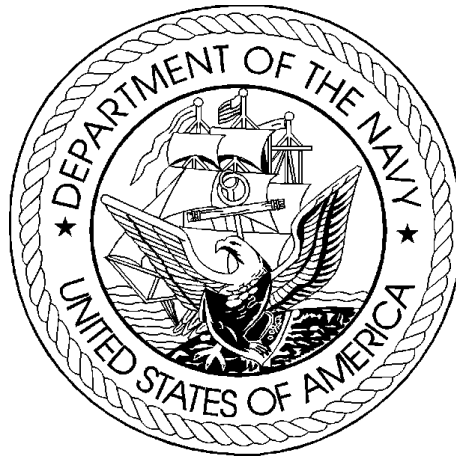


DEPARTMENT OF THE NAVY  
FISCAL YEAR (FY) 2011  
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES  
FEBRUARY 2010

PROCUREMENT, MARINE CORPS

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## **Department of Defense Appropriations Act, 2011**

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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 therefore; plant equipment, appliances, and machines 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, \$1,344,044,000 to remain available for obligation until September 30, 2013.

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## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 Summary  
 (Dollars in Thousands)

25 Jan 2010

Appropriation -----	FY 2009 (Base & OCO) -----	FY 2010 Base & OCO Enacted -----	FY 2010 Supplemental Request -----	FY 2010 Total -----
Procurement, Marine Corps	4,373,537	2,410,009	18,927	2,428,936
Total Department of the Navy	4,373,537	2,410,009	18,927	2,428,936

## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 Summary  
 (Dollars in Thousands)

25 Jan 2010

Appropriation -----	FY 2011 Base -----	FY 2011 OCO -----	FY 2011 Total Request -----
Procurement, Marine Corps	1,344,044	1,778,243	3,122,287
Total Department of the Navy	1,344,044	1,778,243	3,122,287

## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 Summary  
 (Dollars in Thousands)

25 Jan 2010

## Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2009 (Base & OCO) -----	FY 2010 Base & OCO Enacted -----	FY 2010 Supplemental Request -----	FY 2010 Total -----
02. Weapons and combat vehicles	834,704	338,183		338,183
03. Guided missiles and equipment	111,936	92,970		92,970
04. Communications & electronics equipment	871,103	669,371	14,300	683,671
05. Support Vehicles	520,912	531,953		531,953
06. Engineer and Other Equipment	2,018,227	736,113	4,627	740,740
07. Spares and Repair Parts	16,655	41,419		41,419
Total Procurement, Marine Corps	4,373,537	2,410,009	18,927	2,428,936

## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 Summary  
 (Dollars in Thousands)

25 Jan 2010

Appropriation: Procurement, Marine Corps

Budget Activity -----	FY 2011 Base -----	FY 2011 OCO -----	FY 2011 Total Request -----
02. Weapons and combat vehicles	171,457	439,366	610,823
03. Guided missiles and equipment	50,858		50,858
04. Communications & electronics equipment	654,553	598,893	1,253,446
05. Support Vehicles	202,750	224,783	427,533
06. Engineer and Other Equipment	250,902	515,201	766,103
07. Spares and Repair Parts	13,524		13,524
Total Procurement, Marine Corps	1,344,044	1,778,243	3,122,287



## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2009 (Base & OCO)		FY 2010 Base & OCO Enacted		FY 2010 Supplemental Request		FY 2010 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 02: Weapons and combat vehicles											
-----											
Tracked Combat Vehicles											
1	AAV7A1 PIP	A		5,462		6,135			6,135		U
2	LAV PIP	A		231,031		74,219			74,219		U
3	M1A1 Firepower Enhancements	A		14,663							U
Artillery And Other Weapons											
4	Expeditionary Fire Support System	A	20	21,497	20	19,531			20	19,531	U
5	155mm Lightweight Towed Howitzer	B	62	188,654	18	61,397			18	61,397	U
6	High Mobility Artillery Rocket System	A		135,107		71,256			71,256		U
7	Weapons And Combat Vehicles Under \$5 Million	A		31,482		19,459			19,459		U
Weapons											
8	Modular Weapon System	A		1,892							U
Other Support											
9	Modification Kits	A		177,934		54,866			54,866		U
10	Weapons Enhancement Program	A		26,982		31,320			31,320		U
				-----		-----			-----		
Total Weapons and combat vehicles				834,704		338,183			338,183		
Budget Activity 03: Guided missiles and equipment											
-----											
Guided Missiles											
11	Ground Based Air Defense	A		8,780		11,352			11,352		U
12	Javelin	A		35,548							U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2011 Base		FY 2011 OCO		FY 2011 Total Request		S e
----	-----	-----	Quantity	Cost	Quantity	Cost	Quantity	Cost	c
----	-----	-----	-----	----	-----	----	-----	----	-
Budget Activity 02: Weapons and combat vehicles									
-----									
Tracked Combat Vehicles									
1	AAV7A1 PIP	A		7,749				7,749	U
2	LAV PIP	A		41,277		152,333		193,610	U
3	M1a1 Firepower Enhancements	A							U
Artillery And Other Weapons									
4	Expeditionary Fire Support System	A	10	9,723			10	9,723	U
5	155mm Lightweight Towed Howitzer	B	2	10,356	20	103,600	22	113,956	U
6	High Mobility Artillery Rocket System	A		22,230		145,533		167,763	U
7	Weapons And Combat Vehicles Under \$5 Million	A		26,091		7,329		33,420	U
Weapons									
8	Modular Weapon System	A							U
Other Support									
9	Modification Kits	A		40,916		12,000		52,916	U
10	Weapons Enhancement Program	A		13,115		18,571		31,686	U
			-----		-----		-----		
Total Weapons and combat vehicles				171,457		439,366		610,823	

Budget Activity 03: Guided missiles and equipment

-----

Guided Missiles

11	Ground Based Air Defense	A		5,175				5,175	U
12	Javelin	A							U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2009 (Base & OCO)		FY 2010 Base & OCO Enacted		FY 2010 Supplemental Request		FY 2010 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
13	Follow On To SMAW	A									U
14	Anti-Armor Weapons System-Heavy (AAWS-H)				71,005				71,005		U
	Other Support										
15	Modification Kits	A		67,608	10,613				10,613		U
Total Guided missiles and equipment				111,936	92,970				92,970		
Budget Activity 04: Communications & electronics equipment											
-----											
Command And Control Systems											
16	Unit Operations Center	A		92,468	19,771				19,771		U
	Repair And Test Equipment										
17	Repair And Test Equipment	A		89,730	43,928				43,928		U
	Other Support (Tel)										
18	Combat Support System	A		17,594	11,795				11,795		U
19	Modification Kits	A									U
Command And Control System (Non-Tel)											
20	Items Under \$5 Million (Comm & Elec)	A		10,315	7,673				7,673		U
21	Air Operations C2 Systems	A		27,869	48,040				48,040		U
	Radar + Equipment (Non-Tel)										
22	Radar Systems	A		42,368	10,822				10,822		U
	Intell/Comm Equipment (Non-Tel)										
23	Fire Support System	A		5,151	3,093				3,093		U
24	Intelligence Support Equipment	B		148,477	70,714		14,300		85,014		U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
FY 2011 President's Budget  
Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
(Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2011 Base Quantity	Cost	FY 2011 OCO Quantity	Cost	FY 2011 Total Request Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-
13	Follow On To SMAW	A		21,570			21,570		U
14	Anti-Armor Weapons System-Heavy (AAWS-H)			20,315			20,315		U
	Other Support								
15	Modification Kits	A		3,798			3,798		U
				-----		-----	-----		
	Total Guided missiles and equipment			50,858			50,858		
	Budget Activity 04: Communications & electronics equipment								
	-----								
	Command And Control Systems								
16	Unit Operations Center	A		10,776		112,424	123,200		U
	Repair And Test Equipment								
17	Repair And Test Equipment	A		25,636		15,962	41,598		U
	Other Support (Tel)								
18	Combat Support System	A		32,877			32,877		U
19	Modification Kits	A				18,545	18,545		U
	Command And Control System (Non-Tel)								
20	Items Under \$5 Million (Comm & Elec)	A		3,405		11,549	14,954		U
21	Air Operations C2 Systems	A		67,568		41,031	108,599		U
	Radar + Equipment (Non-Tel)								
22	Radar Systems	A		860		5,493	6,353		U
	Intell/Comm Equipment (Non-Tel)								
23	Fire Support System	A		3,906		4,710	8,616		U
24	Intelligence Support Equipment	B		92,377		82,897	175,274		U

