	-	-	<b>33.546</b>	-	-	<b>90.924</b>	-	-	<b>186.912</b>	-	-	<b>5.777</b>	-	-	<b>192.689</b>

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

**Footnotes:**

(1) THS: FY18 funds will begin replacing AN/PRC-117F radios with AN/PRC-117G radios.

(2) JBC-P HW/SW Integration, New Equipment Training and Fielding Support increases \$.967M from FY17 to FY18 in support of simultaneous fielding for 3 vehicle platforms and Tactical Operations Center (TOC) Kit refresh.

(3) NOTM: System Refresh/Equipment Upgrades funding increase from FY17 to FY18 reflects Size Weight and Power (SWaP) retrofits and equipment upgrades and engineering change proposals (ECPs) for fielded systems.

(4) NOTM: FY17 Production system quantity reduced from twenty-three (23) to seventeen (17) as a result of a mandate for Windows 10 engineering change proposal (ECP) upgrade and retrofit. FY18 funds will procure twenty (20) NOTM production systems and will modify NOTM so it can receive Type I encrypted full motion video data from Unmanned Aerial Vehicle (UAV).

(5) NOTM-A: In support of the Special Purpose Marine Air-Ground Task Force (SPMAGTF) En-route Command, Control, Communications & Computers (C4) Urgent Statement of Need (USON).

(6) NOTM-A: In support of the Special Purpose Marine Air-Ground Task Force (SPMAGTF) En-route Command, Control, Communications & Computers (C4) Urgent Statement of Need (USON). Ancillary equipment includes additional A-Kits, Training Kits, and retro fits to the four (4) NOTM-A's procured in FY16.

(7) COC: Increase of \$1.928 from FY17 to FY18 provides program management, logistics and engineering support for End-of-Life Obsolescence Refresh.



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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)	<b>P-1 Line Item Number / Title:</b> 4633 / Radio Systems
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0605873M, 0506313M
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**Line Item MDAP/MAIS Code:** 000

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	587.372	37.574	57.877	34.361	4.590	38.951	88.358	116.263	244.695	233.338	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	587.372	37.574	57.877	34.361	4.590	38.951	88.358	116.263	244.695	233.338	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>587.372</b>	<b>37.574</b>	<b>57.877</b>	<b>34.361</b>	<b>4.590</b>	<b>38.951</b>	<b>88.358</b>	<b>116.263</b>	<b>244.695</b>	<b>233.338</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	0.201	0.205	-	0.205	0.210	0.215	0.219	0.223	Continuing	Continuing
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 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 (KG-250), Integrated Receiver- Decoder (for NTSC video), Managed Ethernet Switch, Unmanaged Ethernet Switch, Video Converter, and transit cases.

**Very Small Aperture Terminal (VSAT):** VSAT provides wideband beyond line-of-sight (BLOS), low-cost satellite communications to Marine Air-Ground Task Force (MAGTF) commands at the Major Subordinate Commands to the Battalion levels. VSAT enables critical voice, video, and data for Command and Control (C2), Fires, Logistics, and Intelligence. VSAT fills a void of BLOS, high bandwidth capability throughout the MAGTF. VSAT systems already support operations on commercial SATCOM bandwidth (Ku). Additional military SATCOM frequencies (Ka-band) have already been incorporated into the large, trailer mounted VSAT systems to alleviate reliance on commercial SATCOM bandwidth. This effort was recently expanded to include Ka-band upgrades for small and medium variants and X-band kits for the VSAT-Large (VSAT-L). As legacy systems reach obsolescence, VSAT systems have been identified as the platform supporting continued BLOS SATCOM operations in conjunction with equipment consolidation efforts. Future modifications will be required to support the obsolescence of three other programs of record PHOENIX and LMST, and the realignment of ECCS under the VSAT program. These efforts include the development and integration of an external antenna with the VSAT-L trailer, projected through FY 18. In order to subsume the capabilities lost in the phase out of the obsolete systems, VSAT systems require ECPs to incorporate the WAN optimization, COMSEC modernization, VSAT-E network equipment refreshes, and external antenna, in addition to upgrades to ancillary subsystems.

**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 also capable of operation when removed from the HMMWV.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4633 / Radio Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0605873M, 0506313M				
<b>Line Item MDAP/MAIS Code:</b> 000										
<p>Military Global Positioning System (GPS) User Equipment (MGUE) (formerly DAGR): The DAGR is a lightweight, hand-held, self-contained, Selective Availability Anti-Spoofing Module (SAASM) based GPS receiver. It provides Position, Velocity, Navigation, and Timing (PVNT) data using the GPS dual-frequency (L1/L2) Precise Positioning Service (PPS) for vehicular, hand-held, sensor and gun laying applications. Prices are based on quantities procured by all services during ordering.</p> <p>Tactical Communications Modernization (TCM): TCM is established to procure or assist in the procurement of communications across the Marine Corps. The program schedule and budget profile for TCM procures multiple families of radio systems to support the primary operational voice and data communications requirements for mounted and dismounted forces. TCM procurements enable joint interoperability, mobile networking and support National Security Agency (NSA) Communications Security (COMSEC) Modernization requirements.</p> <p>Terrestrial Wideband Transmission Systems (TWTS): TWTS is a capabilities portfolio that includes Beyond Line of Sight (BLOS) system (AN/TRC-170A) and Line of Sight (LOS) systems AN/MRC-142 Family of Systems (FoS). The AN/TRC-170A is a transportable BLOS, terrestrial, self-enclosed troposcatter terminal (multichannel) capable of transmitting and receiving digital data over varying distances up to 100 miles. Next Generation Troposcatter (NGT) is a transit case solution which will replace the AN/TRC-170A. AN/MRC-142B provides ship to shore communication. AN/MRC-142C FoS provides LOS, two-way, secure voice and data communications up to 35 miles.</p>										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	32.558	57.334	34.361	4.590	38.951	88.358	116.263	244.695	233.338
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.016	0.543	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>37.574</b>	<b>57.877</b>	<b>34.361</b>	<b>4.590</b>	<b>38.951</b>	<b>88.358</b>	<b>116.263</b>	<b>244.695</b>	<b>233.338</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4633 / Radio Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0605873M, 0506313M			
<b>Line Item MDAP/MAIS Code:</b> 000										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Radio Systems				- / 587.372	- / 37.574	- / 57.877	- / 34.361	- / 4.590	- / 38.951
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 587.372</b>	<b>- / 37.574</b>	<b>- / 57.877</b>	<b>- / 34.361</b>	<b>- / 4.590</b>	<b>- / 38.951</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> FY2018 Base Appropriation Request: \$34.361M</p> <p>Global Broadcast Service (GBS): \$1.655M - Funding will procure hardware to support planned tech refresh efforts. Decrease of \$6.800M from FY17 to FY18 accounts for FY17 OCO which supported TSR-11 refresh and procurement.</p> <p>Very Small Aperture Terminal (VSAT): \$2.068M - Funding enables the procurement and integration of the VSAT-L external antenna effort, and refresh and upgrade of components which are end-of-life/end-of-support such as server upgrades. In addition funding provides for fielding and program support. Decrease of \$4.521M from FY17 to FY18 accounts for completion of FY17 Rapid Response Kit (RRK) network package procurement and fielding support.</p> <p>Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T): \$.549M - Funding will procure program support and software upgrades to the AN/PYQ-17 Network Planning Tool. Increase of \$.012M from FY17 to FY18 supports improvement procurements such as Terminal Operating Units (TOUs).</p> <p>Tactical Communications Modernization (TCM): \$17.852M - Funding provides for the procurement of Mobile User Objective System (MUOS) capability to include antennas, and additional ancillary components (\$15.986M), procurement of Application Program Set (APS) to support High Frequency Radio (HFR) II maintenance (\$0.366M) and program support (\$1.500M). Decrease of \$21.651M from FY17 to FY18 reflects procurement schedule of MUOS firmware.</p> <p>Terrestrial Wideband Transmission Systems (TWTS): \$12.237M - Increase of \$9.937M from FY17 to FY18 to procure Next Generation Troposcatter (NGT), a transit case solution which will replace the AN/TRC-170A. Funds also provide for program support.</p> <p>OCO: FY2018 Overseas Contingency Operations (OCO) Request: \$4.590M</p> <p>Very Small Aperture Terminal (VSAT): \$4.590M - Funding will support the procurement of an additional (10) VSAT-E Rapid Response Kits (RRKs) to support High Demand/Low Density equipment employed by forward units to include the Special Purpose-Marine Air Ground Task Forces, Marine Expeditionary Units, and Marine Expeditionary Brigades.</p>										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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			-	-	0.560	-	-	0.282	-	-	0.645	-	-	0.859	-	-	-	-	-	0.859
1.2) Tech Refresh	A		-	-	0.709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1.3) PRS 11	A		-	-	-	94,261.00	21	1.979	-	-	-	-	-	-	-	-	-	-	-	
1.4) TSR-11	A		-	-	-	-	-	-	145,000.00	8	1.160	-	-	-	-	-	-	-	-	
1.5) TSR 11 Retrofit	A		-	-	-	-	-	-	60,000.00	92	5.520	-	-	-	-	-	-	-	-	
1.6) TSR 11 Retrofit (Reserves)	A		-	-	-	-	-	-	60,000.00	5	0.300	-	-	-	-	-	-	-	-	
1.7) Program/Training Support (Reserves)			-	-	-	-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	
1.8) Ancillary Components	A		-	-	-	-	-	0.376	-	-	0.822	-	-	-	-	-	-	-	-	
1.9) Fielding Support (1)	A		-	-	-	-	-	-	-	-	-	-	-	0.796	-	-	-	-	0.796	
Subtotal: 1) Global Broadcast Service (GBS)			-	-	1.269	-	-	2.637	-	-	8.455	-	-	1.655	-	-	-	-	-	1.655
2) Very Small Aperture Terminal (VSAT)																				
2.1) Modem Upgrades	A		-	-	1.192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.2) VSAT Tech Refresh and Upgrade (2)	A		-	-	2.869	-	-	1.810	-	-	1.748	-	-	1.200	-	-	-	-	1.200	
2.3) VSAT-E Rapid Response Kit (RRK) Network Packages	A		-	-	-	-	-	-	90,196.08	51	4.600	-	-	-	-	-	-	-	-	
2.4) VSAT-E Rapid Response Kit (RRK) Systems	A		-	-	-	-	-	-	-	-	-	-	-	0.000	459,000.00	10	4.590	459,000.00	10	4.590
2.5) Logistics/Fielding/ Training Support (3)			-	-	-	-	-	0.174	-	-	0.241	-	-	0.868	-	-	-	-	0.868	
Subtotal: 2) Very Small Aperture Terminal (VSAT)			-	-	4.061	-	-	1.984	-	-	6.589	-	-	2.068	-	-	4.590	-	-	6.658
3) Secure Mobile Anti-Jam Reliable Tactical - Terminal (SMART-T)																				
3.1) Tech Refresh (4)	A		-	-	-	-	-	0.517	-	-	0.262	-	-	-	-	-	-	-	-	
3.2) Tech Refresh (Reserves) (5)	A		-	-	0.128	-	-	0.116	-	-	0.235	-	-	-	-	-	-	-	-	
3.3) TMPS SW Refresh	A		-	-	-	-	-	-	-	-	-	-	-	0.507	-	-	-	-	0.507	
3.4) Program Support			-	-	5.001	-	-	0.023	-	-	0.040	-	-	0.042	-	-	-	-	0.042	
Subtotal: 3) Secure Mobile Anti-Jam Reliable Tactical - Terminal (SMART-T)			-	-	5.129	-	-	0.656	-	-	0.537	-	-	0.549	-	-	-	-	-	0.549

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy																Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Military GPS User Equipment (MGUE)																					
4.1) DAGRs <sup>(6)</sup>	A		3,517.53	1,882	6.620	-	-	-	2,822.22	90	0.254	-	-	-	-	-	-	-	-	-	
4.2) DAGRs (cables, power adapters)	A		-	-	1.230	-	-	-	-	-	0.239	-	-	-	-	-	-	-	-	-	
Subtotal: 4) Military GPS User Equipment (MGUE)			-	-	7.850	-	-	-	-	-	0.493	-	-	-	-	-	-	-	-	-	
5) Tactical Communications Modernization (TCM)																					
5.1) Engineering & Program Support			-	-	35.256	-	-	0.972	-	-	1.981	-	-	1.500	-	-	-	-	-	1.500	
5.3) Ancillary Components	A		-	-	0.521	-	-	5.791	-	-	0.052	-	-	1.966	-	-	-	-	-	1.966	
5.5) MBR II MUOS <sup>(7)</sup>	A		-	-	-	10,000.00	1,656	16.560	10,000.00	2,844	28.440	10,000.00	198	1.980	-	-	-	10,000.00	198	1.980	
5.6) MBR II MUOS (Reserves) <sup>(8)</sup>	A		-	-	-	10,000.00	490	4.900	-	-	-	-	-	-	-	-	-	-	-	-	
5.7) MUOS Antennas <sup>(9)</sup>	A		-	-	-	-	-	-	4,740.00	977	4.631	3,452.00	3,594	12.406	-	-	-	3,452.00	3,594	12.406	
5.15) AN/MRC-145B Product Verification/ Install kits	A		-	-	-	-	-	0.361	-	-	-	-	-	-	-	-	-	-	-	-	
5.16) AN/PRC-117G	A		-	-	-	-	-	-	34,879.71	73	2.546	-	-	-	-	-	-	-	-	-	
5.17) AN/VRC-114V1	A		-	-	-	-	-	-	59,666.67	3	0.179	-	-	-	-	-	-	-	-	-	
5.18) AN/VRC-114V1 Install Kits	A		-	-	-	-	-	0.099	-	-	0.084	-	-	-	-	-	-	-	-	-	
5.19) Squad Level Radios (RFES USON)	A		-	-	-	-	-	1.379	-	-	1.590	-	-	-	-	-	-	-	-	-	
5.20) XTS 5000 Hand Held Radios	A		-	-	-	-	-	1.236	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 5) Tactical Communications Modernization (TCM)			-	-	35.777	-	-	31.298	-	-	39.503	-	-	17.852	-	-	-	-	-	17.852	
6) Terrestrial Wideband Transmission Systems (TWTS)																					
6.1) Engineering and Program Support <sup>(10)</sup>			-	-	2.849	-	-	-	-	-	2.091	-	-	0.337	-	-	-	-	-	0.337	
6.2) Next Generation Tropo (NGT)	A		-	-	-	-	-	-	-	-	-	850,000.00	14	11.900	-	-	-	850,000.00	14	11.900	
6.3) AN/MRC 142 ECP Integration	A		-	-	1.954	-	-	0.849	-	-	-	-	-	-	-	-	-	-	-	-	
6.4) AN/MRC142C HW/cable procurement	A		-	-	-	-	-	0.150	-	-	0.209	-	-	-	-	-	-	-	-	-	
Subtotal: 6) Terrestrial Wideband Transmission Systems (TWTS)			-	-	4.803	-	-	0.999	-	-	2.300	-	-	12.237	-	-	-	-	-	12.237	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
7) Prior Year Cumulative Funding																				
7.1) Prior Year Cumulative Funding			-	-	528.483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) Prior Year Cumulative Funding			-	-	528.483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	587.372	-	-	37.574	-	-	57.877	-	-	34.361	-	-	4.590	-	-	38.951

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

**Footnotes:**

- (1) GBS: Increase of \$.796M from FY17 to FY18 supports fielding of the TSR-11s.
- (2) VSAT: Tech refresh and upgrade efforts consist of multiple components with varying quantities and unit prices as components go end-of-life/end-of-sale (EOL/EOS).
- (3) VSAT: Logistics/Fielding/Training support initiated in FY16 and will ramp up in FY18 to support efforts such as integration of the external antenna and VSAT-E capabilities, network package refreshes, fielding, and new equipment training.
- (4) SMART-T Tech Refresh: Terminal Operating Unit (TOU) procurement will leverage the Army's new contract in 4QFY17
- (5) SMART-T Tech Refresh: Terminal Operating Unit (TOU) procurement will leverage the Army's new contract in 4QFY17.
- (6) Military Global Positioning System (GPS) User Equipment(MGUE): FY17 is the final year to procure DAGRS. FY18-FY21 initial procurements of MGUE Increment 2.
- (7) TCM MBR II MUOS: Army Forces Strategic Command (ARSTRAT) certification and subsequent testing for MUOS firmware delayed procurement from FY16 to FY18. FY16/17/18 PMC funds will procure MUOS Firmware in Aug 2018.
- (8) TCM MBR II MUOS (Reserves): Army Forces Strategic Command (ARSTRAT) certification and subsequent testing for MUOS firmware delayed procurement from FY16 to FY18. FY16 PMC funds will procure MUOS Firmware in Aug 2018.
- (9) TCM: MUOS Antennas solution consists of three different variants with three different unit costs; the unit cost is an average of the three Antenna variants.
- (10) TWTS Eng & Prog Spt: Decrease of \$1.754M from FY17 to FY18 reflects completion of manpower, personnel & training plan (MPTP) and transition of support for MRC-142C to sustainment.

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)	<b>P-1 Line Item Number / Title:</b> 4634 / Comm Switching & Control Systems
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0506213M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	365.355	62.956	66.383	54.615	0.000	54.615	45.292	38.038	38.855	39.671	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	365.355	62.956	66.383	54.615	0.000	54.615	45.292	38.038	38.855	39.671	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>365.355</b>	<b>62.956</b>	<b>66.383</b>	<b>54.615</b>	<b>0.000</b>	<b>54.615</b>	<b>45.292</b>	<b>38.038</b>	<b>38.855</b>	<b>39.671</b>	<b>Continuing</b>	<b>Continuing</b>
<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, the Electronic Key Management Systems (EKMS) transition to the Key Management Infrastructure (KMI), the National Security Agency (NSA) directed Cryptographic Modernization of the COMSEC infrastructure, Installations (base, posts, and station), and platforms. 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. 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-sized 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 LAN and WAN data networking capability that forms the data communications backbone and data communications support to organizations within a MAGTF. The CDN provides extension of the Defense Information System Network (DISN), Secret Internet Protocol Router Network (SIPRNet), Sensitive But Unclassified (SBU), Non-secure Internet Protocol Router Network (NIPRNet) as well as a Coalition networking capability and access to strategic, supporting establishments, joint and other service component tactical data networks for Marine Corps Tactical Data Systems (TDSs) and other DDS-Ms. The CDN provides Marine Corps maneuver elements with a modular and scalable IP data transport capability that will replace, supplement and be used with existing legacy data systems through the integration of computers, routers, data switches and cabling, Enhanced Position Location and Reporting System (EPLRS) radio net interface units, modems, link encryption devices, and patch panels. Uninterrupted Power Supplies (UPS) provide for emergency power and continuity of operations. The CDN can operate from the SBU up to the Top Secret/Sensitive Compartmented Information (TS/SCI) level and contains integral In-line Network Encryption (INE) device supporting IP Security (IPSec) and Virtual Private Networking (VPN).

Tactical Voice Switching System (TVSS): The TVSS is a modular ISDN circuit switch capable system that combines voice and Voice Over Internet Protocol telecommunications, multiplexing, transmission encryption, and group modem capabilities in one system for command, control, administrative, and logistic voice communications. Facilitates secure and non-secure voice, circuit switching functions, and network routing and management functions with current fielded tactical systems of the military services. Interoperates with joint, coalition, and host nation networks, and operates in unclassified and classified environments.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4634 / Comm Switching & Control Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0506213M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	62.949	62.211	52.175	-	52.175	42.774	33.393	34.115	34.832
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.007	4.172	2.440	-	2.440	2.518	4.645	4.740	4.839
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>62.956</b>	<b>66.383</b>	<b>54.615</b>	-	<b>54.615</b>	<b>45.292</b>	<b>38.038</b>	<b>38.855</b>	<b>39.671</b>



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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4634 / Comm Switching & Control Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0506213M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Comm Switching & Control Systems				- / 365.355	- / 62.956	- / 66.383	- / 54.615	- / -	- / 54.615
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 365.355</b>	<b>- / 62.956</b>	<b>- / 66.383</b>	<b>- / 54.615</b>	<b>- / 0.000</b>	<b>- / 54.615</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										
<p><b>Justification:</b>  FY2018 Base Appropriation Request: \$54.615M</p> <p>COMSEC: \$1.163M. (\$0.908M Active, \$0.255M Reserve). Increase of \$0.058M from FY17 to FY18 reflects restructure of COMSEC modernization in support of Expeditionary Force 21 and National Security Agency guidelines. Funding continues to provide items such as procurements and replacements of damaged COMSEC equipment and ancillary devices and program support.</p> <p>JCSE: \$0.474M Active. Increase of \$0.007M from FY17 to FY18 reflects the Marine Corps mandated share of efforts to keep the JCSE equipped with the latest state-of-the-art equipment to accomplish its Joint Staff Mission. The specific purpose will be determined at the annual JCSE modernization review.</p> <p>CDN: \$44.628M (\$42.443M Active; \$2.185M Reserves) Increase of \$0.661M from FY17 to FY18 reflects network equipment procurement technology refresh cycle during sustainment. FY18 funds will support Engineering Change Proposals, procurement and fielding for the CDN networking equipment technology refresh to include the Network Optimization and reconfiguration efforts to reduce size, weight, and power (SWaP) requirements of the CDN systems. Funds will also support management, acquisition, logistics, Manpower support, Personnel and Training Analysis and Training Plan development and support.</p> <p>TVSS: \$8.350M Active. Decrease of \$12.494M from FY17 to FY18 represents completion of the server based solution for Voice over Internet Protocol (VoIP) for the senior echelons of the MAGTF. FY18 funds will support addition of video teleconference equipment and modifications to the system to ensure viable voice communication capability for all echelons of the MAGTF.</p>										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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			-	-	2.837	-	-	0.222	-	-	0.544	-	-	0.196	-	-	-	-	-	0.196
1.2) COMSEC racks	A		-	-	-	-	-	-	-	-	0.045	-	-	-	-	-	-	-	-	-
1.3) COMSEC hardware	A		-	-	5.301	-	-	3.840	-	-	0.115	-	-	0.124	-	-	-	-	-	0.124
1.4) COMSEC lab support			-	-	0.750	-	-	0.667	-	-	0.149	-	-	0.588	-	-	-	-	-	0.588
1.5) COMSEC Racks/ Cables (Reserves)	A		-	-	0.459	-	-	0.002	-	-	0.252	-	-	0.255	-	-	-	-	-	0.255
Subtotal: 1) Communications Security (COMSEC)			-	-	9.347	-	-	4.731	-	-	1.105	-	-	1.163	-	-	-	-	-	1.163
2) Joint Communications Support Equipment (JCSE)																				
2.1) USMC contribution to JCSE			-	-	1.969	-	-	0.404	-	-	0.467	-	-	0.474	-	-	-	-	-	0.474
Subtotal: 2) Joint Communications Support Equipment (JCSE)			-	-	1.969	-	-	0.404	-	-	0.467	-	-	0.474	-	-	-	-	-	0.474
3) Combat Data Network (CDN)																				
3.1) Program Support/ Fielding/CLS/Training (1)			-	-	26.505	-	-	6.091	-	-	9.876	-	-	6.200	-	-	-	-	-	6.200
3.2) Software Assurance	A		-	-	32.556	-	-	4.340	-	-	-	-	-	-	-	-	-	-	-	-
3.3) Network Optimization	A		-	-	1.677	-	-	5.380	-	-	9.450	-	-	9.600	-	-	-	-	-	9.600
3.4) ECP Network Equipment (2)	A		-	-	41.192	-	-	32.360	-	-	6.200	-	-	26.643	-	-	-	-	-	26.643
3.5) ECP Server Tech Refresh (3)	A		-	-	-	-	-	-	-	-	14.521	-	-	-	-	-	-	-	-	-
3.6) ECP Laptops	A		-	-	-	-	-	0.789	-	-	-	-	-	-	-	-	-	-	-	-
3.7) ECP Network Equipment (Reserves)	A		-	-	5.117	-	-	-	-	-	1.960	-	-	2.185	-	-	-	-	-	2.185
3.8) ECP Server Tech Refresh (Reserves)	A		-	-	-	-	-	-	-	-	1.960	-	-	-	-	-	-	-	-	-
3.9) ECP Laptops (Reserves)	A		-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) Combat Data Network (CDN)			-	-	107.047	-	-	48.965	-	-	43.967	-	-	44.628	-	-	-	-	-	44.628
4) Tactical Voice Switching System (TVSS)																				
4.1) TVSS Obsolete ECPs (4)	A		-	-	0.826	-	-	1.330	-	-	20.844	-	-	7.920	-	-	-	-	-	7.920

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
4.2) Program Support (5)			-	-	-	-	-	7.515	-	-	-	-	-	0.430	-	-	-	-	-	0.430
Subtotal: 4) Tactical Voice Switching System (TVSS)			-	-	0.826	-	-	8.845	-	-	20.844	-	-	8.350	-	-	-	-	-	8.350
5) Digital Technical Control (DTC)																				
5.1) IA Sustainment ECP Upgrades	A		-	-	1.150	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) Digital Technical Control (DTC)			-	-	1.150	-	-	0.011	-	-	-	-	-	-	-	-	-	-	-	-
6) Prior Year Cumulative Funding																				
6.1) Prior Year Funding			-	-	245.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) Prior Year Cumulative Funding			-	-	245.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	365.355	-	-	62.956	-	-	66.383	-	-	54.615	-	-	-	-	-	54.615

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 decrease of \$3.676M from FY17 to FY18 aligns with the completion of server procurement and fielding of routers and switches.
- (2) CDN - ECP Network Equipment increase of \$20.443M from FY17 to FY18 supports procurement of network optimization equipment and reconfiguration efforts to reduce size, weight, and power (SWaP) requirements. Each procurement is comprised of multiple components with varying quantities and unit costs.
- (3) CDN - ECP Server Tech Refresh decrease of \$14.521M from FY17 to FY18 reflects completion of refresh.
- (4) TVSS Obsolete ECPs decrease \$12.924M from FY17 to FY18 reflects server solution transition to Voice over Internet Protocol (VoIP).
- (5) TVSS Program Support increase of \$.430M from FY17 to FY18 supports program efforts to transition to Voice over Internet Protocol (VoIP).

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)	<b>P-1 Line Item Number / Title:</b> 4635 / Comm & Elec Infrastructure Supt
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0605013M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ <i>in Millions</i> )	166.302	65.520	36.873	44.455	0.000	44.455	83.139	59.218	90.774	107.232	Continuing	Continuing
Less PY Advance Procurement (\$ <i>in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ <i>in Millions</i> )	166.302	65.520	36.873	44.455	0.000	44.455	83.139	59.218	90.774	107.232	Continuing	Continuing
Plus CY Advance Procurement (\$ <i>in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ <i>in Millions</i> )	166.302	65.520	36.873	44.455	0.000	44.455	83.139	59.218	90.774	107.232	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 Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-

## Description:

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. BTI supports, upgrades, and enhances the telecommunications systems infrastructure for all Marine Corps installations to meet the demands required to support the 5th Element of the Marine Air Ground Task Force (MAGTF). BTI is designed to maintain current industry standards related to technological capabilities for all voice, video, and data services transported via each installation's infrastructure. These data services include support for, but are not limited to: telephony (including voice over internet protocol), video-teleconferencing, 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, and teleconferencing. The ongoing focus is technology refresh and standardization on DISA Unified Capabilities (voice, video, collaboration, and data) through modernization of installation infrastructure to maintain connection to the DISA network. The BTI program is implementing the DISA UC Requirement at 17 Marine installations world-wide. The upgrades of the installations are required to meet the BTI program Full Operational Capability (FOC) for Unified Capability (UC) for the telephone switch and Dense Wave Division Multiplexing (DWDM) for the transport.

PUBLIC KEY INFRASTRUCTURE (PKI) is a framework of laws, policies, procedures, and technologies for the use of digital credentials, which provide confidentiality, integrity, authenticity, and non-repudiation in electronic communications and transactions. PKI allows secure access to IT systems. PKI has 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 Public Key Infrastructure Program (PKI) program provides the resources, manpower and equipment (hardware and software), dedicated to the management (i.e.: generation, production, distribution, control, accounting and destruction) of keys and certificates used by public key-based security services to include NIPRNet and SIPRNet both garrison and deployed. 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.

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 service 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), Fire Station Alerting (FSA) and Mobile Data Computers (MDC) for first responder's vehicles.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4635 / Comm & Elec Infrastructure Supt
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0605013M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>ENTERPRISE LAND MOBILE RADIOS (E-LMR): E-LMR is a modern, digital, Association of Public Safety Communications Officials Project 25 Trunked radio system 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 the Ft. Hood incident, DoD recognized that effective emergency communications and mutual aid support operation 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.</p> <p>TEST, EVALUATION, &amp; ENGINEER ENVIRONMENT: Marine Corps Tactical Systems Support Activity (MCTSSA) provides the only Marine Corps organic, operationally relevant, Marine Air Ground Task Force (MAGTF) Command, Control, Communication, and Computer (C4) architecture for testing and other engineering tasks. This environment is the sole organic solution in the Marine Corps for Link-16 Tactical Data Link Networks for air-to- air, ship, and shore targeting and messaging, validated at MCTSSA before Marine/Navy use in theater. The environment also provides Marine Corps organic equipment, environments, operators, and testers for Joint Communications Exercises, Joint Interoperability Testing, and Systems of System testing. Funding supports modernization and expansion of the MAGTF Systems Integration Environment at MCTSSA for non-Table of Equipment items: Communications Backbone, Test Tool/Data Collection Hardware/Software, and Computers. The environment is essential to operating forces support for fielded C4 systems, as well as evaluating USMC and Joint C4 systems in a controlled, repeatable, and re-configurable manner that reduces program risk and identifies significant deficiencies prior to fielding to the operating forces. More than forty Marine Corps C4 programs and systems rely on MCTSSA support.</p> <p>The Marine Corps Enterprise Network (MCEN) Planning Yard is an initiative by Headquarters Marine Corps agencies and the Marine Corps CIO to establish a planning and test environment to engineer and technically evaluate changes to the MCEN. Changes proposed to the MCEN by Marine Expeditionary Forces (MEFs), Marine Air-Ground Task Force (MAGTF) Information Technology (IT) Support Centers (MITSCs), the Marine Corps Cyber Operations Group (MCCOG), and USMC C4I acquisition programs will be evaluated in a controlled, standardized, and disciplined manner within the MCEN Planning Yard. Changes will be evaluated based on impact to cyber security, performance, and consistency of implementation across the MCEN. The MCEN Planning Yard will also evaluate new technologies for potential introduction on the MCEN. Funding procures virtualization environments, cyber tools and test tools to enable proposed changes and new technology evaluation in an operationally relevant environment. This effort was initiated in order to meet the requirements set forth by Sec. 1647 of the 2016 NDAA.</p> <p>MARINE CORPS INFORMATION OPERATIONS PROGRAM (MCIOP) provides MAGTF commanders and the Marine Corps a responsive and effective full-spectrum information operations (IO) planning and psychological operations delivery capability by means of deployable support teams and a comprehensive general support IO reach-back capability in order to integrate IO into Marine Corps operations. Multiple classification levels require separate Information Technology (IT) infrastructure to support each classification level in accordance with National Security Agency and Defense Intelligence Agency standards. This includes equipment necessary for connecting internal MCIOC IT infrastructure (voice, video, and data) with the existing Marine Corps Base Quantico support infrastructure.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)						<b>P-1 Line Item Number / Title:</b> 4635 / Comm & Elec Infrastructure Supt				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M, 0605013M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Comm & Elec Infrastructure Supt				- / 166.302	- / 65.520	- / 36.873	- / 44.455	- / -	- / 44.455
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 166.302</b>	<b>- / 65.520</b>	<b>- / 36.873</b>	<b>- / 44.455</b>	<b>- / 0.000</b>	<b>- / 44.455</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										
<p><b>Justification:</b> FY2018 Justifications: \$44.455M</p> <p>BASE TELECOMMUNICATIONS INFRASTRUCTURE (BTI) \$32.893M:</p> <p>Growth from FY17 to FY18 is due to BTI Defense Policy Review Initiative (DPRI) install schedule, UC/DWDM schedule, and E-LMR fielding acceleration.</p> <p>\$22.783M will support the technology refresh and standardization of DISA Unified Capabilities (voice, video, collaboration, and data) through UC/DWDM modernization at three Marine Corps installations. The funding increase of \$13.582M from FY17 to FY18 is due to the increase in the number of installations receiving the UC/DWDM upgrade and the alignment of the DPRI BTI installation schedule with the Guam construction schedule.</p> <p>\$10.110M will support DPRI. FY18 funding is required to install base telecommunications infrastructure for two Japanese funded MILCON projects in Guam. These projects will establish a non-live fire training area in Andersen South and a waterfront headquarters facility in Apra Harbor. The Andersen South training facility will provide Marines with the ability to maintain readiness by conducting convoys, military operations on urbanized terrain, and breaching. The waterfront headquarters facility is required for the mobilization and de-mobilization of cargo and personnel in/out of Guam. These requirements are directly related to the relocation of Marines from Okinawa to Guam.</p> <p>PUBLIC KEY INFRASTRUCTURE (PKI): \$1.409M funding will support the continuation of PKI hardware and software implementation across the (NIPRNet and SIPRNet) for both garrison and deployed networks in order to meet CYBERCOM's Tasking Order requiring the use of hardware tokens for access to networks, network resources and secure email in accordance with DODI 8520.02 and DODI 8520.03. Funding will also be utilized to procure necessary tokens and equipment for SIPRNet Token issuance across the MCEN as well as implementation of the DOD PKI NIPRNet Enterprise Alternate Token Management System. Funding increase of \$0.171M from FY17 to FY18 procures additional infrastructure necessary to implement NIPRnet Enterprise Alternate Token System (NEATS) and Non Person Entity (NPE) when completed by the DOD Public Key Infrastructure Program Manager Office (PMO).</p> <p>CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS): \$4.709M will support network connection, procurement and fielding of emergency dispatch systems to MCAS Iwakuni and MCB Camp LeJeune. The reduction in funding from FY17 to FY18 reflects the completion of the CERS solution at remaining installations.</p> <p>ENTERPRISE LAND MOBILE RADIOS (E-LMR): \$4.272M funding will support the completion of E-LMR Western Region Infrastructure contract to include network connection and implementation at Marine Corps Mountain Warfare Training Center-Bridgeport (MWTG). The increase of \$3.780M from FY2017 to FY2018 funds wireless Radio Frequency communications to support First Responders and Emergency Management Command and Coordination initiatives to attain Full Operational Capability.</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 04: Communications and Electronics Equipment / BSA 19: Other Support (Non-Tel)		<b>P-1 Line Item Number / Title:</b> 4635 / Comm & Elec Infrastructure Supt
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M, 0605013M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>TEST, EVALUATION, &amp; ENGINEERING ENVIRONMENT - EQUIPMENT &amp; TECHNICAL SERVICES (TEEE):            \$.921M Funding supports maintenance and expansion of the MAGTF Systems Integration Environment at MCTSSA for non-Table of Equipment Items: Communications Backbone, Test Tool/Data Collection Hardware/Software, and Computers. The \$5.745M decrease in funding from FY17 to FY18 is due to the FY17 funding received for the MCEN Planning Yard.</p> <p>MARINE CORPS INFORMATION OPERATIONS PROGRAM (MCIOP):            \$0.251M Funding is for the refresh of hardware required on both the classified Joint Worldwide Intelligence Communications System (JWICS) and unclassified Open Source Information System (OSIS) networks. JWICS and OSIS are both provided by the Office of the Director of National Intelligence (ODNI) through Marine Corps Intelligence Activity (MCIA). JWICS provides MCIOC with classified network connectivity and OSIS provides MCIOC with unclassified network connectivity. The \$0.323M decrease from FY17 to FY18 is due to refresh schedule of JWICS and OSIS.</p>		



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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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	A		-	-	0.304	-	-	13.116	-	-	13.763	-	-	10.110	-	-	-	-	-	10.110
1.2) BTI - Unified Capabilities & Dense Wave Division Multiplexing <sup>(1)</sup>	A		-	-	58.662	-	-	29.256	-	-	9.201	-	-	22.783	-	-	-	-	-	22.783
1.3) BTI - Outside Plants	A		-	-	7.773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Base Telecommunications Infrastructure (BTI)			-	-	66.739	-	-	42.372	-	-	22.964	-	-	32.893	-	-	-	-	-	32.893
2) CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS)																				
2.4) CERS - Fielding Activities <sup>(2)</sup>			-	-	14.601	-	-	4.400	-	-	3.139	-	-	1.000	-	-	-	-	-	1.000
2.5) CERS - Emergency Dispatch for Marine Corps Installations <sup>(3)</sup>	A		-	-	14.090	-	-	12.298	-	-	1.800	-	-	3.709	-	-	-	-	-	3.709
2.6) CERS - E-911 for Marine Corps Installations	A		-	-	25.671	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.7) CERS - Network Equipment	A		-	-	1.229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) CONSOLIDATED EMERGENCY RESPONSE SYSTEM (CERS)			-	-	55.591	-	-	16.698	-	-	4.939	-	-	4.709	-	-	-	-	-	4.709
3) PUBLIC KEY INFRASTRUCTURE (PKI)																				
3.1) IT Equipment (To include cables, infrastructure, storage devices, etc.)	A		-	-	13.309	-	-	1.049	-	-	1.238	-	-	1.409	-	-	-	-	-	1.409
Subtotal: 3) PUBLIC KEY INFRASTRUCTURE (PKI)			-	-	13.309	-	-	1.049	-	-	1.238	-	-	1.409	-	-	-	-	-	1.409
4) Enterprise Land Mobile Radio (ELMR)																				
4.2) Western Region Infrastructure <sup>(4)</sup>	A		-	-	12.427	-	-	0.850	-	-	-	-	-	3.200	-	-	-	-	-	3.200
4.4) ELMR - Fielding Activities <sup>(5)</sup>	A		-	-	0.500	-	-	-	-	-	-	-	-	1.072	-	-	-	-	-	1.072
4.5) Defense Policy Review Initiative Equipment	A		-	-	-	-	-	-	-	-	0.492	-	-	-	-	-	-	-	-	-
Subtotal: 4) Enterprise Land Mobile Radio (ELMR)			-	-	12.927	-	-	0.850	-	-	0.492	-	-	4.272	-	-	-	-	-	4.272

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<b>Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy</b>																<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 04 / 19								<b>P-1 Line Item Number / Title:</b> 4635 / Comm & Elec Infrastructure Supt								<b>Aggregated Items Title:</b> Comm & Elec Infrastructure Supt			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) MARINE CORPS INFORMATION OPERATIONS PROGRAM (MCIOP)																				
5.1) Hardware	A		-	-	2.279	-	-	-	-	-	0.574	-	-	0.251	-	-	-	-	-	0.251
Subtotal: 5) MARINE CORPS INFORMATION OPERATIONS PROGRAM (MCIOP)			-	-	2.279	-	-	-	-	-	0.574	-	-	0.251	-	-	-	-	-	0.251
6) TEST, EVALUATION, & ENGINEERING ENVIRONMENT																				
6.1) MCEN Planning Yard	A		-	-	-	-	-	-	-	-	5.644	-	-	-	-	-	-	-	-	-
6.2) Test Tools	A		-	-	0.668	-	-	0.138	-	-	-	-	-	-	-	-	-	-	-	-
6.3) Landing Forces Operations Center Integration System Test Environment	A		-	-	-	-	-	3.505	-	-	-	-	-	-	-	-	-	-	-	-
6.4) MCNEL Fly-Away Kits	A		-	-	0.578	-	-	0.125	-	-	-	-	-	-	-	-	-	-	-	-
6.5) CAC2S STIL Equip (Functional Equivalent)	A		-	-	0.687	-	-	0.151	-	-	0.100	-	-	0.114	-	-	-	-	-	0.114
6.6) VoIP-AS SIP Lab	A		-	-	1.652	-	-	0.632	-	-	-	-	-	-	-	-	-	-	-	-
6.7) Test Engineering Labs Infrastructure	A		-	-	-	-	-	-	-	-	0.922	-	-	0.807	-	-	-	-	-	0.807
Subtotal: 6) TEST, EVALUATION, & ENGINEERING ENVIRONMENT			-	-	3.585	-	-	4.551	-	-	6.666	-	-	0.921	-	-	-	-	-	0.921
7) Prior Year Cumulative Funding																				
7.1) Prior Year Cumulative Funding	A		-	-	11.872	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) Prior Year Cumulative Funding			-	-	11.872	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	166.302	-	-	65.520	-	-	36.873	-	-	44.455	-	-	-	-	-	44.455

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

**Footnotes:**

- (1) FY18 growth is due to an increase from one to three installations being receiving UC/DWDM modernization.
- (2) CERS Fielding Activities funds current efforts at identified locations to support the network connection and implementation of the CERS solution through September 2018. The reduction in funding from FY17 to FY18 reflects the completion of the CERS solution to remaining installations.
- (3) CERS Emergency Dispatch for Marine Corps Installations provides funding for delivery of the vendor's solution to remaining locations in order to support full operational capability for the program. The increase in funding from FY17 to FY18 supports implementation of the CERS solution to MCAS Iwakuni and MCB Camp LeJeune.
- (4) Western Region Infrastructure effort funds Marine Corps Mountain Warfare Training Center-Bridgeport. This effort completes Full Operational Capability.
- (5) ELMR - Fielding Activities funds current efforts at identified locations to support the network connection and implementation of the E-LMR solution.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 1: Administrative Vehicles							<b>P-1 Line Item Number / Title:</b> 5003 / Commercial Passenger Vehicles					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	37.076	2.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.130	-	40.578
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	37.076	2.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.130	-	40.578
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>37.076</b>	<b>2.372</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>1.130</b>	<b>-</b>	<b>40.578</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b>  Commercial Passenger Vehicle (CPV) - The CPV is a centrally managed program for the procurement of commercially available vehicles, such as sedans, vans and buses of various sizes. These vehicles are used primarily for passenger transportation on Marine Corps Base Japan, where leases are rarely economical.</p> <p>This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the above details.</p> <p>Funding for Commercial Passenger Vehicles moves to BLI 5006 beginning in FY 2017.</p>												
<p><b>Justification:</b>  FY 2018 Base Appropriation: NA</p> <p>Funding for Commercial Passenger Vehicles moves to BLI 5006 beginning in FY 2017.</p>												

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 1: Administrative Vehicles	<b>P-1 Line Item Number / Title:</b> 5006 / Commercial Cargo Vehicles
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206624M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	211.161	21.777	122.822	66.951	0.000	66.951	28.026	28.706	31.654	28.475	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	211.161	21.777	122.822	66.951	0.000	66.951	28.026	28.706	31.654	28.475	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>211.161</b>	<b>21.777</b>	<b>122.822</b>	<b>66.951</b>	<b>0.000</b>	<b>66.951</b>	<b>28.026</b>	<b>28.706</b>	<b>31.654</b>	<b>28.475</b>	<b>Continuing</b>	<b>Continuing</b>

*(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:

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. This line also includes P-19 Replacement, which is a tactical firefighting vehicle.

This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the above details.

Emergency Response Vehicles (ERV) - Replaces firefighting apparatuses for maintaining the minimal installations ERV requirements for structural and airfield operations capabilities throughout the Marine Corps. Additionally, Defense Policy Review Initiative (DPRI). This requirement is 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 Passenger Vehicle (CPV) - The CPV is a centrally managed program for the procurement of commercially available vehicles, such as sedans, vans and buses of various sizes. These vehicles are primarily used for passenger transportation on Marine Corps Base Japan, where leases are rarely economical.

P-19R - Vehicles is replacing 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 and provides rescue and aircraft fire fighting capabilities to permanent and expeditionary airfields throughout the Marine Corps. The P-19 Replacement may also be employed to fight structural fires in support of base camps and as firefighting support to other elements of the Marine Air Ground Task Force (MAGTF), such as ammunition supply points, Petroleum, Oil, and Lubricant (POL) distribution points, or hazardous material storage facilities.

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.

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	21.777	122.822	58.032	-	58.032	27.828	28.523	31.468	28.284

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy							Date: May 2017			
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			
Line Item MDAP/MAIS Code: N/A										
Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	8.919	-	8.919	0.198	0.183	0.186	0.191
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	21.777	122.822	66.951	-	66.951	28.026	28.706	31.654	28.475

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 1: Administrative Vehicles						<b>P-1 Line Item Number / Title:</b> 5006 / Commercial Cargo Vehicles				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206624M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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				- / 211.161	- / 21.777	- / 122.822	- / 66.951	- / -	- / 66.951
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 211.161</b>	<b>- / 21.777</b>	<b>- / 122.822</b>	<b>- / 66.951</b>	<b>- / 0.000</b>	<b>- / 66.951</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> FY18 Base Appropriation Request: \$66.951M(\$58.032M Active, \$8.919M Reserves)</p> <p>P-19R - Vehicles - \$32.141M (\$23.222 Active, \$8.919 Reserve) will continue to procure efforts such as non-recurring engineering and procurement of modifications and ECP's. Funds will include a portfolio of CDRL's, Halotron bottles and Halotron carts to continue implementing tasks required from FRP decision. Additionally, programmatic oversight (production/progress reviews) and logistics supportability (FRET-FDT) of those production vehicles is required in support of P-19 for the P-19R vehicles. The ordering period for the contract expires in FY18. Decrease of \$55.0M from FY17 to FY18 is a result of a realignment of funds into FY17 to accelerate procurement of 68 P-19 vehicles (for a total of 126) in FY17.</p> <p>Commercial Passenger Vehicles - \$11.489M - Funding will be used to procure vehicles such as buses and sedans for the required replacements of passenger vehicles that have exceeded the recommended service life for Marine Corps Installations Pacific (MCIPAC); and to support the operation and mission of the USMC OCONUS (Japan) commands. This effort transitions from Commercial Passenger Vehicles (BLI 5003) beginning in FY17.</p> <p>Commercial Cargo Vehicles - \$10.271M- Funds will procure a portfolio of non-tactical general purpose vehicles such as heavy duty and light trucks, special purpose trucks, refuse collection trucks, certain fire department trucks, tanker trucks and all types of trailers to support the deployment and resetting of Operating Forces. Equipment acquired will comply with the California Air Resource Board (CARB) mandates required to support the Operating Forces training, readiness, deployment and reconstitution. The increase of \$2.116M from FY17 to FY18 will provide replacements for outdated vehicles in the above fleet.</p> <p>Emergency Response Vehicles - \$4.519M - Funds will procure ladder trucks, ambulances and fire pumpers for Marine Corps activities and commands.</p> <p>Marine Security Guard (Vehicles) - \$8.531M - Funds the procurement of commercial vehicles for the Marine Security Guard based on the requirements of the particular command and country embassies. This effort transitions from Items less Than \$5M (BLI 5230) beginning in FY17.</p>										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Commercial Cargo Vehicles																				
1.1) Commercial Passenger Vehicles	A		-	-	-	-	-	-	-	-	11.771	-	-	11.489	-	-	-	-	-	11.489
1.2) Emergency Response Vehicles	A		-	-	15.920	-	-	2.939	-	-	4.719	-	-	4.519	-	-	-	-	-	4.519
1.3) Commercial Cargo Vehicles	A		-	-	167.545	-	-	2.472	-	-	10.313	-	-	10.271	-	-	-	-	-	10.271
Subtotal: 1) Commercial Cargo Vehicles			-	-	183.465	-	-	5.411	-	-	26.803	-	-	26.279	-	-	-	-	-	26.279
2) P-19 Replacement																				
2.1) P-19R Procurement Vehicles (1)	A		612,000.00	21	12.852	667,055.00	17	11.340	667,055.00	14	9.339	-	-	-	-	-	-	-	-	-
2.2) P-19 Procurement of Vehicles	A		-	-	-	-	-	-	586,348.21	112	65.671	-	-	-	-	-	-	-	-	-
2.3) Program Office Support (2)	A		-	-	14.844	-	-	-	-	-	0.460	-	-	2.745	-	-	-	-	-	2.745
2.4) Contracting Data Requirement List (CDRL) (3)	A		-	-	-	-	-	0.156	-	-	1.257	-	-	1.250	-	-	-	-	-	1.250
2.5) Federal Regulation Excise Tax (FRET) (4)	A		-	-	-	-	-	1.187	-	-	4.245	-	-	6.867	-	-	-	-	-	6.867
2.7) First Destination Transportation (FDT) (5)			-	-	-	-	-	0.060	-	-	0.178	-	-	1.102	-	-	-	-	-	1.102
2.8) Program Support (Halotron Carts) (6)	A		-	-	-	-	-	-	-	-	0.245	-	-	1.260	-	-	-	-	-	1.260
2.9) Halotron Bottle (7)	A		-	-	-	-	-	-	-	-	0.358	-	-	1.431	-	-	-	-	-	1.431
2.10) Intercom Procurement (Tocnet) (8)	A		-	-	-	-	-	0.182	-	-	0.526	-	-	3.240	-	-	-	-	-	3.240
2.11) Engineering Change Proposal (ECP) (9)	A		-	-	-	-	-	1.344	-	-	-	-	-	7.658	-	-	-	-	-	7.658
2.12) Configuration Changes	A		-	-	-	-	-	-	-	-	1.578	-	-	-	-	-	-	-	-	-
2.13) Contractor Logistics Support (CLS) (10)	A		-	-	-	-	-	-	-	-	-	-	-	0.755	-	-	-	-	-	0.755



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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Contract Logistics Support Parts <sup>(11)</sup>	A		-	-	-	-	-	-	-	-	-	-	-	2.500	-	-	-	-	-	2.500
2.15) Initial Issue Provisioning (IIP) and Secondary Repairables <sup>(12)</sup>	A		-	-	-	-	-	2.097	-	-	3.284	-	-	-	-	-	-	-	-	-
2.16) P-19R_Firetruck Capability Production Document (CPD) NFPA 414 <sup>(13)</sup>	A		-	-	-	-	-	-	-	-	-	-	-	3.333	-	-	-	-	-	3.333
Subtotal: 2) P-19 Replacement			-	-	27.696	-	-	16.366	-	-	87.141	-	-	32.141	-	-	-	-	-	32.141
3) Marine Security Guard																				
3.1) UnArmored	A		-	-	-	-	-	-	66,015.38	65	4.291	68,620.14	56	3.843	-	-	-	68,620.14	56	3.843
3.2) Armored	A		-	-	-	-	-	-	99,710.00	46	4.587	101,913.04	46	4.688	-	-	-	101,913.04	46	4.688
Subtotal: 3) Marine Security Guard			-	-	0.000	-	-	-	-	-	8.878	-	-	8.531	-	-	-	-	-	8.531
Total			-	-	211.161	-	-	21.777	-	-	122.822	-	-	66.951	-	-	-	-	-	66.951
Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.																				
Footnotes:																				
<sup>(1)</sup> Vehicles: P-19R Production Contract contains step ladder pricing. To achieve maximum value of step ladder pricing all vehicles need to be on a single delivery order. A Delivery order was awarded in November 2016 under continuing resolution authority for 14 vehicles in order to keep the production line running. The unit price of these vehicles was/is 667,055.00 The next Delivery order must be awarded NLT May 2017 in order to maximize potential Enterprise savings. The unit price of these vehicles will be 586,348.21 and other cost elements have decreased due to economic order of buy. The unit price of vehicles ordered in May 17 will be \$586,348, if all 112 vehicles are ordered at the same time.																				
<sup>(2)</sup> Program Office Support increased from \$460K to \$2.745, for a total increase of \$2.285M to manage logistics, engineering, and configuration commensurate with delivered vehicles. Initial Logistics Support (ILS) and training are included in the support.																				
<sup>(3)</sup> At P-19R contract award, CDRL's were priced separate CLINs. This is a Firm Fixed Price Development and Production Contract. Decreased from \$1.257M to \$1.250M, for a total decrease of \$7K due to the need for New Equipment Training classes.																				
<sup>(4)</sup> Federal statute requires Federal Retail Excise Tax (FRET) on all trucks of 33,000+ lbs gross weight being shipped to US locations. FRET is based on 12% of final cost. The program is allocating \$6,867,325.18 for FRET. The remaining FRET charges are budgeted for FY18. Estimated FRET is due upon contract delivery of vehicle																				
<sup>(5)</sup> The FY17 FDT charges increase is attributed to buy more vehicles.																				
<sup>(6)</sup> Halotron Carts: this increase is attributed to buying a greater number of vehicles. Additionally, the majority of vehicles ordered with FY17 funding will be delivered in FY18, this is because delivery is eight months After Receipt of Order (ARO). Due to the CR 14 vehicles were procured and 14 of these will be delivered in 4QFY17, the remainder will deliver in FY18.																				
<sup>(7)</sup> Halotron Bottles increased from \$358K to \$1.431M, FY17 required to provide firefighting agent for fielded vehicles.																				
<sup>(8)</sup> Intercom procurement increased from \$526k to \$3.240M, for a total increase of \$2.714M due to increased procurement of vehicles in FY17.																				
<sup>(9)</sup> The FY17 ECPs decreased indicating that configuration has stabilized and the remaining ECPs we expect to spend 10% of the vehicle cost to procure the ECP's such as APU, class B fire extinguisher, etc., will be accomplished in FY18.																				
<sup>(10)</sup> Contractor Logistics Support (CLS) increases from \$0 to \$755K due to fielding vehicles and the requirement to support P-19R until the organic support is available.																				
<sup>(11)</sup> Contractor Logistics Support Parts increases from \$0 to \$2.500M due to fielding vehicles and the requirement to support P-19R until the organic support is available.																				
<sup>(12)</sup> IIP decreased from \$3.284M to \$0 due to the FY17 increase in quantity of vehicles. Since vehicles will be procured sooner, the IIP must be procured in FY17 vice FY18.																				
<sup>(13)</sup> P-19R_Firetruck Capability Production Document (Reserves): FY18 National Fire Protection Association (NFPA) 414 2012 funding will provide for the system to maintain adherence with NFPA standards. Example might be an ECP adding to base vehicle costs (on Firm Fixed Price Contract) as a Class D Fire Extinguishers for all trucks.																				

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles							<b>P-1 Line Item Number / Title:</b> 5050 / Motor Transport Modifications					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B			<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206624M					
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	120.538	9.292	13.292	21.824	0.000	21.824	13.554	13.867	14.145	14.435	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	120.538	9.292	13.292	21.824	0.000	21.824	13.554	13.867	14.145	14.435	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>120.538</b>	<b>9.292</b>	<b>13.292</b>	<b>21.824</b>	<b>0.000</b>	<b>21.824</b>	<b>13.554</b>	<b>13.867</b>	<b>14.145</b>	<b>14.435</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
The modifications program funds numerous essential modifications, initiatives, and new vehicle procurements 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 proactive and focused approach ensures proper vehicle sustainment and life-cycle management and allows the program office to develop and implement improvements as needed to respond to the evolving requirements of the Marine Corps. Funding also addresses Medium Tactical Vehicle Replacement (MTVR) Energy Improvements in an effort to reduce fuel consumption over the life of the vehicle.												
Funding changes after FY 2016 reflect the inclusion of funding for Motor Transport Modifications (MTM) previously funded in BLI 5230.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	8.361	12.551	21.632	-	21.632	13.332	13.630	13.905	14.190		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.931	0.741	0.192	-	0.192	0.222	0.237	0.240	0.245		
<b>Total:</b> <b>Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-		
	<b>Total Obligation Authority</b>	<b>9.292</b>	<b>13.292</b>	<b>21.824</b>	-	<b>21.824</b>	<b>13.554</b>	<b>13.867</b>	<b>14.145</b>	<b>14.435</b>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles						<b>P-1 Line Item Number / Title:</b> 5050 / Motor Transport Modifications				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	Motor Transport Modifications				- / 120.538	- / 9.292	- / 13.292	- / 21.824	- / -	- / 21.824
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 120.538</b>	<b>- / 9.292</b>	<b>- / 13.292</b>	<b>- / 21.824</b>	<b>- / 0.000</b>	<b>- / 21.824</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										
<p><b>Justification:</b> FY 2018 Base Appropriation Request: \$21.824M</p> <p>Medium Tactical Vehicle Replacement (MTVR) Modification: \$6.551M; In FY18, integration brackets and cables will continue to be installed on the MTVR fleet of vehicles. Funding continues to support the procurement of subsystems and components that were transitioned to the Marine Corps from the Office of Naval Research (ONR) Future Naval Capability initiative for a fuel efficient MTVR in September 2016. The decrease of \$0.671M from FY17 to FY18 is due to a reduction in vehicle ECP integration and installations.</p> <p>Motor Transport Modifications (MTM) \$3.993M; Funding will provide for the implementation of the fleet service life extension initiatives, vehicles, quality deficiency resolutions, safety initiatives, and environmental/state transportation mandated vehicle changes. Provides support for Engineering Change Proposal (ECP) integration to include addressing deficiencies of HMMWV vehicles due to up armoring and age degradation of the fleet, testing and fielding efforts for hosted systems i.e. C4I, weapons, and intel that use light tactical vehicles as their base transportation mode. Additional efforts include technical data plates. The decrease of \$0.309M from FY17 to FY18 supports a reduced number of the fleet service life extension initiatives for all legacy vehicles and associated equipment.</p> <p>Logistics Vehicle System Replacement (LVSR) Modification: \$11.088M; \$.192M Reserve. Funding will provide for various modifications required for the LVSR fleet of vehicles, such as for the integration of brackets and cables for warfighter system, and for critical safety upgrades, including the brake corrosion ECPs and the armored door lock improvements. These upgrades address issues that affect user safety, life cycle issues, obsolescence, and ultimately, life cycle cost reductions. The increase of \$9.512M from FY17 to FY18 supports the brake corrosion ECPs and the armored door lock improvements for the Engineering/Safety modifications.</p>										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 <sup>(1)</sup>	A		-	-	-	-	-	1.670	-	-	1.160	-	-	0.726	-	-	-	-	-	0.726
1.2) Vehicle ECP Integration Equipment & Installs <sup>(2)</sup>	A		-	-	40.873	-	-	2.417	-	-	2.250	-	-	0.688	-	-	-	-	-	0.688
1.3) Energy Efficiency Initiative <sup>(3)</sup>	B		-	-	-	-	-	2.212	-	-	3.362	-	-	4.437	-	-	-	-	-	4.437
1.4) Energy Initiative Program Support <sup>(4)</sup>	A		-	-	-	-	-	-	-	-	0.450	-	-	0.700	-	-	-	-	-	0.700
1.5) First Destination Transportation	A		-	-	1.556	-	-	0.697	-	-	-	-	-	-	-	-	-	-	-	-
1.6) Prior Years Cumulative Funding	A		-	-	7.789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Medium Tactical Vehicle Replacement (MTVR) Modifications			-	-	50.218	-	-	6.996	-	-	7.222	-	-	6.551	-	-	-	-	-	6.551
2) LVSR Mods																				
2.1) LVSR Systems Integrations Equip & Installs (GFE, TOCNET, etc) <sup>(5)</sup>	A		-	-	24.058	-	-	0.200	-	-	0.200	-	-	0.100	-	-	-	-	-	0.100
2.2) Vehicle Safety Mods/Upgrades <sup>(6)</sup>	A		-	-	12.062	-	-	0.585	-	-	0.403	-	-	10.453	-	-	-	-	-	10.453
2.3) LVSR Modification Kits (ECPs) <sup>(7)</sup>	A		-	-	19.625	-	-	0.585	-	-	0.417	-	-	0.535	-	-	-	-	-	0.535
2.4) USMC Bridge Pallets Adapters	A		37,142.86	35	1.300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) Emergency Egress Hatch	A		500.00	600	0.300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.6) AFES Installs	A		-	-	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.7) Macaw Back packs and Halligan Tool Bracket Sets	A		-	-	0.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.8) LVSR Reserves (ECP, Safety & Integration) <sup>(8)</sup>			-	-	2.043	-	-	0.926	-	-	0.748	-	-	0.192	-	-	-	-	-	0.192
2.9) Logistics Support (ILS, Factory Trng, etc)			-	-	5.735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.10) Program Office Support			-	-	3.997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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: 2) LVSR Mods			-	-	70.320	-	-	2.296	-	-	1.768	-	-	11.280	-	-	-	-	-	11.280
3) Motor Transport Mods																				
3.1) Safety Modifications <sup>(9)</sup>	B		-	-	-	-	-	-	-	-	1.175	-	-	1.100	-	-	-	-	-	1.100
3.2) Reliability Engineering <sup>(10)</sup>	A		-	-	-	-	-	-	-	-	1.960	-	-	1.828	-	-	-	-	-	1.828
3.3) Program Integration <sup>(11)</sup>	B		-	-	-	-	-	-	-	-	1.082	-	-	0.970	-	-	-	-	-	0.970
3.4) Technical Publications	A		-	-	-	-	-	-	-	-	0.085	-	-	0.095	-	-	-	-	-	0.095
Subtotal: 3) Motor Transport Mods			-	-	0.000	-	-	-	-	-	4.302	-	-	3.993	-	-	-	-	-	3.993
Total			-	-	120.538	-	-	9.292	-	-	13.292	-	-	21.824	-	-	-	-	-	21.824

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

**Footnotes:**

- <sup>(1)</sup> FY17 to FY18 decrease of \$0.434M due to reprioritization of ECP's to higher priority Fuel Efficiency (FE) efforts.
- <sup>(2)</sup> FY17 to FY18 decrease of \$1.562M due to reprioritization of ECP's to higher priority Fuel Efficiency (FE) efforts.
- <sup>(3)</sup> Energy Efficiency Initiative increase between FY17 and FY18 of \$1.075M are for the increased procurement and scheduled installations of the materials and parts necessary to decrease fuel usage in various tactical vehicles in the fleet.
- <sup>(4)</sup> Energy Initiative (EI) Program Support increase between FY17 and FY18 of \$.250M to process and analyze the significant amount of data gathered as improvements and upgrades are made to the fleet of vehicles and provide documentation and reporting to higher echelons.
- <sup>(5)</sup> FY17 to FY18 decrease of \$0.100M is due to GFE A-Kits completed in prior years.
- <sup>(6)</sup> FY17 to FY18 increase of \$10.050M is due to Vehicle Safety upgrades for brake corrosion and armored door lock improvements.
- <sup>(7)</sup> FY17 to FY18 increase of \$0.118M is due to LVSR brake ECPs kit production.
- <sup>(8)</sup> FY17 to FY18 decrease of \$0.556M is due to GFE A-Kits completed in prior years.
- <sup>(9)</sup> FY17 to FY18 decrease of \$0.075 due to downward trend in safety requirements.
- <sup>(10)</sup> FY17 to FY18 decrease of \$0.132M due to downward trend in Safety and Reliability Engineering requirements.
- <sup>(11)</sup> FY17 to FY18 decrease of \$0.112M based on fewer Program Integration requirements in FY18.

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles	<b>P-1 Line Item Number / Title:</b> 5095 / Joint Light Tactical Vehicle
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> 0605812M, 0605813M	<b>Other Related Program Elements:</b> 0603635M, 0605812M, 0605813M
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**Line Item MDAP/MAIS Code:** 279

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	6	119	192	527	-	527	1,856	2,123	1,182	1,207	Continuing	Continuing
Gross/Weapon System Cost (\$ <i>in Millions</i> )	7.425	58.578	113.230	233.639	0.000	233.639	665.477	739.211	469.511	532.720	Continuing	Continuing
Less PY Advance Procurement (\$ <i>in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ <i>in Millions</i> )	7.425	58.578	113.230	233.639	0.000	233.639	665.477	739.211	469.511	532.720	Continuing	Continuing
Plus CY Advance Procurement (\$ <i>in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ <i>in Millions</i>)</b>	<b>7.425</b>	<b>58.578</b>	<b>113.230</b>	<b>233.639</b>	<b>0.000</b>	<b>233.639</b>	<b>665.477</b>	<b>739.211</b>	<b>469.511</b>	<b>532.720</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	332,000.00	281,697.48	281,296.88	269,614.80	-	269,614.80	276,276.94	266,158.74	272,826.57	324,525.27	-	-
Gross/Weapon System Unit Cost (\$ <i>in Dollars</i> )	1,238K	492,252.10	589,739.58	443,337.76	-	443,337.76	358,554.42	348,191.71	397,217.43	441,358.74	Continuing	Continuing

## Description:

Joint Light Tactical Vehicle (JLTV) Family of Vehicles (FoV) is a joint U.S. Army and U.S. Marine Corps program, of which the Army is the lead service. JLTV is a FoV capable of performing multiple mission roles that will provide protected, sustained, networked mobility for personnel and payloads across the full Range of Military Operations (ROMO). JLTV objectives include increased performance, protection, and payload over the legacy High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleet, minimizing ownership costs by maximizing commonality, fuel efficiency and reliability. The commonality of components, maintenance procedures, training, etc. among vehicle variants is expected to be inherent in FoV solutions across mission variants to minimize total ownership cost. Unique service requirements have been minimized.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles					<b>P-1 Line Item Number / Title:</b> 5095 / Joint Light Tactical Vehicle					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B			<b>Program Elements for Code B Items:</b> 0605812M, 0605813M			<b>Other Related Program Elements:</b> 0603635M, 0605812M, 0605813M				
<b>Line Item MDAP/MAIS Code:</b> 279										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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			6 / 7.425	119 / 58.578	192 / 113.230	527 / 233.639	- / 0.000	527 / 233.639
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>6 / 7.425</b>	<b>119 / 58.578</b>	<b>192 / 113.230</b>	<b>527 / 233.639</b>	<b>- / 0.000</b>	<b>527 / 233.639</b>
*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.										
<b>Justification:</b> FY 2018 Base Appropriation Request: \$233.639M Planned projects include the procurement of 527 Low Rate Initial Production (LRIP) assets, kit procurement, government and contractor support, development of publications and technical data, and storage. The kits will support the baseline vehicle by providing 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/C4I winches, etc, in order to respond to environmental conditions or threat situations. The increase (\$120.409M) in funding from FY 2017 to FY 2018 is due to the increased production of JLTV (315 additional vehicles), associated kits, Systems Engineering, Technical Support, continuation of the LRIP test program, the completion of Production Qualification Test (PQT), Reliability Qualification Test (RQT), transportability test, C4 test, Manufacturing Readiness Assessment (MRA), and the procurement of Training Aids and Devices required in support of Initial Operational Capability (IOC) scheduled for 1Q FY 2020 to reflect the impact of the contract protest and align the USMC with US Army. Kits consist of mission essential equipment specific to each vehicle variant and are necessary for the performance of each vehicle's primary operational role. Procurement includes up to 75 individual kits that 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.										



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Exhibit P-5, Cost Analysis: FY 2018 Navy												Date: May 2017						
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 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Procurement Quantity <i>(Units in Each)</i>				6		119		192		527		-		527				
Gross/Weapon System Cost <i>(\$ in Millions)</i>				7.425		58.578		113.230		233.639		0.000		233.639				
Less PY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Net Procurement (P-1) <i>(\$ in Millions)</i>				7.425		58.578		113.230		233.639		0.000		233.639				
Plus CY Advance Procurement <i>(\$ in Millions)</i>				-		-		-		-		-		-				
Total Obligation Authority <i>(\$ in Millions)</i>				7.425		58.578		113.230		233.639		0.000		233.639				
(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>				1,238K		492,252.10		589,739.58		443,337.76		-		443,337.76				
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.																		
Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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 - JLTV Cost																		
Recurring Cost																		
1.1.1) General Purpose <sup>(†)</sup> (1)	332,000.00	6	1.992	258,721.00	24	6.209	254,477.00	88	22.394	258,066.00	115	29.678	-	-	-	258,066.00	115	29.678
1.1.2) Heavy Guns Carrier <sup>(†)</sup>	-	-	-	249,970.00	66	16.498	255,178.00	75	19.138	258,923.00	33	8.544	-	-	-	258,923.00	33	8.544
1.1.3) Close Combat Weapons Carrier <sup>(†)</sup>	-	-	-	286,944.00	23	6.600	277,188.00	16	4.435	274,322.00	88	24.140	-	-	-	274,322.00	88	24.140
1.1.4) Utility <sup>(†)</sup>	-	-	-	281,014.00	15	4.215	243,705.00	33	8.042	247,477.00	291	72.016	-	-	-	247,477.00	291	72.016
1.1.5) Engineering Change Orders <sup>(2)</sup>	-	-	-	-	-	-	-	-	-	-	-	7.709	-	-	-	-	-	7.709
Subtotal: Recurring Cost	-	-	1.992	-	-	33.522	-	-	54.009	-	-	142.087	-	-	-	-	-	142.087
Subtotal: Flyaway - JLTV Cost	-	-	1.992	-	-	33.522	-	-	54.009	-	-	142.087	-	-	-	-	-	142.087
Hardware Cost																		
Recurring Cost																		
2.1.1) Kits <sup>(3)</sup>	-	-	0.791	-	-	8.726	-	-	12.441	-	-	40.035	-	-	-	-	-	40.035
Subtotal: Recurring Cost	-	-	0.791	-	-	8.726	-	-	12.441	-	-	40.035	-	-	-	-	-	40.035
Subtotal: Hardware Cost	-	-	0.791	-	-	8.726	-	-	12.441	-	-	40.035	-	-	-	-	-	40.035
Support - Support Costs Cost																		
3.2) Program Management <sup>(4)</sup>	-	-	0.735	-	-	2.685	-	-	4.740	-	-	5.550	-	-	-	-	-	5.550

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Exhibit P-5, Cost Analysis: FY 2018 Navy													Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) LRIP Contractor SEPM <sup>(5)</sup>	-	-	0.495	-	-	2.808	-	-	13.128	-	-	2.855	-	-	-	-	-	2.855
3.4) System Technical Support (STS) <sup>(6)</sup>	-	-	2.378	-	-	2.000	-	-	10.480	-	-	10.500	-	-	-	-	-	10.500
3.5) Test Support <sup>(7)</sup>	-	-	0.005	-	-	8.837	-	-	18.397	-	-	5.539	-	-	-	-	-	5.539
3.6) Publications/ Technical Data	-	-	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.7) Fielding <sup>(8)</sup>	-	-	0.029	-	-	-	-	-	0.035	-	-	8.130	-	-	-	-	-	8.130
3.8) Training Aids, Devices, Simulators and Simulations (TADSS) <sup>(9)</sup>	-	-	-	-	-	-	-	-	-	-	-	18.943	-	-	-	-	-	18.943
Subtotal: Support - Support Costs Cost	-	-	4.642	-	-	16.330	-	-	46.780	-	-	51.517	-	-	-	-	-	51.517
Gross/Weapon System Cost	1,238K	6	7.425	492,252.10	119	58.578	589,739.58	192	113.230	443,337.76	527	233.639	-	-	0.000	443,337.76	527	233.639

(†) indicates the presence of a P-5a

**Footnotes:**

(1) The program was granted a Milestone C decision on 25 August 2015. The JLTV Joint Program Office (JPO) awarded a Low Rate Initial Production (LRIP)/Full Rate Production (FRP) contract under a limited competition between the three JLTV EMD contractors to Oshkosh Corporation on 25 August 2015. The budget request's unit costs reflect the awarded contract terms. The vendor (Oshkosh) priced all option years as part of the proposal and pricing was accepted by the Government. Unit costs, in all contract years, are consistent with the awarded contract and are set based on quantity ranges and option year. These ranges are dependent on total quantities procured across all Services based on both platform and variant. The following are the current Joint Program Office validated USMC quantities based on the funding request. The database P40 quantities are not current and will be updated at the next opportunity. Procurement totals by year: FY15: 6, FY16: 128, FY17: 212, FY18: 527, FY19: 1,856, FY20: 2,123, FY21: 1,182, and FY22: 1,207. FY15 and FY16 procurement totals are updated to reflect contract actuals. Funding increase from FY 2017 to FY 2018 of \$80.369M due to the increased production rates in accordance with the production contract. Production rate estimates are yearly. Oshkosh's main production line is not wholly JLTV and has been set up to run multiple other Military Tactical Vehicles and Commercial Business on the same line during the same shift. As such they do not have a unique JLTV 1-8-5.

(2) Funding increase from FY17 to FY18 of \$7.709M is a result in the implementation of ECOs and retro fit of design changes to vehicles produced and delivered in FY15-FY18.

(3) Kits are not categorized in Flyaway costs because they are not considered part of prime mission equipment. Funding increase from FY 2017 to FY 2018 of \$27.594M due to the increased production rates in accordance with the production contract and will support verification of vehicle production lines. Kits consist of mission essential equipment specific to each vehicle variant and are necessary for the performance of each vehicle's primary operational role. Procurement includes up to 75 individual kits that 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 compliment base vehicle functionality to achieve requirements for tactical employment and mobility. Kit costs for all FYs have been updated to reflect current contract requirements and budget.

(4) Funding increase from FY17 to FY18 of \$0.810M is due to the transition of PM support from RDT&E to PMC as the program proceeds through the acquisition process.

(5) Funding reduction from FY 2017 and FY2018 of \$10.273M a result of reduced vendor costs as production line stabilizes and production ramp-up occurs. Cost requirements for all FYs has been updated to reflect anticipated contract requirements.

(†) indicates the presence of a P-5a

## Footnotes:

(1) The program was granted a Milestone C decision on 25 August 2015. The JLTV Joint Program Office (JPO) awarded a Low Rate Initial Production (LRIP)/Full Rate Production (FRP) contract under a limited competition between the three JLTV EMD contractors to Oshkosh Corporation on 25 August 2015. The budget request's unit costs reflect the awarded contract terms. The vendor (Oshkosh) priced all option years as part of the proposal and pricing was accepted by the Government. Unit costs, in all contract years, are consistent with the awarded contract and are set based on quantity ranges and option year. These ranges are dependent on total quantities procured across all Services based on both platform and variant. The following are the current Joint Program Office validated USMC quantities based on the funding request. The database P40 quantities are not current and will be updated at the next opportunity. Procurement totals by year: FY15: 6, FY16: 128, FY17: 212, FY18: 527, FY19: 1,856, FY20: 2,123, FY21: 1,182, and FY22: 1,207. FY15 and FY16 procurement totals are updated to reflect contract actuals. Funding increase from FY 2017 to FY 2018 of \$80.369M due to the increased production rates in accordance with the production contract. Production rate estimates are yearly. Oshkosh's main production line is not wholly JLTV and has been set up to run multiple other Military Tactical Vehicles and Commercial Business on the same line during the same shift. As such they do not have a unique JLTV 1-8-5.

(2) Funding increase from FY17 to FY18 of \$7.709M is a result in the implementation of ECOs and retro fit of design changes to vehicles produced and delivered in FY15-FY18.

(3) Kits are not categorized in Flyaway costs because they are not considered part of prime mission equipment. Funding increase from FY 2017 to FY 2018 of \$27.594M due to the increased production rates in accordance with the production contract and will support verification of vehicle production lines. Kits consist of mission essential equipment specific to each vehicle variant and are necessary for the performance of each vehicle's primary operational role. Procurement includes up to 75 individual kits that 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 compliment base vehicle functionality to achieve requirements for tactical employment and mobility. Kit costs for all FYs have been updated to reflect current contract requirements and budget.

(4) Funding increase from FY17 to FY18 of \$0.810M is due to the transition of PM support from RDT&E to PMC as the program proceeds through the acquisition process.

(5) Funding reduction from FY 2017 and FY2018 of \$10.273M a result of reduced vendor costs as production line stabilizes and production ramp-up occurs. Cost requirements for all FYs has been updated to reflect anticipated contract requirements.

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<b>Exhibit P-5, Cost Analysis: FY 2018 Navy</b>		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 05 / 2	<b>P-1 Line Item Number / Title:</b> 5095 / Joint Light Tactical Vehicle	<b>Item Number / Title [DODIC]:</b> 1 / Joint Light Tactical Vehicle
<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :		<b>MDAP/MAIS Code:</b>
<p>(6) Funding increase from FY 2017 to FY 2018 of \$0.020M based on estimated increase in STS work in relation to increased in production.</p> <p>(7) Funding reduction from FY17 to FY18 of \$12.858M is a result of the conclusion of PMC funded test requirements in accordance with the approved program TEMP. Test support will be provided for the conclusion of PQT, RQT, transportability, C4, and other test related requirements.</p> <p>(8) Funding increase from FY 2017 to FY 2018 of \$8.095M is due to the costs associated with the procurement of initial spares and pre-fielding activities which increases in relation to the ramp up of LRIP vehicle production.</p> <p>(9) Funding increase from FY 2017 to FY 2018 \$18.943M due to the requirement to procure training simulators necessary to support vehicle fielding and improve operator safety, survivability, and vehicle maintainability. Funds support the procurement of Combat Convoy, Operator/Driver, and Egress Training simulators. Funds support the integration of JLTV into existing products including electrical, hydraulic, power plant, suspension, and Commander's Status Display Unit training devices. The JTLV TADSS will be incorporated into Formal Learning Center curricula and support unit sustainment training unilaterally across the active and reserve components.</p>		

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<b>Exhibit P-5a, Procurement History and Planning: FY 2018 Navy</b>								<b>Date: May 2017</b>				
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 05 / 2				<b>P-1 Line Item Number / Title:</b> 5095 / Joint Light Tactical Vehicle				<b>Item Number / Title [DODIC]:</b> 1 / Joint Light Tactical Vehicle				

<b>Cost Elements</b>	<b>O C O</b>	<b>FY</b>	<b>Contractor and Location</b>	<b>Method/Type or Funding Vehicle</b>	<b>Location of PCO</b>	<b>Award Date</b>	<b>Date of First Delivery</b>	<b>Qty (Each)</b>	<b>Unit Cost (\$)</b>	<b>Specs Avail Now?</b>	<b>Date Revision Available</b>	<b>RFP Issue Date</b>
1.1.1) General Purpose <sup>(†)</sup>		2015	Oshkosh Corp LLC <sup>(10)</sup> / Oshkosh WI	C / FFP	TACOM	Aug 2015	Sep 2016	6	332,000.00	Y		Dec 2014
1.1.1) General Purpose <sup>(†)</sup>		2016	Oshkosh Corp LLC <sup>(10)</sup> / Oshkosh WI	C / FFP	TACOM	Mar 2016	Jan 2017	24	258,721.00	Y		
1.1.1) General Purpose <sup>(†)</sup>		2017 <sup>(11)</sup>	Oshkosh Corp LLC <sup>(10)</sup> / Oshkosh WI	C / FFP	TACOM	Dec 2016	Oct 2017	88	254,477.00	Y		
1.1.1) General Purpose <sup>(†)</sup>		2018	Oshkosh Corp LLC <sup>(10)</sup> / Oshkosh WI	C / FFP	TACOM	Dec 2017	Oct 2018	115	258,066.00	Y		
1.1.2) Heavy Guns Carrier		2016	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Mar 2016	Jan 2017	66	249,970.00	Y		
1.1.2) Heavy Guns Carrier		2017	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2016	Oct 2017	75	255,178.00	Y		
1.1.2) Heavy Guns Carrier		2018	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2017	Oct 2018	33	258,923.00	Y		
1.1.3) Close Combat Weapons Carrier <sup>(†)</sup>		2016	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Mar 2016	Jan 2017	23	286,944.00	Y		
1.1.3) Close Combat Weapons Carrier <sup>(†)</sup>		2017	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2016	Oct 2017	16	277,188.00	Y		
1.1.3) Close Combat Weapons Carrier <sup>(†)</sup>		2018	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2017	Oct 2018	88	274,322.00	Y		
1.1.4) Utility <sup>(†)</sup>		2016	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Mar 2016	Jan 2017	15	281,014.00	Y		
1.1.4) Utility <sup>(†)</sup>		2017	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2016	Oct 2017	33	243,705.00	Y		
1.1.4) Utility <sup>(†)</sup>		2018	Oshkosh Defense LLC / Oshkosh, WI	C / FFP	TACOM	Dec 2017	Oct 2018	291	247,477.00	Y		

<sup>(†)</sup> indicates the presence of a P-21

**Footnotes:**

<sup>(10)</sup> MS C and contract award occurred on 25 August 2015. Production rates for the JLTV variants are shown as annual rates.

<sup>(11)</sup> Due to quantity and budget limitations of the Continuing Resolution, JLTV quantities will be procured in multiple contract awards. 106 total vehicles were procured in Dec 2016. The remaining 106 are schedule for award in Jun 2017.

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Exhibit P-21, Production Schedule: FY 2018 Navy																						Date: May 2017																											
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	ACCEPT PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	O C T		N O V		D E C		Calendar Year 2015										Calendar Year 2016																										
													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) General Purpose <sup>(1)</sup>																																																	
	1	2015	NAVY	6	0	6											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5															
	1	2015	ARMY <sup>(‡)</sup>	115	0	115											A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	106														
	1	2015	Total	121	0	121											-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	111														
	1	2016	NAVY	24	0	24																					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	24								
	1	2016	ARMY <sup>(‡)</sup>	377	0	377																					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	377								
	1	2016	Total	401	0	401																					-	-	-	-	-	-	-	-	-	-	-	-	-	-	401								
	1	2017	NAVY	88	0	88																															-	-	-	-	-	-	-	-	-	-	-	-	88
	1	2017	ARMY <sup>(‡)</sup>	696	0	696																															-	-	-	-	-	-	-	-	-	-	-	-	696
	1	2017	Total	784	0	784																															-	-	-	-	-	-	-	-	-	-	-	-	784
	1	2018	NAVY	115	0	115																															-	-	-	-	-	-	-	-	-	-	-	-	115
	1	2018	ARMY <sup>(‡)</sup>	783	0	783																															-	-	-	-	-	-	-	-	-	-	-	-	783
	1	2018	Total	898	0	898																															-	-	-	-	-	-	-	-	-	-	-	-	898
1.1.3) Close Combat Weapons Carrier																																																	
	2	2016	NAVY	23	0	23																					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23							
	2	2016	ARMY <sup>(‡)</sup>	42	0	42																					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42							
	2	2016	Total	65	0	65																					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65							
	2	2017	NAVY	16	0	16																															-	-	-	-	-	-	-	-	-	-	-	-	16
	2	2017	ARMY <sup>(‡)</sup>	86	0	86																															-	-	-	-	-	-	-	-	-	-	-	-	86
	2	2017	Total	102	0	102																															-	-	-	-	-	-	-	-	-	-	-	-	102
	2	2018	NAVY	88	0	88																															-	-	-	-	-	-	-	-	-	-	-	-	88
	2	2018	ARMY <sup>(‡)</sup>	89	0	89																															-	-	-	-	-	-	-	-	-	-	-	-	89
	2	2018	Total	177	0	177																															-	-	-	-	-	-	-	-	-	-	-	-	177
1.1.4) Utility																																																	
	3	2016	NAVY	15	0	15																					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15							
	3	2016	ARMY <sup>(‡)</sup>	165	0	165																					A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165							
	3	2016	Total	180	0	180																					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	180							
	3	2017	NAVY	33	0	33																															-	-	-	-	-	-	-	-	-	-	-	-	33
	3	2017	ARMY <sup>(‡)</sup>	751	0	751																															-	-	-	-	-	-	-	-	-	-	-	-	751
	3	2017	Total	784	0	784																															-	-	-	-	-	-	-	-	-	-	-	-	784
	3	2018	NAVY	291	0	291																															-	-	-	-	-	-	-	-	-	-	-	-	291
							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: FY 2018 Navy																			Date: May 2017												
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	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	2018	ARMY (†)	945	0	945																									945
	3	2018	Total	1,236	0	1,236																									1,236
							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: FY 2018 Navy																				Date: May 2017												
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 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		
1.1.1) General Purpose <sup>(1)</sup>																																
	1	2015	NAVY	6	1	5	1	1	1	1	1	-	-	-	-	-	-														0	
	1	2015	ARMY <sup>(‡)</sup>	115	9	106	9	9	9	9	10	10	10	10	10	10	10														0	
	1	2015	<b>Total</b>	<b>121</b>	<b>10</b>	<b>111</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2016	NAVY	24	0	24	-	-	-	1	2	2	2	2	2	2	2	2	2	2	3										0	
	1	2016	ARMY <sup>(‡)</sup>	377	0	377	-	-	-	31	31	31	31	31	31	31	32	32	32	32	32										0	
	1	2016	<b>Total</b>	<b>401</b>	<b>0</b>	<b>401</b>	-	-	-	<b>32</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>35</b>	-	-	-	-	-	-	-	-	-	0	
	1	2017	NAVY	88	0	88			A -	-	-	-	-	-	-	-	-	-	7	7	7	7	7	7	7	7	8	8	8	8	0	
	1	2017	ARMY <sup>(‡)</sup>	696	0	696			A -	-	-	-	-	-	-	-	-	-	58	58	58	58	58	58	58	58	58	58	58	58	0	
	1	2017	<b>Total</b>	<b>784</b>	<b>0</b>	<b>784</b>			-	-	-	-	-	-	-	-	-	-	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	0
	1	2018	NAVY	115	0	115															A -	-	-	-	-	-	-	-	-	-	115	
	1	2018	ARMY <sup>(‡)</sup>	783	0	783															A -	-	-	-	-	-	-	-	-	-	783	
	1	2018	<b>Total</b>	<b>898</b>	<b>0</b>	<b>898</b>															-	-	-	-	-	-	-	-	-	-	898	
1.1.3) Close Combat Weapons Carrier																																
	2	2016	NAVY	23	0	23	-	-	-	1	2	2	2	2	2	2	2	2	2	2	2										0	
	2	2016	ARMY <sup>(‡)</sup>	42	0	42	-	-	-	3	3	3	3	3	3	4	4	4	4	4	4										0	
	2	2016	<b>Total</b>	<b>65</b>	<b>0</b>	<b>65</b>	-	-	-	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	-	-	-	-	-	-	-	-	-	0	
	2	2017	NAVY	16	0	16			A -	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	2	2	2	2	0	
	2	2017	ARMY <sup>(‡)</sup>	86	0	86			A -	-	-	-	-	-	-	-	-	-	7	7	7	7	7	7	7	7	7	8	8	8	0	
	2	2017	<b>Total</b>	<b>102</b>	<b>0</b>	<b>102</b>			-	-	-	-	-	-	-	-	-	-	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>10</b>	0	
	2	2018	NAVY	88	0	88															A -	-	-	-	-	-	-	-	-	-	88	
	2	2018	ARMY <sup>(‡)</sup>	89	0	89															A -	-	-	-	-	-	-	-	-	-	89	
	2	2018	<b>Total</b>	<b>177</b>	<b>0</b>	<b>177</b>															-	-	-	-	-	-	-	-	-	-	177	
1.1.4) Utility																																
	3	2016	NAVY	15	0	15	-	-	-	1	1	1	1	1	1	1	1	1	2	2	2										0	
	3	2016	ARMY <sup>(‡)</sup>	165	0	165	-	-	-	13	13	13	14	14	14	14	14	14	14	14	14										0	
	3	2016	<b>Total</b>	<b>180</b>	<b>0</b>	<b>180</b>	-	-	-	<b>14</b>	<b>14</b>	<b>14</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>16</b>	-	-	-	-	-	-	-	-	-	0	
	3	2017	NAVY	33	0	33			A -	-	-	-	-	-	-	-	-	-	2	2	2	3	3	3	3	3	3	3	3	3	0	
	3	2017	ARMY <sup>(‡)</sup>	751	0	751			A -	-	-	-	-	-	-	-	-	-	62	62	62	62	62	63	63	63	63	63	63	63	0	
	3	2017	<b>Total</b>	<b>784</b>	<b>0</b>	<b>784</b>			-	-	-	-	-	-	-	-	-	-	<b>64</b>	<b>64</b>	<b>64</b>	<b>65</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	0	
	3	2018	NAVY	291	0	291															A -	-	-	-	-	-	-	-	-	-	291	
							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: FY 2018 Navy																			Date: May 2017															
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 2017												Fiscal Year 2018												B A L A N C E			
O C 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				
	3	2018	ARMY (†)	945	0	945													A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	945
	3	2018	Total	1,236	0	1,236													-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,236
							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: FY 2018 Navy																		Date: May 2017														
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										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	
1.1.1) General Purpose <sup>(1)</sup>																																
	1	2015	NAVY	6	6	0																										0
	1	2015	ARMY <sup>(‡)</sup>	115	115	0																										0
	1	2015	Total	121	121	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2016	NAVY	24	24	0																										0
	1	2016	ARMY <sup>(‡)</sup>	377	377	0																										0
	1	2016	Total	401	401	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2017	NAVY	88	88	0																										0
	1	2017	ARMY <sup>(‡)</sup>	696	696	0																										0
	1	2017	Total	784	784	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	1	2018	NAVY	115	0	115	9	9	9	9	9	10	10	10	10	10	10											0				
	1	2018	ARMY <sup>(‡)</sup>	783	0	783	65	65	65	65	65	65	65	65	66	66	66											0				
	1	2018	Total	898	0	898	74	74	74	74	74	75	75	75	75	76	76	76	-	-	-	-	-	-	-	-	-	-	-	-	0	
1.1.3) Close Combat Weapons Carrier																																
	2	2016	NAVY	23	23	0																										0
	2	2016	ARMY <sup>(‡)</sup>	42	42	0																										0
	2	2016	Total	65	65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	2	2017	NAVY	16	16	0																										0
	2	2017	ARMY <sup>(‡)</sup>	86	86	0																										0
	2	2017	Total	102	102	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	2	2018	NAVY	88	0	88	7	7	7	7	7	7	7	7	8	8	8	8											0			
	2	2018	ARMY <sup>(‡)</sup>	89	0	89	7	7	7	7	7	7	7	8	8	8	8	8											0			
	2	2018	Total	177	0	177	14	14	14	14	14	14	14	15	16	16	16	16	-	-	-	-	-	-	-	-	-	-	-	-	0	
1.1.4) Utility																																
	3	2016	NAVY	15	15	0																										0
	3	2016	ARMY <sup>(‡)</sup>	165	165	0																										0
	3	2016	Total	180	180	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	3	2017	NAVY	33	33	0																										0
	3	2017	ARMY <sup>(‡)</sup>	751	751	0																										0
	3	2017	Total	784	784	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
	3	2018	NAVY	291	0	291	24	24	24	24	24	24	24	24	24	25	25	25	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

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Exhibit P-21, Production Schedule: FY 2018 Navy																			Date: May 2017													
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														BALANCE	
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		
	3	2018	ARMY (†)	945	0	945	78	78	78	79	79	79	79	79	79	79															0	
	3	2018	Total	1,236	0	1,236	102	102	102	103	103	103	103	103	103	104	104	104	-	-	-	-	-	-	-	-	-	-	-	-	-	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: FY 2018 Navy									Date: May 2017			
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 2018	1-8-5 For 2018	MAX For 2018	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 Corp LLC <sup>(10)</sup> - Oshkosh WI	12	696	2,820	0	0	10	10	0	0	10	10
2	Oshkosh Defense LLC - Oshkosh, WI	12	696	2,820	0	0	10	10	0	0	10	10
3	Oshkosh Defense LLC - Oshkosh, WI	12	696	2,820	0	0	10	10	0	0	10	10

(‡) 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:**

<sup>(10)</sup> MS C and contract award occurred on 25 August 2015. Production rates for the JLTV variants are shown as annual rates.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles							<b>P-1 Line Item Number / Title:</b> 5097 / Family of Tactical Trailers					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	143.208	3.757	2.691	1.938	0.000	1.938	3.166	3.237	3.301	3.369	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	143.208	3.757	2.691	1.938	0.000	1.938	3.166	3.237	3.301	3.369	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>143.208</b>	<b>3.757</b>	<b>2.691</b>	<b>1.938</b>	<b>0.000</b>	<b>1.938</b>	<b>3.166</b>	<b>3.237</b>	<b>3.301</b>	<b>3.369</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Family of Tactical Trailers provides for the procurement and support of trailers in the light, medium, and heavy fleet in support of the Marine Corps tactical vehicle mobility capability. This program includes multiple initiatives such as the M1102-H (Cargo) & M1102-MCC (Marine Corps Chassis) Light Tactical Trailers (LTT), the M1076 PLS (Palletized Load System) Trailer, the MK1077 Flatrack for the PLS Trailer and LVSR, Medium Tactical Vehicle Replacement (MTVR) Trailer, M870 Ton Low Bed, Mk970 Tactical Refueler and the Flatrack Refueler Capability (FRC).												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	2.793	1.952	1.276	-	1.276	2.480	2.536	2.586	2.640		
NR	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	0.964	0.739	0.662	-	0.662	0.686	0.701	0.715	0.729		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-	-	
	<b>Total Obligation Authority</b>	<b>3.757</b>	<b>2.691</b>	<b>1.938</b>	-	<b>1.938</b>	<b>3.166</b>	<b>3.237</b>	<b>3.301</b>	<b>3.369</b>		
<b>Justification:</b> FY 2018 Base Appropriation Request: \$1.938M (\$1.276 Active; \$0.662M Reserve) Funds in the amount of \$1.938M will support the active and reserve Heavy Trailer Fleet program acquisition plans. Funding will support procurement and installation of safety and engineering change modifications to the Medium and Heavy Tactical Trailer Fleet of Vehicles to include (but not limited to) the Palletized Load System-Trailer (PLS-T), M870 (40 & 50 ton variants), Mk1077 (Flatrack), Mk970, MTVR MK 593 Trailer and Flatrack Refueler Capability (FRC) to provide support to the Operational Forces by providing the capability to transport required cargo within the mission profile of the Medium Tactical Vehicle Replacement and Logistical Vehicle System Replacement.  The decrease in funding of \$0.753M from FY 2017 to FY 2018 is a result of MTVR trailer fielding completion and significant reductions in trailer ECP procurements.												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles							<b>P-1 Line Item Number / Title:</b> 5132 / Trailers					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	0.000	0.000	0.000	10.282	0.000	10.282	0.000	0.000	0.000	0.000	-	10.282
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	0.000	0.000	0.000	10.282	0.000	10.282	0.000	0.000	0.000	0.000	-	10.282
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>10.282</b>	<b>0.000</b>	<b>10.282</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-</b>	<b>10.282</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Program funding was requested in order to fund FORCE 2025 and IR emerging interim facilities requirements. The trailers line is made up of temporary facilities (interim relocatable trailers) that will be purchased to accommodate the Marine Corps' 185K Active Duty End Strength. These shelters will be located at the following locations: Marine Corps Base (MCB) Camp Lejeune, MCB Camp Pendleton, Marine Corps Base Hawaii, Marine Corps Air Stations (MCAS) Yuma, MCAS Miramar, MCAS Cherry Point, and the Marine Corps Air Ground Combat Center (MCAGCC) 29 Palms.												
<b>Justification:</b> FY18 Baseline Budget: FY18 funding of \$10.282M funds 5 temporary facilities projects and planning in support of NDAA-directed end strength increase in FY17 (182K to 185K), Marine Corps Force 2025 FY18 facilities requirements, and CMC Infrastructure Reset FY-18 proposed consolidations and demolitions. This funding is foundational to meeting the intent of SecDef's Phase Two focus. Absent this temporary facilities funding, the Marine Corps will delay meeting these program balance, facilities investment, and force structure growth requirements.												

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 3: Other Support	<b>P-1 Line Item Number / Title:</b> 5230 / Items less Than \$5 Million
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206624M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	101.565	8.326	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> )	101.565	8.326	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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>101.565</b>	<b>8.326</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>Continuing</b>	<b>Continuing</b>
<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 line item supports procurement of items such as equipment, modification kits, gear, relocatable trailers, livable containers, and material with a unit cost under \$5M in support of the Marine Corps.

Motor Transport Modifications - Funds procurement and modifications to ground transportation systems for operational priorities, vehicles, engineering change proposals, safety concerns, support equipment inefficiencies, tool malfunctions, product quality deficiencies, and other issues that affect reliability, availability, maintainability, and readiness. Provides for the procurement, sustainment, and life-cycle management of vehicles to implement improvements in response to known and emergent needs of the Marine Corps.

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.

Funding for Motor Transport Modifications moves to BLI 5050 beginning in FY 2017.

Funding for Marine Security Guard Vehicles moves to BLI 5006 beginning in FY 2017.

## Justification:

Funding for Motor Transport Modifications moved to BLI 5050 beginning in FY 2017.

Funding for Marine Security Guard Vehicles moved to BLI 5006 beginning in FY 2017.

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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment	<b>P-1 Line Item Number / Title:</b> 6054 / Env Cntrl Equip Assorted
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206624M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	85.983	0.000	0.018	1.405	0.000	1.405	4.534	3.385	3.453	3.521	-	102.299
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	85.983	0.000	0.018	1.405	0.000	1.405	4.534	3.385	3.453	3.521	-	102.299
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>85.983</b>	<b>0.000</b>	<b>0.018</b>	<b>1.405</b>	<b>0.000</b>	<b>1.405</b>	<b>4.534</b>	<b>3.385</b>	<b>3.453</b>	<b>3.521</b>	<b>-</b>	<b>102.299</b>
<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 Environmental Control Equipment consists of Environmental Control Units (ECU), Field Refrigeration Systems, Integrated Trailer ECU and Generator Systems, and Cooling and Refrigeration Expeditionary Tool Kits. These systems provide required heating, cooling, storage, and servicing for systems throughout the Marine Corps. Current efforts seek to replace all legacy ECUs with systems of higher reliability and higher efficiency using EPA-approved refrigerants, more energy efficient enhanced mobility, easier to repair, and quieter than their predecessors. With environmental control systems consuming 50-70% of tactical electric power in theater, this 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 procurement of the following principal end items and ancillary equipment:

(1) Field Refrigeration Systems (FRS) Refrigerant Unit (RU) replacement. This effort seeks to replace legacy RUs in current USMC Large and Small FRSs complying with EPA regulations while increasing efficiency thus reducing overall power requirements/demands.

(2) The Enhanced Environmental Control Unit (E2CU) program is the second generation of a family of environmental control units from 9,000 BTU to 60,000 BTU/Hr cooling output. The E2CU program will provide tactical Heating, Ventilation and Air Conditioning (HVAC) and superior reliability for all MAGTF units in all operational concepts. E2CU will have significant average fuel efficiency improvements over the current ECU family has been demonstrated while complying with newer EPA regulations on refrigerants.

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	1.321	0.381	0.389	0.397
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.018	1.405	-	1.405	3.213	3.004	3.064	3.124
<b>Total:</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment					<b>P-1 Line Item Number / Title:</b> 6054 / Env Cntrl Equip Assorted					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Secondary Distribution	Total Obligation Authority	-	0.018	1.405	-	1.405	4.534	3.385	3.453	3.521
<p><b>Justification:</b>  FY 2018 Base Appropriation Request: \$1.405M (ACTIVE: \$0.000/RESERVE: \$1.405M)  Funds will purchase new Refrigeration Units (RUs) for the existing Small and Large Field Refrigeration Systems upgrading the RUs with EPA compliant refrigerant.</p> <p>The increase of \$1.387M from FY17 to FY18 allows for upgrades to meet Environmental Protection Agency (EPA) Clean Air Act requirements for Environmental Control Units Refrigerant.</p> <p>OCO:  FY 2018 Overseas Contingency Operations (OCO) Request: N/A</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							<b>P-1 Line Item Number / Title:</b> 6274 / Bulk Liquid Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	109.118	1.037	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> )	109.118	1.037	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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>109.118</b>	<b>1.037</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> Family of Expeditionary Water Systems is a roll up line that contains items such as the Lightweight Water Purification System (LWPS), Expeditionary Water Distribution System (EWDS), as well as, various water supply support components and equipment including Six Container (SIXCON) Pump and Tank Modules, Nozzles, Field Laundry Units, Interconnection Sets, Water Packaging Components, Shower Units, 3k/5k/25k Tanks, Hypochlorination Units, Water Quality Analysis Sets - Purification and Small Unit Water Purifiers (Individual, Squad, and Platoon) necessary to support the storage, distribution and analysis of potable water. The LWPS is a small, modular, self-contained system that uses filtration and reverse osmosis technology to produce 75 to 125 gallons per hour (GPH) of potable water from fresh, brackish, salt, and nuclear, biological, and chemical (NBC) contaminated water. This capability is necessary to provide safe and potable water to battalion sized or smaller units in an expeditionary environment or in extended company operations.												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	0.972	-	-	-	-	-	-	-	-	-	
NR	Quantity	-	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	0.065	-	-	-	-	-	-	-	-	-	
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-	-	
	<b>Total Obligation Authority</b>	<b>1.037</b>	-	-	-	-	-	-	-	-	-	
<b>Justification:</b> Funding for Bulk Liquid Equipment moves to BLI 6670 beginning in FY 2017.  OCO: FY2018 Overseas Contingency Operations (OCO) Request: N/A												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							<b>P-1 Line Item Number / Title:</b> 6277 / Tactical Fuel Systems					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	334.658	0.135	0.078	1.788	0.000	1.788	2.849	2.924	2.981	3.041	-	348.454
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	334.658	0.135	0.078	1.788	0.000	1.788	2.849	2.924	2.981	3.041	-	348.454
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>334.658</b>	<b>0.135</b>	<b>0.078</b>	<b>1.788</b>	<b>0.000</b>	<b>1.788</b>	<b>2.849</b>	<b>2.924</b>	<b>2.981</b>	<b>3.041</b>	<b>-</b>	<b>348.454</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
<p>Family of Expeditionary Fuel Systems contains highly versatile fuel systems designed to receive, store, transfer and dispense fuel in support of Marine Air Ground Tactical Force (MAGTF) operations. The family contains individual Table of Allowance Material Control Numbers which support MAGTF operations by providing all aspects of land-based fuel support to include analysis, receipt, storage, transfer and dispensing fuel including all the components required to configure the following systems: Tactical Airfield Fuel Distribution System (TAFDS), Amphibious Assault Fuel System (AAFS), SIXCON Fuel Storage and Pump Module, Fire Suppression System (FSS), Helicopter Expedient Refueling System (HERS), 600 GPM Fuel Pump Assembly, Berm Liners, Various Capacity Fuel Tanks, Petroleum Quality Analysis System-Enhanced, and various elastomeric fuel systems components and equipment.</p> <p>Procurement supports centrally management items with lifecycles, preplanned product improvements, and obsolescence mitigation by procurement of newer components/subsystems supported by industry. Procurement also supports repacking current systems into smaller modular packages for scalability and mission tailoring which may require additional subsystems for certain packages to be complete as new TAMCNs and tables of allowances are authorized.</p>												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.076	-	0.895	-	0.895	1.425	1.463	1.491	1.521		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	0.059	0.078	0.893	-	0.893	1.424	1.461	1.490	1.520		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		
	<b>Total Obligation Authority</b>	<b>0.135</b>	<b>0.078</b>	<b>1.788</b>	<b>-</b>	<b>1.788</b>	<b>2.849</b>	<b>2.924</b>	<b>2.981</b>	<b>3.041</b>		
<b>Justification:</b>												
<p>FY2018 Base Appropriation Request: \$1.788M (ACTIVE: \$0.895M/RESERVE: \$0.893M)</p> <p>Family of Expeditionary Fuel Systems funds will purchase various centrally managed Fuel Components, Combined Containment Fuel Detectors (CCFDS), Solar Pulse Chargers, Fuel Pods and 3K/20K/50K Tank Chests.</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment		<b>P-1 Line Item Number / Title:</b> 6277 / Tactical Fuel Systems
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> N/A
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Funding increased from FY17 to FY18 by \$1.710M supporting modernization efforts for fuel quality surveillance and accounting equipment such as gravity flow meters, petroleum test kits, and combined fuel detectors.</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO) Request: N/A</p>		



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**Exhibit P-40, Budget Line Item Justification:** FY 2018 Navy **Date:** May 2017

<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment	<b>P-1 Line Item Number / Title:</b> 6366 / Power Equipment Assorted
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<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206624M
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**Line Item MDAP/MAIS Code:** N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	362.412	8.955	17.973	9.910	0.000	9.910	25.055	21.711	22.138	22.584	-	490.738
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) <i>(\$ in Millions)</i>	362.412	8.955	17.973	9.910	0.000	9.910	25.055	21.711	22.138	22.584	-	490.738
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority <i>(\$ in Millions)</i></b>	<b>362.412</b>	<b>8.955</b>	<b>17.973</b>	<b>9.910</b>	<b>0.000</b>	<b>9.910</b>	<b>25.055</b>	<b>21.711</b>	<b>22.138</b>	<b>22.584</b>	<b>-</b>	<b>490.738</b>
<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 POWER EQUIPMENT - The Family of Mobile Electric Power Equipment consists of command and control systems for power management and distribution (intelligent power management), tactical generators ranging from 2 to 200 kilowatts, power distribution systems, energy storage systems, load banks, floodlights, cabling, and electrician tool kits. This equipment is procured and fielded to manage and provide electricity on the battlefield. Systems may be mounted on prime movers, skids or trailers. Systems support maneuver, combat support, and combat service support units requiring tactical power to operate weapons systems, Command, Control, Communications, Computers and Intelligence (C4I) systems, medical and messing facilities, environmental control equipment, and water purification systems. With over 10,000 generators and using diesel engines in the Operating Forces, improving their fuel efficiency and reliability will be a significant contribution to reducing the USMC fuel demand, and lightening the 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 encompass procurement and testing of the following principal end items and ancillary equipment:

- (1) Intelligent Power Management Systems (IPMS) which support a robust, scalable solution to interconnect, control, store and distribute power from various sources. As a result, the power requirements will be met in a more efficient manner thus reducing fuel consumption. The IPMS will use multiple electrical inputs from military generators, vehicles and renewable sources. Subsystems include Digital Control System (DCS), Energy Storage Unit (ESU), and Intelligent Power Distribution System (IPD).
- (2) Advanced Medium Mobile Power Sources (AMMPS) procurement of the remaining Generator Sets needed systems to complete the Approved Acquisition Objective
- (3) AMMPS Digital Control System procurement to provide tactical general gridding capability that will provide greater flexibility and reduce fuel consumption of networked generators.
- (4) Large Advanced Power Sources (LAMPS) procurement of newer more fuel efficient large format generators (100-200kw) replacing the legacy generators and ensuring commonality with the Army large format generators.

FAMILY OF ALTERNATIVE POWER SOURCES FOR COMMUNICATIONS EQUIPMENT (APSCE) - This family consists of multiple suites of devices, grouped into sub-families, that are used to provide highly expeditionary power (worn on the Marine, hand-carried, or vehicle mounted) to operate communications equipment, computers and peripheral equipment in place of disposable batteries, and for scenarios where fuel powered generators are too large, too heavy, unsuitable for use, or provide undue logistics burden due to refueling needs.

The first suite of devices encompasses renewable and hybrid energy based systems, and includes the man-portable Ground Renewable Expeditionary Energy Network System (GREENS) that supports a company level operations center and Forward Operating Base, the man-packable Solar Portable Alternative Communications Energy Systems (SPACES) that supports Combat Outposts and Observation Points,

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						<b>P-1 Line Item Number / Title:</b> 6366 / Power Equipment Assorted				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<p>and the Mobile Electric Power Source that provides light systems (up to 5kW) and medium (up to 10kW) to power mission command and control, information networks, communications, environmental control, life support, sustainment and illumination at the battalion level. All of these exploit the use of solar energy and power management technologies to recharge batteries and directly power electronic equipment without a need, or with a reduced need for re-fueling generators.</p> <p>The second suite of devices includes both shelter based (semi-rugged) and fully ruggedized power supplies (operate outdoors) that convert grid power (alternating current) to vehicle based power (direct current). These power supplies support all elements across the USMC with standard models that provide variable electrical output to support a wide electrical range of operations.</p> <p>The third suite of devices is the vehicle mounted inverters that convert vehicle 24 Volt direct current to 120 Volt alternating current to allow on-the-move operation of equipment that previously was only able to be used while stationary. These inverters are used throughout all theaters of operations by Marine Corps aviation and ground units requiring 120 VAC, 60Hz electrical power. The inverter based power systems reduce the requirement for tactical generators needed for small operations.</p> <p>The fourth suite of devices provides an alternative power source for each radio in the Marine Corps (seven different models). These radio power adapters allow radios to be powered from central power sources (such as GREENS and SPACES) or grid power (120 volt AC generator), reducing the consumption of rechargeable and non-rechargeable batteries when in garrison/shelter operations. These systems lead to cost avoidance, conservation of batteries, and flexibility of operations.</p> <p>The fifth suite supports all lead-acid batteries used in vehicles and artillery systems, and a host of battery chemistries (nickel-cadmium (NiCd), nickel metal hydride (NiMH), and lithium-ion (Li-ion)) used in command, control and communications systems. The suite consists of battery chargers, battery conditioners, battery maintainers, battery analyzers, and battery safety management systems for both garrison (semi-rugged) and deployed operations (ruggedized). As the USMC (and all services) move towards fully adopting rechargeable batteries for energy efficiency and logistics demand reduction, this suite of devices is critical to support numerous weapons, robots, IED jammers, surveillance systems, vehicles, and communication systems that are highly dependent on batteries for their operation.</p>										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	8.952	14.793	8.122	-	8.122	23.204	19.823	20.213	20.620
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.003	3.180	1.788	-	1.788	1.851	1.888	1.925	1.964
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>8.955</b>	<b>17.973</b>	<b>9.910</b>	-	<b>9.910</b>	<b>25.055</b>	<b>21.711</b>	<b>22.138</b>	<b>22.584</b>

**Justification:**  
FY2018 Base Appropriation Request: \$9.910M (ACTIVE: \$8.122M/RESERVE: \$1.788M)

MOBILE POWER EQUIPMENT \$6.694M (ACTIVE: \$6.694M/RESERVE: \$0.000M)  
Funds the procurement of Large Advanced Mobile Power Source (LAMPS), Intelligent Power Management (IPM) subsystems (AMMPS Digital Control System (DCS), FDT charges and various logistics support.

ADVANCED POWER SOURCES \$3.216M (ACTIVE:\$1.428M/RESERVE: \$1.788M)  
Funds the procurement and fielding of Advanced Battery Charger. Funding required to meet the Approved Acquisition Objectives outlined in the Total Force Structure Management System.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment		<b>P-1 Line Item Number / Title:</b> 6366 / Power Equipment Assorted
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206624M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>The decrease in Advanced Power Sources funding (\$11.264M) from FY17 to FY18 completes the procurement of Ground Renewable Expeditionary Energy Network System (GREENS) and the man-portable Solar Portable Alternative Communications Energy Systems (SPACES) both renewable energy based systems within the Family of Alternative Power Sources for Communications Equipment (APSCE).</p> <p>The increase in Mobile Power Equipment funding \$3.201M from FY17 to FY18 is for the procurement of both Advanced Medium Mobile Power Sources (AMMPS) and the Large Advanced Power Sources (LAMPS) generators and associated Rail Kits within the Family of Mobile Power Equipment (MPE).</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO) Request: N/A</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							<b>P-1 Line Item Number / Title:</b> 6518 / Amphibious Support Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	172.295	3.882	7.371	5.830	0.000	5.830	4.732	4.838	4.943	5.043	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	172.295	3.882	7.371	5.830	0.000	5.830	4.732	4.838	4.943	5.043	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>172.295</b>	<b>3.882</b>	<b>7.371</b>	<b>5.830</b>	<b>0.000</b>	<b>5.830</b>	<b>4.732</b>	<b>4.838</b>	<b>4.943</b>	<b>5.043</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b>												
<p>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/parachuting programs, specialized reconnaissance programs and underwater reconnaissance capability programs. Programs such as: Airborne Reconnaissance Equipment (ARE) program -- a roll-up line with multiple specialized raid projects, such as, parachuting equipment used for reconnaissance in support of Marine Air Ground Task Force (MAGTF) operations; Air Delivery Family of Systems (formerly Joint Precision Air Drop System (JPADS)) program -- 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 (parachute) 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; Amphibious Reconnaissance Capability program (formerly Underwater Reconnaissance Capability (URC))-- an overarching Family of Systems which sustains/enhances/supports capabilities of current and future combatant diving systems and small craft as needed and when required by the fleet such as Combat Rubber Reconnaissance Craft (CRRC), Open Water Safety Craft (OWSC), 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), and the Diver Reconnaissance Vehicle (DRV), Diver Propulsion Device (DPD), Marine Individual Assault Kit (MIAK), Marine Assault Breacher's Kit (MABK) in support of MAGTF expeditionary operations.</p>												
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>		
Navy	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	3.882	7.051	5.556	-	5.556	4.530	4.631	4.732	4.828		
NR	Quantity	-	-	-	-	-	-	-	-	-		
	Total Obligation Authority	-	0.320	0.274	-	0.274	0.202	0.207	0.211	0.215		
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-		
	<b>Total Obligation Authority</b>	<b>3.882</b>	<b>7.371</b>	<b>5.830</b>	-	<b>5.830</b>	<b>4.732</b>	<b>4.838</b>	<b>4.943</b>	<b>5.043</b>		
<b>Justification:</b>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment		<b>P-1 Line Item Number / Title:</b> 6518 / Amphibious Support Equipment
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206623M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>FY2018 Base Appropriations Request: \$5.830M</p> <p>Airborne Reconnaissance Equipment: \$4.138M (Active - \$3.864M, Reserves - \$0.274M) - Funding will support the procurement of the Maneuverable Parachute System (MC-6) and Enhanced Multi Mission Parachute Systems (E-MMPS), and various equipment such as kits, component sets, ancillary equipment and increase combat multipliers, survivability, durability and functionality over that of the current inventory items.</p> <p>Amphibious Reconnaissance Capability: \$1.692M- Funding will support procurement of Amphibious Reconnaissance Capability Family of Systems equipment to sustain, enhance, and support capabilities of current and future combatant diving systems and small craft. Funding will also continue to support the procurement of the propulsion solution to the first phase of the DRV system.</p> <p>Decrease in funding from FY17 to FY18 of \$1.541M is due to procurement reductions in both Airborne Reconnaissance Equipment (ARE) and Amphibious Reconnaissance Capability.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment							<b>P-1 Line Item Number / Title:</b> 6520 / EOD Systems					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M					
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	6,460.081	5.165	110.321	27.240	21.000	48.240	37.046	22.832	23.212	23.600	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	6,460.081	5.165	110.321	27.240	21.000	48.240	37.046	22.832	23.212	23.600	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>6,460.081</b>	<b>5.165</b>	<b>110.321</b>	<b>27.240</b>	<b>21.000</b>	<b>48.240</b>	<b>37.046</b>	<b>22.832</b>	<b>23.212</b>	<b>23.600</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>ASSAULT BREACHER VEHICLE (ABV) is a tracked, armored combat engineer vehicle designed to breach minefields and complex obstacles and provide a deliberate and in-stride breaching capability. ABV consists of a rebuilt and upgraded M1A1 Tank chassis with the integration of Non-Developmental Items (NDI), which includes a Full-Width Mine Plow, a Dozer Blade, a Surface Mine Plow, a Rapid Ordnance Removal System, two M58 Linear Demolition Charges, a lane marking system and a self-defense weapon system. The ABV will provide crew protection and vehicle survivability while having the speed and mobility to keep pace with the maneuver force. The M1A1 Tank Chassis will provide economic supportability of the system through its commonality with the tank fleet and armor protection for survivability.</p> <p>MK 154 MODERNIZATION is a line charge launcher system installed in the Amphibious Assault Vehicle Personnel variant (AAVP7) used to breach mine fields in shallow water and inland areas, providing the USMC with an amphibious operations breaching capability.</p> <p>FAMILY OF EOD EQUIPMENT supports Marine operating forces, national security strategy, and force protection by locating, accessing, identifying, rendering safe, neutralizing, and disposing of hazards from foreign and domestic, conventional, chemical, biological, radiological, nuclear, and high yield explosives (CBRNE), unexploded explosive ordnance (UXO), improvised explosive devices (IEDs), and weapons of mass destruction (WMD) that present a threat to operations, installations, personnel, or materiel. The Explosive Ordnance Disposal (EOD) mission provides a means to neutralize the hazards associated with explosive ordnance that are beyond the normal capabilities of other specialties that present a threat to operations, installations, personnel and material. The Family of EOD Equipment accomplishes this mission by detecting, identifying, rendering safe, recovering, evacuating and disassembling, and/or disposing of unexploded ordnance with a variety of EOD specialized equipment and tool kits.</p> <p>MINE RESISTANT AMBUSH PROTECTED (MRAP) Family of Vehicles (FoV) provides Warfighters multi-mission platforms capable of mitigating Improvised Explosive Devices (IEDs), underbody mines, and small arms fire threats, which are currently the greatest casualty producers in Overseas Contingency Operations (OCO). Multiple vehicle categories (CATs) have been procured, fielded, and sustained: MRAP- All Terrain Vehicle (M-ATV) - Combat operations (ops) in rural, mountainous, urban terrain. Category I - Urban combat operations, ambulance. Category II - Multi-mission ops-convoy lead, troop transport, ambulance, utility vehicle. Category III - Mine/IED clearance ops, explosive ordnance disposal. Funding includes required Government Furnished Equipment (GFE)/subsystems and Engineering Change Proposal (ECP)/Capability Insertion in response to an UUNS/JUONS and Warfighter safety and survivability requirements.</p> <p>COUNTER RADIO-CONTROLLED IMPROVISED EXPLOSIVE DEVICE (RCIED) ELECTRONIC WARFARE (USMC CREW) SYSTEMS are vehicle mounted and dismounted modular programmable multi-band radio frequency jammers designed to deny enemy use of selected portions of the radio frequency spectrum in the vicinity of the jammer to counter the RCIED threat. The mounted and dismounted systems provide Marines in vehicle convoys and on foot with the necessary protection from the continued and evolving threat of deadly RCIEDs. Legacy CREW systems are currently deployed to meet threats in the</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						<b>P-1 Line Item Number / Title:</b> 6520 / EOD Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
multiple theaters of operation and fielded to selected Marine Expeditionary Units (MEU)/Marine Expeditionary Forces (MEF) in support of worldwide deployment. The mounted CREW Systems will receive a performance upgrade with contracting efforts starting in FY17 using OCO funding.										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.165	107.471	27.240	21.000	48.240	37.046	22.832	23.212	23.600
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	2.850	-	-	-	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>5.165</b>	<b>110.321</b>	<b>27.240</b>	<b>21.000</b>	<b>48.240</b>	<b>37.046</b>	<b>22.832</b>	<b>23.212</b>	<b>23.600</b>



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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 1: Engineer and Other Equipment						<b>P-1 Line Item Number / Title:</b> 6520 / EOD Systems				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206211M, 0206313M, 0206623M, 0206315M, 0502511M, 0206624M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-40a	EOD Systems				- / 6,460.081	- / 5.165	- / 110.321	- / 27.240	- / 21.000	- / 48.240
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 6,460.081</b>	<b>- / 5.165</b>	<b>- / 110.321</b>	<b>- / 27.240</b>	<b>- / 21.000</b>	<b>- / 48.240</b>
<p>*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.</p> <p>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</p>										
<p><b>Justification:</b> FY2018 Base Appropriation Request: \$27.240M</p> <p>CREW Systems: The decrease in funding from FY2017 to FY2018 (\$75.00M) completes procurement of 1,845 Mounted CREW Systems using FY17 OCO funding.</p> <p>MINE RESISTANT AMBUSH PROTECTED (MRAP) VEHICLES: (\$1.152M) Funds ECP upgrades for the enduring MRAP vehicle requirement. The increase from FY17 to FY18 (\$0.806M) continues ECP Block III Upgrades and Egress Installations to maintain vehicle relevancy in meeting force protection threats, such as blast, rollover or water submersion events, and responding to operational needs.</p> <p>FAMILY OF EOD EQUIPMENT: (\$26.087M) Funds Supply Stock Lists (SL-3) Kits to include specialized tools. The decrease of \$8.495 from FY 2017 to FY 2018 is attributed to the \$21.300 million required in FY2017 to upgrade critical equipment required to mitigate significant risk to EOD Technicians executing tasks within an explosive hazardous serious injury zone. Supports the procurement of AN/PVS-31 Optic Sights (with helmet mounts) and AN/PAS-29 Enhanced Clip-On Thermal Imagers (ECOTI) as well as various specialized EOD kits and EOD equipment.</p> <p>ASSAULT BREACHER VEHICLE MODIFICATION: (\$00.001M) Funds support M1A1 Upgrade.</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO) Request: \$21.000M</p> <p>MINE RESISTANT AMBUSH PROTECTED(MRAP) Family of Vehicles(FOV):\$4,000 Funds the installation of Egress kits procured in response to UUUNS 08275UC and 10215UC the MARCENT Enduring requirements. The Egress kit increases force protection on all Cougar CAT I and CAT II variants by ensuring that vehicle occupants can safely exit the vehicle after blast, rollover or water submersion events.</p> <p>FAMILY OF EOD EQUIPMENT: (\$17.000M) - Procures Commercial Off the Shelf (COTS) equipment to include sensor detectors, video fiber optic scopes, Improvised Explosive Devices (IED)/Weapons of Mass Destruction (WMD) diagnostic kits and fusion optics. These capabilities will give the EOD technician precision capabilities to counter IEDs/WMDs during category "A" incidents where the EOD technician is required to assume a grave and immediate risk and physically operate within the very serious injury zone. Continue to provide support to EOD operations currently in support of U.S. Forces Central Command (CENT) and other "new norm" (ONN) Special Purpose Marine Air Ground Task Forces (SPMAGTFs) Crisis Response (CR) postured world-wide require a multitude of EOD specific equipment items to achieve full readiness, enabling supported units and nations engaged against the threat and use of IEDs, WMDs, and Unexploded Explosive Ordnance (UXO).</p>										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Assault Breacher Vehicle (ABV)																				
1.1) Assault Breacher Vehicle (ABV) Modification	A		-	-	6.130	-	-	0.568	-	-	0.393	-	-	0.001	-	-	-	-	-	0.001
Subtotal: 1) Assault Breacher Vehicle (ABV)			-	-	6.130	-	-	0.568	-	-	0.393	-	-	0.001	-	-	-	-	-	0.001
2) Family of EOD Systems																				
2.1) EOD Specialized Equipment and Tool Kits <sup>(1)</sup>	A		-	-	119.969	-	-	3.294	-	-	31.732	-	-	26.087	-	-	17.000	-	-	43.087
2.2) EOD Reserves	A		-	-	-	-	-	-	-	-	2.850	-	-	-	-	-	-	-	-	-
Subtotal: 2) Family of EOD Systems			-	-	119.969	-	-	3.294	-	-	34.582	-	-	26.087	-	-	17.000	-	-	43.087
3) MK 154 Remanufacture																				
3.1) MK 154 Remanufacture	A		182,520.83	48	8.761	-	-	0.795	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) MK 154 Remanufacture			-	-	8.761	-	-	0.795	-	-	-	-	-	-	-	-	-	-	-	-
4) Mine Resistant Ambush Protected (MRAP)																				
4.1) Upgrades	A		-	-	-	-	-	0.508	-	-	0.346	-	-	1.152	-	-	4.000	-	-	5.152
4.2) Prior Years Cumulative Funding	A		-	-	6,296.296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Mine Resistant Ambush Protected (MRAP)			-	-	6,296.296	-	-	0.508	-	-	0.346	-	-	1.152	-	-	4.000	-	-	5.152
5) COUNTER RCIED ELECTRONIC WARFARE (USMC CREW)																				
5.1) CVRJ Augmentation Program	A		-	-	-	-	-	-	-	-	75.000	-	-	-	-	-	-	-	-	-
Subtotal: 5) COUNTER RCIED ELECTRONIC WARFARE (USMC CREW)			-	-	0.000	-	-	-	-	-	75.000	-	-	-	-	-	-	-	-	-
7) Prior Years Cumulative Funding																				
7.1) Other Prior Year	A		-	-	28.925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) Prior Years Cumulative Funding			-	-	28.925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	6,460.081	-	-	5.165	-	-	110.321	-	-	27.240	-	-	21.000	-	-	48.240

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

**Footnotes:**

<sup>(1)</sup> Various tool kits are procured. EOD tool kits include CBNRE kits, Search kits, Tech kits, Tool kits, SL3 kits, GO kits, and IED kits. FY18 base and OCO will procure sensor detectors, video fiber optic scopes, Improvised Explosive Devices (IED)/Weapons of Mass Destruction (WMD) diagnostic kits and fusion optics.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 2: Materials Handling Equipment							<b>P-1 Line Item Number / Title:</b> 6438 / Physical Security Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206313M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	232.029	30.228	37.723	53.477	0.000	53.477	29.737	23.310	19.660	67.330	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	232.029	30.228	37.723	53.477	0.000	53.477	29.737	23.310	19.660	67.330	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>232.029</b>	<b>30.228</b>	<b>37.723</b>	<b>53.477</b>	<b>0.000</b>	<b>53.477</b>	<b>29.737</b>	<b>23.310</b>	<b>19.660</b>	<b>67.330</b>	<b>Continuing</b>	<b>Continuing</b>
<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:**

Physical Security Systems provide systematic, uniform technological solutions to manpower intensive security requirements. Systems are used at bases and stations protecting our most important assets vital to operations - people, flight lines, classified information, Arms, Ammunition, and Explosives (AA&E), shore lines, open dessert areas, critical assets and infrastructure and providing constant, vigilant capabilities that control and restrict access and provide notification of actual and attempted unauthorized intrusion. Mass Notification System (MNS) provides immediate notice and warning to personnel living and working aboard our bases and stations in the event of security breaches via interior and exterior speaker systems, telephones and computers in the event of 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, installation, and facility automated access control and tracking capabilities. These systems increase efficiency/effectiveness of available security manpower and improve security and safety at installation perimeter, flight line, restricted area, facility entry points and is now expanding to meet installation access control requirements. Ground based radars support wide areas aboard Marine Corps installations such as expansive waterways, open airfields and dessert areas (improved assessment at long distances) allowing 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 facilities (MILCONs), 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/Video Teleconferencing Systems and other industrial equipment such as recycling and pulping systems, warehouse conveyor systems, and heavy maintenance equipment.

Identity Dominance System-MC (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 in accordance with current MAGTF policy. The primary mission of IDS-MC is to provide the MAGTF with the means to identify persons encountered in the battlespace. While IDS-MC is not an intelligence analysis system, it does provide identification information in support of military intelligence and law enforcement operations 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, law enforcement, 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. IDS will subsume the Biometrics Automated Toolset (BAT). The total AAO of 804 is required for training facilities and eleven battalion-sized elements.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 2: Materials Handling Equipment		<b>P-1 Line Item Number / Title:</b> 6438 / Physical Security Equipment
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206313M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>G-BOSS is an expeditionary, ground-based, self-contained, multi-spectral sensor-oriented, persistent surveillance system used to observe, collect, detect, identify, classify, track, and report on contacts, objects of interest, and assessed threats twenty-four hours a day utilizing a fused video and sensor data display. System variants will allow mobility, transportability, scalability and modularity, and will be capable of independent employment or as part of a network. All G-BOSS variants may be integrated into mutually supporting, closed networks. G-BOSS funding transitions to BLI 4747 in FY18.</p> <p>Utilities provide essential support to facilities for performing installation missions. Utilities PMC funding provides the initial hardware and equipment to establish an enterprise-wide cybersecure network operating environment for the control systems that operate our utilities and the facilities systems that deliver utilities to facilities. Without this cybersecure environment, our utilities and facilities will remain vulnerable to attack that could damage or deny the use of our installations or facilities to provide mission support. This effort answers the DoD mandate (OASD Memorandum 31 Mar 2016 to implement cybersecurity controls on the most critical facility-related control systems by the end of FY19, referencing DoDI 8500.01, Cybersecurity, Mar 2014). To provide the cybersecure network, the hardware and equipment will be used to support the buildout of the Building and Utilities Control Systems (BUCS) Enclaves. The enclaves will be established within Marine Corps facilities already designated for housing IT assets. The enclaves will provide capabilities such as a resilient isolated network for the various BUCS to include increased security controls for high risk activities such as vendor or contractor maintenance, repair, or expansion of systems; consistent implementation of security controls across BUCS; comprehensive passive and active monitoring, including inheritance of security and monitoring services from the servicing Network Operations and Security Center (NOSC); increased breach isolation capabilities; patching and tech refreshes; secure sharing of control system and metering data with business systems for analysis; and to reduce total hardware count and software count, resulting in lower life cycle cost and reduced threat surface.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 2: Materials Handling Equipment						<b>P-1 Line Item Number / Title:</b> 6438 / Physical Security Equipment				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206313M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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				- / 232.029	- / 30.228	- / 37.723	- / 53.477	- / -	- / 53.477
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 232.029</b>	<b>- / 30.228</b>	<b>- / 37.723</b>	<b>- / 53.477</b>	<b>- / 0.000</b>	<b>- / 53.477</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										
<p><b>Justification:</b> FY18 Base Appropriation Request: \$53.477M</p> <p>IDS-MC \$0.498M: Supports the required remanufacture of the SEEK II handheld hardware repurposed for IDS-MC, which provides identification information, which provides identification information in support of military intelligence and law enforcement operations 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, law enforcement, 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.</p> <p>Collateral Equipment \$41.532M: Funds initial outfitting (one time procurement) of items like mass notification systems, intrusion detection systems, closed circuit TVs, passive optical networks, internal grounding systems, voice over internet telephones, switches, routers, uninterrupted power supplies, audio visual, and video teleconferencing suites.</p> <p>The increase of \$21.531M from FY17 to FY18 is due to the number and type of projects that are currently under construction and are coming to completion in FY18. These projects include but are not limited to; Townsend Bombing Range Expansion, Camp Pendleton Communication Complex, Joint Strike Force Hangar at MCAS Miramar, Unmanned Aircraft System Facility at MCAS Cherry Point, Radar Air Traffic Control Facility at MCAS New River, Aircraft Hangar Facility at MCB Hawaii, and Simulator Control Facility at Camp Lejeune. Without equipment, the buildings may not be usable for their intended purpose after construction.</p> <p>Installation Security Systems \$7.447M: Funds the procurement of physical security systems and program initiatives supporting flight line security, waterside/shoreline security, protection of classified material storage areas, Arms, Ammunition &amp; Explosives (AA&amp;E) and other critical assets. Funds will support the enhancement of command and control systems for the Marine Corps Expeditionary Security System (MCESS). As well as required upgrades to the family of systems to maintain compliance with DoD requirements to deploy an enterprise access control system capable of interfacing with DoD databases such as Defense Enrollment Eligibly Reporting System (DEERS) and other federal government authoritative databases. This funding also supports Defense Policy Review Initiatives (DPRI) for Guam, Okinawa, Iwakuni. An additional \$6.5M was received in FY 17 due to the implementation of the installation physical access control systems approval.</p> <p>The decrease in funding of \$9.779M from FY17 to FY18 is due to reduced requirements for CCTV/data recording devices at installations.</p> <p>Utilities \$4.000M: Funds the procurement of hardware and equipment to support the buildout of the Building and Utilities Control Systems (BUCS) Enclaves at 4 Regional Commands and 15 installations. The increase in funding of \$4.000M in FY17 to FY18 is due to program implementation beginning in FY18. FY18 will be the only year of PMC funding for these efforts under the Utilities program, as all BUCS requirements will transition to the newly-created Facilities Related Control Systems (FRCS) program beginning in FY19.</p> <p>OCO: FY 2018 Overseas Contingency Operations (OCO) Request: N/A</p>										

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<b>Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy</b>																<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 06 / 2								<b>P-1 Line Item Number / Title:</b> 6438 / Physical Security Equipment								<b>Aggregated Items Title:</b> Physical Security Equipment			

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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	A		-	-	118.842	-	-	8.669	-	-	20.001	-	-	41.532	-	-	-	-	-	41.532
Subtotal: 1) Collateral Equipment			-	-	118.842	-	-	8.669	-	-	20.001	-	-	41.532	-	-	-	-	-	41.532
2) Installations Security Equipment																				
2.1) Installation Security Equipment	A		-	-	101.324	-	-	10.713	-	-	17.226	-	-	7.447	-	-	-	-	-	7.447
Subtotal: 2) Installations Security Equipment			-	-	101.324	-	-	10.713	-	-	17.226	-	-	7.447	-	-	-	-	-	7.447
3) Identity Dominance System - Marine Corps (IDS-MC)																				
3.2) Software Support	A		-	-	-	-	-	2.693	-	-	0.496	-	-	0.498	-	-	-	-	-	0.498
Subtotal: 3) Identity Dominance System - Marine Corps (IDS-MC)			-	-	0.000	-	-	2.693	-	-	0.496	-	-	0.498	-	-	-	-	-	0.498
4) Ground-Based Operational Surveillance System (G-BOSS)																				
4.1) G-BOSS Integration Support	A		-	-	-	-	-	8.153	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Ground-Based Operational Surveillance System (G-BOSS)			-	-	0.000	-	-	8.153	-	-	-	-	-	-	-	-	-	-	-	-
5) Utilities																				
5.1) Utilities	A		-	-	-	-	-	-	-	-	-	-	-	4.000	-	-	-	-	-	4.000
Subtotal: 5) Utilities			-	-	0.000	-	-	-	-	-	-	-	-	4.000	-	-	-	-	-	4.000
6) Prior Year Cumulative Funding																				
6.1) Prior Year Cumulative Funding	A		152,089.74	78	11.863	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) Prior Year Cumulative Funding			-	-	11.863	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	232.029	-	-	30.228	-	-	37.723	-	-	53.477	-	-	-	-	-	53.477

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

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 2: Materials Handling Equipment							<b>P-1 Line Item Number / Title:</b> 6441 / Garrison Mobile Eng Equip (GMEE)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	139.958	1.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	141.363
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	139.958	1.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	141.363
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>139.958</b>	<b>1.405</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-</b>	<b>141.363</b>
<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:**  
 Command Support Equipment - Provides for the procurement/replacement of equipment such as Class 3 (Non-industrial) and Class 4 (Industrial) equipment to support the operation and mission of United States Marine Corps ground bases, air stations and districts for existing facilities.

Garrison Mobile Engineer Equipment (GMEE) - The Garrison Mobile Engineering Equipment (GMEE) program is a centrally-managed PMC 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 PMC program for the procurement of a portfolio of equipment for replacement of equipment such as forklifts, warehouse cranes and platform trucks, to include Rough Terrain Container Handler (RTCH).

Funding for this BLI moves to BLI 6544 beginning in FY 2017.

**Justification:**  
 Funding for this BLI moves to BLI 6544 beginning in FY 2017.

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							<b>P-1 Line Item Number / Title:</b> 6532 / Training Devices					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	854.029	44.359	42.458	76.185	0.000	76.185	54.522	50.179	55.429	59.374	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	854.029	44.359	42.458	76.185	0.000	76.185	54.522	50.179	55.429	59.374	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>854.029</b>	<b>44.359</b>	<b>42.458</b>	<b>76.185</b>	<b>0.000</b>	<b>76.185</b>	<b>54.522</b>	<b>50.179</b>	<b>55.429</b>	<b>59.374</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	0.048	0.049	0.050	-	0.050	0.051	0.052	0.053	0.054	Continuing	Continuing
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) upgrades Combined Arms Staff Trainer (CAST) at the 5 Approved Acquisition Objective (AAO) locations to provide a more immersive training opportunity for Marine Air Ground Task Force (MAGTF) staff elements in the areas of fire support employment, coordination, and integration. The upgraded system will support Marine Expeditionary Battalion (MEB) level training and to effectively integrate current and emerging Communications Command Control Computers and Intelligence (C4I) systems. These funds will also support the procurement of system hardware.

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 C2 TECOE is the primary Command and Control (C2) training venue 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.

FAMILY OF COMBAT VEHICLE TRAINING SYSTEM (FCVTS) consists of the active duty Marine Corps' Combat Convoy Simulator (CCS) and the USMC Reserves' Virtual Combat Convoy Trainer - Reconfigurable Vehicle Simulator (VCCT-RVS). 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. Procurement funding supports technology refreshes to the system.

FORCE ON FORCE TRAINING SYSTEMS (FoFTS) provides realistic, non-live fire capabilities to perform force-on-force training and supports realistic, live fire force-on-target training. The program develops, fields and supports a suite of tactical engagement capabilities that enhance Marine Air Ground Task Force (MAGTF) 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 Instrumented-Tactical

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy		Date: May 2017
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		
<p>Engagement Simulation System (I-TESS) 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. Funding supports procurement of company sets of I-TESS training systems required to meet Authorized Acquisition Objective (AAO).</p> <p>IMMERSIVE TRAINING RANGE SUPPORT (ITRS) [FORMERLY SQUAD IMMERSIVE TRAINING ENVIRONMENT (SITE)] 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.</p> <p>INDOOR SIMULATED MARKSMANSHIP TRAINER (ISMT) is a three (3) 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, M240G, M240B, M203, MK19, MP5, M249 SAW, M870 12 gauge shotgun, SMAW, M224 60mm Mortar, M252 81mm Mortar, M4A1, Joint Services Combat Shotgun (JSCS, M67 Infantry Automatic Rifle (IAR), M32 Multi-shot Grenade Launcher, and the M72 Light Anti-Armor Weapon (LAW).</p> <p>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 Marine Expeditionary Force (MEF) and Joint Task Force (JTF).</p> <p>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</p> <p>MARINE CORPS DISTANCE LEARNING Program (MCDLP) - provides the MarineNet E-Learning Infrastructure that enables Marines to receive training and education via interactive media, when and where training is needed. DL contributes to the Marine Corps' operational readiness by providing Marines with access to required military occupational specialty (MOS), ommon 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.</p> <p>RANGES AND TRAINING AREA MANAGEMENT (RTAM) [FORMERLY RANGE MODERNIZATION/TRANSFORMATION (RM/T)] Baseline program 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, and force-on-force training. Major system components of modernization include Military Operations on Urbanized Terrain (MOUT) facilities, inter-active targetry, 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, live-fire coordination in support of maneuver, and logistics operations in support of units at and above company level. Deploying operational units need access to instrumented, non live-fire and live-fire capable MOUT training facilities, urban sniper training capabilities, convoy operation/reaction course 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 Marine Air Ground Task Force (MAGTF) and deploying to the combat theaters. Additionally lessons learned from Operation Iraqi Freedom (OIF) 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.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		<b>P-1 Line Item Number / Title:</b> 6532 / Training Devices
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206623M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>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 tactical ordnance on selected target 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.</p> <p>TRAINING SIMULATION SUPPORT (TSS) program encompasses the procurement of low density, minor (low cost) MAGTF ground training equipment, simulators and simulations. These devices such as medical training kits, climbing walls, weapons models and mockups, enhance basic occupational and combat skills across the wide spectrum of tactics, techniques, procedures and proficiency. TSS for the most part is for commercial/service non-developmental training devices, used by Marine Corps Schools of Infantry, Marine Corps Martial Arts Program, Recruit Depots, operating forces, bases, stations and support combat readiness. Funding provides capability for the USMC to conduct critical OCO training and participate as a full-fledged member of several Joint programs.</p> <p>This line item includes funding specified for Defense Policy Review Initiative (DPRI) within the details above.</p>		

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property						<b>P-1 Line Item Number / Title:</b> 6532 / Training Devices				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B				<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206623M			
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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				- / 854.029	- / 44.359	- / 42.458	- / 76.185	- / -	- / 76.185
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 854.029</b>	<b>- / 44.359</b>	<b>- / 42.458</b>	<b>- / 76.185</b>	<b>- / 0.000</b>	<b>- / 76.185</b>
<small>*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.</small>										
<small>Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.</small>										
<p><b>Justification:</b></p> <p>Overall Training Devices Accomplishments: Baseline requests provide for seamless training environments that continue to enhance training capabilities, modernize major USMC base and station live training ranges, provide enhanced after action review with ground truth feedback, realistic representation of opposing forces (OPFOR) and enhanced range and exercise command and control capabilities. Without these training devices, Marines will not be properly trained and prepared for combat when deployed to combat theaters.</p> <p>FY2018 Base Appropriation Request: \$76.185M</p> <p>COMBINED ARMS COMMAND AND CONTROL TRAINER UPGRADE SYSTEM (CACCTUS) \$4.659M will provide necessary hardware components and installation in support of the training systems at all 5 authorized sites and the supporting test facility. The \$1.144M increase in funds from FY17 to FY18 supports additional hardware needed for re-architecture/modernization at all 5 sites.</p> <p>COMMAND and CONTROL TRAINING and EDUCATION CENTER of EXCELLENCE (C2 TECOE) \$.516M will provide the procurement funding support for equipment refresh and procurement of new training systems at the five (5) MAGTF Integrated Systems Training Centers (MISTCs). The \$.0112M increase in funds from FY17 to FY18 supports additional C2 Ops Course Computer procurement.</p> <p>DEPLOYABLE VIRTUAL TRAINING ENVIRONMENT (DVTE) \$2.538M will provide procurement funding support for the new phase of the hardware refresh of DVTE suites which will be accomplished over the next 4 years (2017 to 2020). The \$.309M increase in funds from FY 17 to FY18 supports escalating visual system performance requirements brought on by the growth in Live/Virtual/Constructive (LVC) integrated training events and EDVTE software performance enhancements.</p> <p>FORCE ON FORCE TRAINING SYSTEM (FoFTS) \$.7456M will allow procurement of additional sets of Instrumented-Tactical Engagement Simulation Systems (I-TESS) to support large scale battalion and joint level training exercises with enhanced instrumentation systems for Armored vehicles and Crew Served Weapons. The increase of \$.4056M from FY17 to FY18 is to procure additional Instrumented-Tactical Engagement Simulation System (I-TESS) sets of equipment required to conduct Battalion and Joint level Force on Force exercises.</p> <p>IMMERSIVE TRAINING RANGE SUPPORT (ITRS) [FORMERLY SQUAD IMMERSIVE TRAINING ENVIRONMENT (SITE)] \$25.012M represents a new start. The receipt of funds in FY18 will provide an outdoor Infantry Immersive Trainer (IIT) for increased IIT capacity at Camp Lejeune, NC to address II MEF and east coast Security Force Battalion operational unit throughput deficiencies.</p> <p>INDOOR SIMULATED MARKSMANSHIP TRAINER (ISMT) \$8.158M will provide for the hardware refresh procurement of simulated weapons such as AT4, M2 .50 Cal, M9, M16A4, M16A2 Fully Sensored, M240G, M240B, M203, MK19, MP5, M249 SAW, M870 12 gauge shotgun, SMAW, M224 60mm Mortar, M252 81mm Mortar, M4A1, Joint Services Combat Shotgun (JSCS, M67 Infantry Automatic Rifle (IAR), M32 Multi-shot Grenade Launcher, and the M72 Light Anti-Armor Weapon (LAW). Decrease of \$.5401M is attributed to the funds received in FY17 with the Request for Additional Appropriations (RAA).</p> <p>MARINE AIR GROUND TASK FORCE (MAGTF) TACTICAL WARFARE SIMULATION (MTWS) \$.904M will provide hardware/software refresh IAW four-year refresh cycle. Increase from FY 17 to FY18 is due to technical Budget Line Item (BLI) change requirement from BLI 4630.</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		<b>P-1 Line Item Number / Title:</b> 6532 / Training Devices
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206623M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>MARINE CORPS DISTANCE LEARNING PROGRAM (MCDLP) \$2.696M will provide hardware, technical support and testing for the disaster recovery site for MarineNet and purchase yearly software license renewals. Increase from FY17 to FY18 is due to technical Budget Line Item (BLI) change requirement from BLI 4630.</p> <p>RANGES AND TRAINING AREA MANAGEMENT [FORMERLY RANGE MODERNIZATION/TRANSFORMATION (RM/T) \$19.481M will provide funding for continued Integrated Range Status System (IRSS) re-capitalization and will allow for procurement of training systems and devices that support multiple ranges at various locations such as inter-active targetry, battlefield effects simulators, individual and vehicle tracking systems, and aviation tracking systems for live fire and non-live fire training ranges at the MAGTF Training Center (MAGTFTC) and home station commands which is based on priorities established by Training &amp; Education Command Range &amp; Training Area Management division. The \$4.715M increase in funds from FY17 to FY18 provides funding support for electronic warfare training.</p> <p>SUPPORTING ARMS VIRTUAL TRAINER (SAVT) \$4.212M will provide the start of procurement funding to support the technical refresh to be accomplished over two years (2018 and 2019) at all sites including the test berth. The \$.151M increase from FY17 to FY18 supports additional technical refresh computers and image generators. Migrating to improved JSAF Enhancements and Windows 10.</p> <p>TRAINING SIMULATIONS SUPPORT (TSS) \$0.553M encompasses the procurement of low density, minor (low cost) MAGTF ground training equipment, simulators and simulations. These devices such as medical training kits, bleeding simulation kits, weapons models and mockups, enhance basic occupational and combat skills across the wide spectrum of tactics, techniques, procedures and proficiency. Funding provides capability for the USMC to conduct critical training and participate as a full-fledged member of several Joint programs. FY18 will provide continued support for a determined combination of minor low cost ground training equipment, simulators and simulations. The funding for the TSS line (460910) is level throughout the FYDP and the small increases each year (average of 3%) account for annual inflation.</p> <p>OCO: FY2018 Overseas Contingency Operations (OCO): N/A</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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	A		-	-	38.658	-	-	0.711	-	-	3.515	-	-	4.406	-	-	-	-	-	4.406
1.2) CACCTUS Peripherals	A		-	-	-	-	-	0.150	-	-	-	-	-	0.253	-	-	-	-	-	0.253
1.3) CACCTUS Software Licenses	A		-	-	0.110	-	-	0.140	-	-	-	-	-	-	-	-	-	-	-	-
1.4) CACCTUS Hardware Support Services	A		-	-	0.740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) CACCTUS NAVAIR Database Correlation	A		-	-	0.248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) CACCTUS			-	-	39.756	-	-	1.001	-	-	3.515	-	-	4.659	-	-	-	-	-	4.659
2) C2TECOE																				
2.1) C2TECOE - Lab Equipment			-	-	2.684	-	-	0.287	-	-	0.295	-	-	0.416	-	-	-	-	-	0.416
2.2) C2TECOE - Training Systems			-	-	0.681	-	-	0.100	-	-	0.100	-	-	0.100	-	-	-	-	-	0.100
Subtotal: 2) C2TECOE			-	-	3.365	-	-	0.387	-	-	0.395	-	-	0.516	-	-	-	-	-	0.516
3) DVTE																				
3.1) DVTE Phase III Hardware Refresh	A		-	-	1.270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2) DVTE Technical Refresh			-	-	-	-	-	-	-	-	2.229	-	-	2.538	-	-	-	-	-	2.538
Subtotal: 3) DVTE			-	-	1.270	-	-	-	-	-	2.229	-	-	2.538	-	-	-	-	-	2.538
4) FoFTS																				
4.1) FoFTS I-TESS Training Systems	A		-	-	-	-	-	-	-	-	3.400	-	-	7.456	-	-	-	-	-	7.456
Subtotal: 4) FoFTS			-	-	0.000	-	-	-	-	-	3.400	-	-	7.456	-	-	-	-	-	7.456
5) (FCVTS) Family of Combat Vehicle Training Sys																				
5.1) CCS Desktop Hardware Purchase	A		-	-	-	-	-	17.000	-	-	-	-	-	-	-	-	-	-	-	-
5.2) CCS COTS Software Purchase	A		-	-	-	-	-	1.000	-	-	-	-	-	-	-	-	-	-	-	-
5.3) CCS Peripheral Hardware Purchase	A		-	-	-	-	-	3.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) (FCVTS) Family of Combat Vehicle Training Sys			-	-	0.000	-	-	21.000	-	-	-	-	-	-	-	-	-	-	-	-
6) ISMT																				
6.1) ISMT Hardware Refresh (multiple	A		-	-	1.271	-	-	14.272	-	-	13.559	-	-	8.158	-	-	-	-	-	8.158

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
locations and configurations)																				
6.3) ISMT Hardware Labor Support	A		-	-	0.190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.4) ISMT Hardware Contractor Logistics Support	A		-	-	0.239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) ISMT			-	-	1.700	-	-	14.272	-	-	13.559	-	-	8.158	-	-	-	-	-	8.158
7) MTWS																				
7.1) MTWS Hardware and Software Refresh	A		-	-	-	-	-	-	-	-	-	-	-	0.904	-	-	-	-	-	0.904
Subtotal: 7) MTWS			-	-	0.000	-	-	-	-	-	-	-	-	0.904	-	-	-	-	-	0.904
8) MCDLP																				
8.1) MCDLP NAVAIR WR - Support	A		-	-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.500
8.2) MCDLP NAVAIR Hardware Contract	A		-	-	-	-	-	-	-	-	-	-	-	1.259	-	-	-	-	-	1.259
8.3) MCDLP MITRE Test Programs	A		-	-	-	-	-	-	-	-	-	-	-	0.937	-	-	-	-	-	0.937
Subtotal: 8) MCDLP			-	-	0.000	-	-	-	-	-	-	-	-	2.696	-	-	-	-	-	2.696
9) Ranges and Training Area Management																				
9.1) RM/T Multiple Instrum, MOUT, Targetry and BES TNG SYS and Range Re-Cap			-	-	293.012	-	-	6.143	-	-	11.792	-	-	18.882	-	-	-	-	-	18.882
9.2) Simulated Weapon Systems (MK19 & M41)	A		-	-	2.721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.3) RM/T Support	A		-	-	0.762	-	-	0.615	-	-	0.650	-	-	0.562	-	-	-	-	-	0.562
9.4) IRSS Re-Capitalization	A		-	-	-	-	-	0.392	-	-	2.324	-	-	-	-	-	-	-	-	-
9.5) RMT Ranges Instrumentation (GUAM)	A		-	-	-	-	-	0.031	-	-	-	-	-	0.037	-	-	-	-	-	0.037
Subtotal: 9) Ranges and Training Area Management			-	-	296.495	-	-	7.181	-	-	14.766	-	-	19.481	-	-	-	-	-	19.481
10) SAVT																				
10.1) SAVT Hardware Refresh	A		-	-	-	-	-	-	-	-	2.096	-	-	2.218	-	-	-	-	-	2.218
10.2) SAVT Hardware Refresh Labor Support/CLS	A		-	-	-	-	-	-	-	-	0.765	-	-	0.794	-	-	-	-	-	0.794

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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)
10.3) SAVT - Post Deployment Software Support	A		-	-	-	-	-	-	-	-	1.200	-	-	1.200	-	-	-	-	-	1.200
Subtotal: 10) SAVT			-	-	0.000	-	-	-	-	-	4.061	-	-	4.212	-	-	-	-	-	4.212
11) IMMERSIVE TRAINING RANGE SUPPORT (ITRS)																				
11.1) ITRS IIT NAVFAC Training Sys Equipment Tasks	B		-	-	-	-	-	-	-	-	-	-	-	12.210	-	-	-	-	-	12.210
11.2) ITRS IIT Range Instrumentation	A		-	-	-	-	-	-	-	-	-	-	-	9.176	-	-	-	-	-	9.176
11.3) ITRS IIT Atmospherics	A		-	-	-	-	-	-	-	-	-	-	-	3.626	-	-	-	-	-	3.626
Subtotal: 11) IMMERSIVE TRAINING RANGE SUPPORT (ITRS)			-	-	0.000	-	-	-	-	-	-	-	-	25.012	-	-	-	-	-	25.012
12) TSS																				
12.1) Training Simulation Support (TSS) Training Aids			-	-	12.439	-	-	0.518	-	-	0.533	-	-	0.553	-	-	-	-	-	0.553
Subtotal: 12) TSS			-	-	12.439	-	-	0.518	-	-	0.533	-	-	0.553	-	-	-	-	-	0.553
13) Prior Years Cumulative Funding																				
13.1) Other Prior Year			-	-	499.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 13) Prior Years Cumulative Funding			-	-	499.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	854.029	-	-	44.359	-	-	42.458	-	-	76.185	-	-	-	-	-	76.185

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



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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							<b>P-1 Line Item Number / Title:</b> 6543 / Container Family					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	26.053	1.154	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	27.207
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	26.053	1.154	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	27.207
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>26.053</b>	<b>1.154</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>-</b>	<b>27.207</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> The Container Family provides Marine Corps Operating Forces with a fully intermodal transport capability emphasizing dimensional standardization and International Organization for Standardization compatibility. Containers consist of: Pallet (PALCONs), Quadruple (QUADCONs), Quadruple with Roll-up door (QUADCON RUD) and Joint Modular Intermodal Container (JMIC). Containers will replace locally assembled prefabricated wooden mount out boxes and flat box pallets. The containers will be used to support storage and movement of organizational property and consumable supplies; provide field, garrison and shipboard warehousing; and facilitate ship-to-shore movement. The Joint Modular Intermodal Container (JMIC) provides efficient, seamless, and visible movement of supplies and unit equipment throughout the transportation and distribution systems.  Funding for Container Family moves to BLI 6670 beginning in FY 2017.												
<b>Justification:</b> FY 2018 Base Appropriation: \$0.0M  Funding for Container Family moves to BLI 6670 beginning in FY 2017.												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							<b>P-1 Line Item Number / Title:</b> 6544 / Family of Construction Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	169.559	9.306	32.815	26.286	0.000	26.286	24.943	29.811	31.185	29.898	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	169.559	9.306	32.815	26.286	0.000	26.286	24.943	29.811	31.185	29.898	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (<i>\$ in Millions</i>)</b>	<b>169.559</b>	<b>9.306</b>	<b>32.815</b>	<b>26.286</b>	<b>0.000</b>	<b>26.286</b>	<b>24.943</b>	<b>29.811</b>	<b>31.185</b>	<b>29.898</b>	<b>Continuing</b>	<b>Continuing</b>
<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> )	-	-	0.051	0.052	-	0.052	0.053	0.054	0.055	0.056	Continuing	Continuing
Flyaway Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost ( <i>\$ in Dollars</i> )	-	-	-	-	-	-	-	-	-	-	-	-

**Description:**

Family of Construction Equipment (FCE) provides for the replacement and Service Life Extension Program (SLEP) of Marine Corps construction equipment. Funding supports equipment to conduct engineer missions such as constructing countermobility obstacles, building pioneer roads, establishing survivability positions, development of expeditionary airfields and general engineering support to forward operating bases and lodgment areas. Airfield Damage Repair Kit (ADR) - The Marine Corps requires an Airfield Damage Repair (ADR) Kit capable of creating useable landing surfaces by new construction or repair of existing facilities. This mission has been repeatedly tested during recent operations in Afghanistan and Iraq and will be required in future operations. The ADR Kit must take advantage of modern development in construction equipment and materials, must be easily deployable, flexible enough to work in all geographic locations and environments, and be able to quickly repair craters and spalls of all sizes. The required capability for ADR Kits is to support the repairs for (6) 10-foot diameter concrete craters and (15) 10-foot diameter asphalt craters as well as 45 spalls. Also provides for Expeditionary Matting Soil Stabilization System (EMS3) which is modular, comprised of a kit with interchangeable parts which could be assembled into different configurations to support mission specific tasks. Those tasks range from improving mobility across beach landings and making passable paths along supply routes. This EMS3 supports operations in temperate, cold weather, and desert environments.

Family of Material Handling Equipment (FMHE) line is a roll-up line that provides 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.

Command Support Equipment - Provides for the procurement/replacement of equipment such as Class 3 (Non-industrial) and Class 4 (Industrial) equipment with system unit cost of \$250K or greater, to support the operation and mission of United States Marine Corps ground bases, air stations and districts for existing facilities.

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, to include Rough Terrain Container Handler (RTCH).

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy							Date: May 2017			
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			
Line Item MDAP/MAIS Code: N/A										
Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.984	31.649	23.662	-	23.662	22.630	27.448	28.775	27.439
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.322	1.166	2.624	-	2.624	2.313	2.363	2.410	2.459
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.306	32.815	26.286	-	26.286	24.943	29.811	31.185	29.898

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy								<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property						<b>P-1 Line Item Number / Title:</b> 6544 / Family of Construction Equipment				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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				- / 169.559	- / 9.306	- / 32.815	- / 26.286	- / -	- / 26.286
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 169.559</b>	<b>- / 9.306</b>	<b>- / 32.815</b>	<b>- / 26.286</b>	<b>- / 0.000</b>	<b>- / 26.286</b>
*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.										
<p><b>Justification:</b> FY2018 Base Appropriation Request: \$26.286M (ACTIVE: \$23.662M/RESERVE: \$2.624M)</p> <p>Family of Construction Equipment - \$9.106M (ACTIVE: \$7.833M/RESERVE: \$1.273M): Funds continue to fund the procurement of the Airfield Damage Repair Kits, Expeditionary Matting Soil Stabilization System (EMS3) and Integrated Logistics Support for the Family of Construction Equipment programs. The ADR kit is capable of creating expedient repairs to useable landing surfaces by new construction or repair of existing facilities. ADR Kit(s) have the capability to support repairs for (6) 10-foot diameter concrete craters and (15) 10-foot diameter asphalt craters as well as 45 spalls. Funding will also procure the new Expeditionary Matting Soil Stabilization System (EMS3) which is modular, comprised of a kit with interchangeable parts which could be assembled into different configurations to support mission specific tasks. Those tasks range from improving mobility across beach landings and making passable paths along supply routes. This EMS3 supports operations in temperate, cold weather, and desert environments.</p> <p>Family of Material Handling Equipment - \$11.546M (ACTIVE: \$10.195M/RESERVE: \$1.351M): Funds will procure the Tractor, Rubber Tires, and Articulated Steering, Multiple Purpose (TRAM) SLEP as well as Rough Terrain Container Handlers (RTCH) SEP to replace non-operational and over-aged forklifts, required to support the operation and mission of the USMC Bases and Stations. Funding increased from FY17 to FY18 by \$8.130M which supports the initiation of Service Life Extension Programs for the Rough Terrain Container Handler and the Tractor, Rubber Tires and Articulated Steering, Multi-purpose tractor.</p> <p>Material Handling Equipment - \$1.710M Funding continues to be used to procure a portfolio of warehouse tractor forklifts, narrow aisle forklifts, various sizes (4,000 to 20,000 lbs.) forklifts, warehouse cranes and platform trucks to include Rough Terrain Container Handlers (RTCH) to replace non-operational and over-aged forklifts, required to support the operation and mission of the USMC Bases and Stations. Being underfunded in prior fiscal years, installations are forced to increase maintenance costs (local &amp; O&amp;MMC) due to utilization &amp; extended operational life.</p> <p>Garrison Mobile Engineering Equipment \$3.453M - Funding continues to be used to procure commercial engineering equipment to replace non-operational and over-aged light, medium or heavy duty tractors, road and runway sweepers, loaders, excavators, bulldozers, and scrapers required to comply with mandates and support the operation and mission of the USMC Bases and Stations. Unfunded requirements results in further replacement delays of equipment needed to perform transportation and maintenance services at Marine Corps activities for use in garrison.</p> <p>Command Support Equipment - \$0.471M Funding will support the replacement of Open Water Spill Response Equipment for MCB Hawaii. Increase of \$471K from FY17 to FY18 is due to FY17 realignment of funds to support the Airfield Damage Repair Kit requirement below.</p> <p>Line Item funding decrease from FY17 to FY18 by (\$6.529) due to an adjustment made to satisfy an urgent FY17 requirement for the Airfield Damage Repair Kit within the Family of Construction Equipment.</p> <p>OCO: FY2018 Overseas Contingency Operations (OCO) Request: N/A</p>										

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy																Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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	A		450,000.00	34	15.300	-	-	1.689	-	-	-	-	-	-	-	-	-	-	-	-	
1.2) Marine Corps Tactical Weld Shop	A		181,880.00	25	4.547	129,000.00	48	6.192	129,000.00	42	5.418	-	-	-	-	-	-	-	-	-	
1.3) Marine Corps Tactical Weld Shop-Reserves	A		-	-	0.900	132,200.00	10	1.322	-	-	-	-	-	-	-	-	-	-	-	-	
1.5) Medium Crawler Tractor SLEP-Reserves	A		-	-	-	-	-	-	-	-	0.554	-	-	1.273	-	-	-	-	-	1.273	
1.7) Family of Construction Equipment Integrated Logistics Support	A		-	-	13.677	-	-	0.103	-	-	5.474	-	-	0.532	-	-	-	-	-	0.532	
1.8) Airfield Damage Repair Kit	A		-	-	-	-	-	-	-	-	13.915	-	-	5.621	-	-	-	-	-	5.621	
1.9) Expeditionary Matting Soil Stabilization System	A		-	-	-	-	-	-	-	-	1.000	-	-	1.680	-	-	-	-	-	1.680	
1.10) Prior Years Cumulative Funding	A		-	-	135.135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: 1) Family of Construction Equipment			-	-	169.559	-	-	9.306	-	-	26.361	-	-	9.106	-	-	-	-	-	9.106	
2) Family of Material Handling Equipment																					
2.1) Extendable Boom Forklift Modernization-Crew Protection Kits	A		-	-	-	-	-	-	28,896.42	9	0.260	-	-	-	-	-	-	-	-	-	
2.2) Rough Terrain Container Handler SLEP	A		-	-	-	-	-	-	-	-	-	-	-	1.779	-	-	-	-	-	1.779	
2.3) Tractor Rubber Tired Articulated SLEP	A		-	-	-	-	-	-	-	-	-	-	-	8.416	-	-	-	-	-	8.416	
2.4) Tractor Rubber Tired Articulated SLEP-Reserves	A		-	-	-	-	-	-	-	-	0.612	-	-	1.351	-	-	-	-	-	1.351	
2.5) Material Handling Equipment Integrated Logistics Support	A		-	-	-	-	-	-	-	-	2.544	-	-	-	-	-	-	-	-	-	
Subtotal: 2) Family of Material Handling Equipment			-	-	0.000	-	-	-	-	-	3.416	-	-	11.546	-	-	-	-	-	11.546	
3) Garrison Mobile Engineering Equipment																					
3.1) Garrison Mobile Engineering Equipment	A		-	-	-	-	-	-	-	-	2.007	-	-	3.453	-	-	-	-	-	3.453	

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Exhibit P-40a, Budget Item Justification For Aggregated Items: FY 2018 Navy															Date: May 2017					
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 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 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) Garrison Mobile Engineering Equipment			-	-	0.000	-	-	-	-	-	2.007	-	-	3.453	-	-	-	-	-	3.453
4) Material Handling Equipment																				
4.1) Material Handling Equipment	A		-	-	-	-	-	-	-	-	1.031	-	-	1.710	-	-	-	-	-	1.710
Subtotal: 4) Material Handling Equipment			-	-	0.000	-	-	-	-	-	1.031	-	-	1.710	-	-	-	-	-	1.710
5) Command Support Equipment																				
5.1) Command Support Equipment	A		-	-	-	-	-	-	-	-	-	-	-	0.471	-	-	-	-	-	0.471
Subtotal: 5) Command Support Equipment			-	-	0.000	-	-	-	-	-	-	-	-	0.471	-	-	-	-	-	0.471
Total			-	-	169.559	-	-	9.306	-	-	32.815	-	-	26.286	-	-	-	-	-	26.286

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

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property							<b>P-1 Line Item Number / Title:</b> 6545 / Family of Internally Trans Veh (ITV)					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206623M				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	82.400	18.638	9.654	1.583	0.000	1.583	0.633	0.669	6.691	8.713	-	128.981
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	82.400	18.638	9.654	1.583	0.000	1.583	0.633	0.669	6.691	8.713	-	128.981
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>82.400</b>	<b>18.638</b>	<b>9.654</b>	<b>1.583</b>	<b>0.000</b>	<b>1.583</b>	<b>0.633</b>	<b>0.669</b>	<b>6.691</b>	<b>8.713</b>	<b>-</b>	<b>128.981</b>
<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> )	-	-	-	-	-	-	-	-	-	-	-	-
<p><b>Description:</b></p> <p>The Family of Internally Transportable Vehicles (FITV) are light weight and internally transportable in the V-22, CH-53D &amp; CH53E helos. The FITV provides deployed Marine Air-Ground Task Force (MAGTF) and Marine Expeditionary Unit (Special Operations Capable) (MEU SOC) with vehicles which are internally transportable in selected rotary and fixed wing aircraft. The FITV expeditionary vehicles supporting over-the-horizon amphibious operations, irregular warfare and enhanced company operations. The vehicles are fielded to infantry and reconnaissance, Marine Corps Forces Special Operations Command (MARSOC), and artillery batteries as part of the Expeditionary Fire Support System (EFSS). The FITV also provides Special Operations Forces (SOF) with a platform to support their primary and secondary missions. Speed, maneuverability, and the use of cover and concealment are the crew's primary means of survival.</p> <p>The ITV Improvement Initiative (I-Cubed) is an Abbreviated Acquisition Program (AAP) that provides product improvement to the FITV Fleet to address safety and reliability issues. Pre-induction repairs will bring the vehicle to condition code A. The ITV modification kits consist of upgrades such as cable assemblies, occupant restraint system, suspension and drivetrain. Condition code A and the ITV modification kits will maintain or improve readiness, and safety to the fleet.</p> <p>In FY20 the Marine Corps will establish the Internally Transportable Vehicle Replacement (ITV-R) initiative. The ITV-R will begin to replace the current Family of Internally Transportable Vehicles (FITV) and Utility Task Vehicle (UTV).The ITV-R will be a multirole vehicle providing a deployed Special Purpose Marine Air-Ground Task Force (SP MAGTF) and Marine Expeditionary Unit(Special Operations Capable) (MEU (SOC)) with an internally transportable vehicle to support over-the-horizon amphibious operations, irregular warfare and enhanced company operations. It will provide support to the Artillery Expeditionary Fire Support System (EFSS), Reconnaissance, Infantry and Marine Corps Forces Special Operations Command (MARSOC). This capability will be employed by Marine Corps forces they execute heliborne and tiltrotor operations.</p> <p>In FY16, Congress approved an Above Threshold Reprogramming (ATR) to procure Utility Task Vehicle (UTV) to fill a capability gap in motorized logistics sustainment/casualty evacuation (CASEVAC) for Marine Corps infantry units. The UTV provides infantry battalions with a reliable, easily maintained, inexpensive vehicle to support dispersed and disaggregated operations in support of the future concepts outlined in Expeditionary Force-21 (EF-21). This capability will be employed by the helo companies of the MEUs and SP MAGTFs as they execute heliborne and tiltrotor operations. This commercial off the shelf (COTS) solution will mitigate the infantry battalion support gap, with the ability to operate in remote, rural regions where currently fielded ground mobility platforms are unsuitable due to size, weight, and safety concerns.</p> <p><b>Justification:</b> FY 2018 Base Appropriation Request: \$1.583M active</p>												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 3: General Property		<b>P-1 Line Item Number / Title:</b> 6545 / Family of Internally Trans Veh (ITV)
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206623M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>Funding will provide for the pre-induction repairs and the kit installations for the final ITV Improvement Initiative (I-Cubed) vehicles, as well as technical documentation, which provide product improvement to the FITV Fleet to address safety and reliability issues. The decrease of (\$8.071M) from FY17 to FY18 is due to the completion of kit procurements in FY17.</p>		

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Exhibit P-40, Budget Line Item Justification: FY 2018 Navy								Date: May 2017				
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	28.143	5.146	6.326	7.716	0.000	7.716	9.808	10.049	10.246	10.455	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	28.143	5.146	6.326	7.716	0.000	7.716	9.808	10.049	10.246	10.455	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	28.143	5.146	6.326	7.716	0.000	7.716	9.808	10.049	10.246	10.455	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:												
This budget line item includes various procurements such as engineering efforts, engineering change proposals, modifications, and other related items less than \$5 million each.												
Corrosion Prevention and Control (CPAC) Program provides a comprehensive approach to extend the useful life on Marine Corps tactical ground and ground support equipment. The CPAC Program Office is responsible for the governance, oversight and management of both preventive and corrective corrosion control encompassing 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.												
Engineer Mods and Tool Kits funds critical improvements to various pieces of equipment by enhancing their current capabilities and expanding protection from direct and indirect fire by providing specific tool kits, including the specific chest or case to store and transport the tools, to perform specific missions assigned to engineer units, such as carpentry, grubbing or clearing areas with pioneer type tools, destruction/ demolition, masonry, electrical (base camp support), plumbing, etc. including (but not limited to) Construction Shop Kit, Pioneer Platoon Kit, Pioneer Squad Kit, Carpenter Kit, Mason Kit, and tactical weld shop upgrades.												
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. Containers such as Pallet (PALCONS), Quadruple (QUADCONS), Quadruple with Roll-up door (QUADCON RUD) and Joint Modular Intermodal Container (JMIC) are procured. Containers will replace locally assembled prefabricated wooden mount out boxes and flat box pallets. The containers will be used to support storage and movement of organizational property and consumable supplies; provide field, garrison and shipboard warehousing; and facilitate ship-to-shore movement. The Joint Modular Intermodal Container (JMIC) provides efficient, seamless, and visible movement of supplies and unit equipment throughout the transportation and distribution systems.												
Family of Expeditionary Water Systems (FEWS) is a family of systems line that contains items such as the Tactical Water Purification System (TWPS), Lightweight Water Purification System (LWPS), Expeditionary Water Distribution System (EWDS), Platoon Water Purification System (PWPS), Individual Water Purification System (IWPS) as well as all the various water supply support and analysis components and equipment including Six Container (SIXCON) Pump and Tank Modules, Nozzles, Field Laundry Units, Interconnection Sets, Water Packaging Components, Shower Units, Grey Water Recycling, 3k/5k/25k Tanks, Hypocholorination Units, Water Quality Analysis Sets necessary to support the storage, distribution and analysis of potable water. The TWPS produces up to 1,500 gallons per hour (GPH), it is a mobile water treatment system that allows the commander to produce bulk water supplies at battalion and regimental level. The LWPS is a lightweight modular, self-contained system that uses filtration and reverse osmosis technology to produce up to 230 GPHof potable water from fresh, brackish, salt, and nuclear, biological, and chemical (NBC) contaminated water. This capability is necessary to provide safe												

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 06: Engineer and Other Equipment / BSA 4: Other Support						<b>P-1 Line Item Number / Title:</b> 6670 / Items Less Than \$5 Million				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): B			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206624M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
and potable water to company units in an expeditionary environment or in extended company operations. PWPS is a vehicle transported system with a 2 person lift capability. It purifies a minimum of 15 GPH for fresh, brackish, and salt water. IWPS is an individual water purification system that is designed to provide emergency or short term drinking water to the individual Marine from a fresh water source.										
<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.146	5.735	7.634	-	7.634	9.288	9.675	9.865	10.066
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.591	0.082	-	0.082	0.520	0.374	0.381	0.389
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>5.146</b>	<b>6.326</b>	<b>7.716</b>	-	<b>7.716</b>	<b>9.808</b>	<b>10.049</b>	<b>10.246</b>	<b>10.455</b>

**Justification:**  
FY2018 Base Appropriation Request: \$7.716M (ACTIVE: \$7.634M/RESERVE: \$0.082M)

Corrosion Prevention and Control (CPAC) \$0.867M: Continues to fund the procurement of equipment protective covers designed to reduce and/or eliminate the negative effects of corrosion on USMC ground tactical and support equipment, and the replacement of aging covers that have exceeded their expected life cycle to prevent failure in the field. The priority will be to provide equipment covers for equipment at II MEF, MARFORRES, and MARSOC for USMC equipment placed in an administrative staging program to mitigate the negative impacts of corrosion and decrease total ownership costs. Additionally, procurement funding will used to replace aging blast and painting equipment at the Corrosion Repair Facilities (CRF's) located at I MEF, II MEF, and III MEF which are managed by the consolidated CPAC program currently monitoring the health on 92,758 tactical ground and support equipment assets.

Engineer Modification Kits (EMK) \$3.541M: Continues to fund EMK for 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.

Marine Corps Family of Containers (MCFC) \$1.297M: Continues to fund Joint Modular Intermodal Containers. Funding is required to meet the Approved Acquisition Objectives outlined in the Total Force Structure Management System.

Family of Expeditionary Water Systems (FEWS) \$2.011M (ACTIVE: \$1.929M/RESERVES \$0.082M): Funding continues to procure PWPS. This equipment will support material readiness.

The increase in funding from FY17 to FY18 \$0.791M supports procurement of Lightweight Water Purification Systems(LWPS) and PWPS.

OCO:  
FY2018 Overseas Contingency Operations (OCO) Request: N/A

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017					
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 07: Spares and Repair Parts / BSA 1: Spares And Repair Parts							<b>P-1 Line Item Number / Title:</b> 7000 / Spares and Repair Parts					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> 0206211M, 0206625M, 0204460M, 0206313M, 0206315M, 0305239M, 0502511M					

<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity ( <i>Units in Each</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost ( <i>\$ in Millions</i> )	0.000	9.944	22.848	35.640	0.000	35.640	26.141	34.356	34.495	40.668	Continuing	Continuing
Less PY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) ( <i>\$ in Millions</i> )	0.000	9.944	22.848	35.640	0.000	35.640	26.141	34.356	34.495	40.668	Continuing	Continuing
Plus CY Advance Procurement ( <i>\$ in Millions</i> )	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b> ( <i>\$ in Millions</i> )	<b>0.000</b>	<b>9.944</b>	<b>22.848</b>	<b>35.640</b>	<b>0.000</b>	<b>35.640</b>	<b>26.141</b>	<b>34.356</b>	<b>34.495</b>	<b>40.668</b>	<b>Continuing</b>	<b>Continuing</b>
<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), Sensitive Compartmented Information Communications (SCI Comms), Tactical Remote Sensor System (TRSS), MAGTF Secondary Imagery Dissemination System (MSIDS), Intelligence Analysis System (IAS), LAV-Anti Tank System Program, LAV Obsolescence 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 Increment 1.1 (ACV 1.1), and Training Simulation Support (TSS)/Training Devices.

<b>Secondary Distribution</b>		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Navy	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.439	18.468	35.278	-	35.278	26.141	34.356	34.495	40.668
NR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.505	4.380	0.362	-	0.362	-	-	-	-
<b>Total: Secondary Distribution</b>	<b>Quantity</b>	-	-	-	-	-	-	-	-	-
	<b>Total Obligation Authority</b>	<b>9.944</b>	<b>22.848</b>	<b>35.640</b>	<b>-</b>	<b>35.640</b>	<b>26.141</b>	<b>34.356</b>	<b>34.495</b>	<b>40.668</b>

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy							<b>Date:</b> May 2017			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 07: Spares and Repair Parts / BSA 1: Spares And Repair Parts						<b>P-1 Line Item Number / Title:</b> 7000 / Spares and Repair Parts				
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> 0206211M, 0206625M, 0204460M, 0206313M, 0206315M, 0305239M, 0502511M				
<b>Line Item MDAP/MAIS Code:</b> N/A										
<b>Exhibits Schedule</b>					<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Exhibit Type</b>	<b>Title*</b>	<b>Subexhibits</b>	<b>ID CD</b>	<b>MDAP/MAIS Code</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>	<b>Quantity / Total Cost (Each) / (\$ M)</b>
P-18	PMC spares				- / -	- / 9.944	- / 22.848	- / 35.640	- / -	- / 35.640
<b>P-40</b>	<b>Total Gross/Weapon System Cost</b>				<b>- / 0.000</b>	<b>- / 9.944</b>	<b>- / 22.848</b>	<b>- / 35.640</b>	<b>- / 0.000</b>	<b>- / 35.640</b>
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.										
<p><b>Justification:</b> FY 2018 Base Appropriation Request: \$35.440M (\$35.078M Active; \$0.362M Reserve)</p> <p>The funding increase (\$12.592M) from FY17 to FY18 is primarily due to G/ATOR increase of \$5.447, RQ-21 increase of \$5.215M and ACV 1.1 increase of \$5.569M.</p> <p>LAV Anti-Tank Modernization (ATM) BLI 2038: \$1.006M funding will continue to provide funding for spares required for the fielding of the ATM.</p> <p>AN/TPS-80 Ground Air Task Oriented Radar (G/ATOR) BLI 4655: \$16.840M provides spares funding to support Gallium Nitride (GaN) LRIP systems. FY18 Spares funding is required to procure the initial provisioning package to primarily support those GaN LRIP systems being procured in FY17 and fielded in FY19, as over 90 percent of the G/ATOR Spares have a lead time exceeding 12 months. The Spares funding increase of (\$5.647M) from FY17 to FY18 ultimately supports the additional fielding of five (5) new systems in FY19 for a total of thirteen (13) G/ATOR systems fielded through FY19. Additionally, this funding increase allows for the decentralized distribution of initial spares from LOGCOM to the Repair Inventory Points at each Marine Expeditionary Force. Without adequate sparing, Marine Operational Forces will not have the necessary repair parts to operate and maintain newly fielded G/ATOR Radar Systems placing the program at significant risk of meeting its important Key Performance Parameter (KPP) 8; Sustainment.</p> <p>Family of Material Handling Equipment (FMHE) BLI 6544: \$0.052 provides 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.</p> <p>General Purpose Tool and Test Equipment BLI 4181: \$0.173M funding will continue to support reimbursement to the working capital funds for spares acquired and needed during test support.</p> <p>Training Simulation Support (TSS)/Training Devices BLI 6532: \$0.050M Training Simulation Support will continue to provide funding for a small quantity of systems spares/parts to fulfill allowance pool quantities while systems are being repaired or replaced.</p> <p>IAS BLI 4747: \$0.158M of spares funding will provide for direct vendor support of the principal end item (PEI) components delivery to the Fleet Marine Force.</p> <p>MSIDS BLI 4747: \$0.099M will provide for purchase of hardware and accessory spares of the MSIDS Suite necessary to keep ground-based imagery collection and dissemination assets in operation, ensuring spares are available to the warfighter when breakage occurs to minimize equipment down-time.</p> <p>TRSS BLI 4747: \$0.099M will provide for the purchase of equipment spares in the TRSS System of Systems (SoS) to ensure repair time and equipment unavailability is minimized for the warfighter.</p> <p>SMART-T BLI 4633: \$0.205M will provide for the direct vendor support of the principal end item (PEI) components to reduce repair time and equipment downtime for the Warfighter.</p>										

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<b>Exhibit P-40, Budget Line Item Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N: Procurement, Marine Corps / BA 07: Spares and Repair Parts / BSA 1: Spares And Repair Parts		<b>P-1 Line Item Number / Title:</b> 7000 / Spares and Repair Parts
<b>ID Code</b> (A=Service Ready, B=Not Service Ready): A	<b>Program Elements for Code B Items:</b> N/A	<b>Other Related Program Elements:</b> 0206211M, 0206625M, 0204460M, 0206313M, 0206315M, 0305239M, 0502511M
<b>Line Item MDAP/MAIS Code:</b> N/A		
<p>RQ-21 UAS BLI 4737: \$11.027M procures initial spares for 4 RQ-21A systems in FY18 as well as support sparing for deployments in that year. Increase of \$5.215M from FY17 to FY18 is due to requirement for the spares to support Marine deployments with RQ-21 that year.</p> <p>M1A1 Modification Kits BLI 2061: Reserve \$0.362M will procure the remaining reserve spares for the Abrams Integrated Display and Targeting System (AIDATS). The \$4.018M decrease in funding from FY17 is due to the procurement strategy that maximized production of AIDATS in FY17.</p> <p>ACV 1.1 BLI 2025: \$5.569M procures initial spares for communication suites, Driver's Vision Enhancer, Exportable Power, Joint Battle Command-Platform (JBC-P), and Amphibious Remote Weapon Stations (ARWS). Initial spares for ACV 1.1 are procured commensurate with the end items they support based on lead time for procurement.</p>		

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<b>Exhibit P-18, Initial and Replenishment Spare and Repair Parts Justification: FY 2018 Navy</b>					<b>Date:</b> May 2017	
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 1109N / 07 / 1		<b>P-1 Line Item Number / Title:</b> 7000 / Spares and Repair Parts			<b>Title:</b> PMC spares	
<b>End Item Line Item Number / Name [MDAP/MAIS]</b>	<b>Prior Years (\$ M)</b>	<b>FY 2016 (\$ M)</b>	<b>FY 2017 (\$ M)</b>	<b>FY 2018 Base (\$ M)</b>	<b>FY 2018 OCO (\$ M)</b>	<b>FY 2018 Total (\$ M)</b>
<b>Initial</b>						
BA 02 - Weapons and combat vehicles						
2025 / Amphibious Combat Vehicle 1.1	-	-	-	5.569	-	5.569
2038 / LAV PIP	-	1.275	0.628	1.006	-	1.006
2061 / Modification Kits	-	2.069	4.380	0.362	-	0.362
BA 04 - Communications and Electronics Equipment						
4181 / Repair and Test Equipment	-	0.204	0.218	0.173	-	0.173
4633 / Radio Systems	-	-	0.201	0.205	-	0.205
4655 / Ground/Air Task Oriented Radar (G/ATOR)	-	1.572	11.193	16.840	-	16.840
4737 / RQ-21 UAS	-	4.070	5.812	11.027	-	11.027
4747 / Intelligence Support Equipment	-	0.656	0.316	0.356	-	0.356
BA 06 - Engineer and Other Equipment						
6462 / Material Handling Equip	-	0.050	-	0.000	-	0.000
6532 / Training Devices	-	0.048	0.049	0.050	-	0.050
6544 / Family of Construction Equipment	-	-	0.051	0.052	-	0.052
<b>Subtotal: Initial</b>	-	<b>9.944</b>	<b>22.848</b>	<b>35.640</b>	-	<b>35.640</b>
<b>Total Cost (Initial + Replenishment)</b>	-	<b>9.944</b>	<b>22.848</b>	<b>35.640</b>	-	<b>35.640</b>