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Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2009 (Base & OCO) Quantity Cost	FY 2010 Base & OCO Enacted Quantity Cost	FY 2010 Supplemental Request Quantity Cost	FY 2010 Total Quantity Cost	S e c
----	-----	-----	-----	-----	-----	-----	-
25	RQ-11 UAV			495 41,492		495 41,492	U
26	DCGS-MC	A					U
	Other Comm/Elec Equipment (Non-Tel)						
27	Night Vision Equipment	A	53,078	10,328		10,328	U
	Other Support (Non-Tel)						
28	Common Computer Resources	A	88,364	138,012		138,012	U
29	Command Post Systems	A	144,765	72,707		72,707	U
30	Radio Systems	A	62,832	81,436		81,436	U
31	Comm Switching & Control Systems	A	64,412	94,013		94,013	U
32	Comm & Elec Infrastructure Support	A	23,680	15,547		15,547	U
			-----	-----	-----	-----	
	Total Communications & electronics equipment		871,103	669,371	14,300	683,671	
	Budget Activity 05: Support Vehicles						
	-----						
	Administrative Vehicles						
33	Commercial Passenger Vehicles	A	1,197	1,261		1,261	U
34	Commercial Cargo Vehicles	A	17,600	13,568		13,568	U
	Tactical Vehicles						
35	5/4T Truck HMMWV (MYP)	A	591 130,979	213 37,602		213 37,602	U
36	Motor Transport Modifications	A	38,355	2,991		2,991	U
37	Medium Tactical Vehicle Replacement	A	30,832	141,802		141,802	U
38	Logistics Vehicle System Rep	A	518 255,144	486 275,941		486 275,941	U
39	Family Of Tactical Trailers	A	32,983	34,792		34,792	U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
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 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2011 Base Quantity	Cost	FY 2011 OCO Quantity	Cost	FY 2011 Total Request Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-
25	RQ-11 UAV		16	32,490			16	32,490	U
26	DCGS-MC	A		4,582		21,789		26,371	U
	Other Comm/Elec Equipment (Non-Tel)								
27	Night Vision Equipment	A							U
	Other Support (Non-Tel)								
28	Common Computer Resources	A		258,947		29,412		288,359	U
29	Command Post Systems	A		33,021		36,256		69,277	U
30	Radio Systems	A		40,551		155,545		196,096	U
31	Comm Switching & Control Systems	A		32,279		63,280		95,559	U
32	Comm & Elec Infrastructure Support	A		15,278				15,278	U
				-----		-----		-----	
	Total Communications & electronics equipment			654,553		598,893		1,253,446	

## Budget Activity 05: Support Vehicles

-----

## Administrative Vehicles

33	Commercial Passenger Vehicles	A		1,157				1,157	U
34	Commercial Cargo Vehicles	A		12,696				12,696	U

## Tactical Vehicles

35	5/4T Truck HMMWV (MYP)	A	17	4,849	77	12,994	94	17,843	U
36	Motor Transport Modifications	A		5,253				5,253	U
37	Medium Tactical Vehicle Replacement	A		11,721		80,559		92,280	U
38	Logistics Vehicle System Rep	A	550	133,827	230	109,100	780	242,927	U
39	Family Of Tactical Trailers	A		19,156		22,130		41,286	U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
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 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2009 (Base & OCO) Quantity Cost	FY 2010 Base & OCO Enacted Quantity Cost	FY 2010 Supplemental Request Quantity Cost	FY 2010 Total Quantity Cost	S e c
----	-----	----	-----	-----	-----	-----	-
40	Trailers	A	8,399	18,066		18,066	U
	Other Support						
41	Items Less Than \$5 Million	A	5,423	5,930		5,930	U
	Total Support Vehicles		520,912	531,953		531,953	
Budget Activity 06: Engineer and Other Equipment							
-----							
Engineer And Other Equipment							
42	Environmental Control Equip Assort	A	10,535	10,225		10,225	U
43	Bulk Liquid Equipment	A	13,744	20,635		20,635	U
44	Tactical Fuel Systems	A	30,230	68,372		68,372	U
45	Power Equipment Assorted	A	52,091	54,800		54,800	U
46	Amphibious Support Equipment	A	24,745	28,787		28,787	U
47	EOD Systems	A	1,342,196	140,744		140,744	U
Materials Handling Equipment							
48	Physical Security Equipment	A	86,229	15,848		15,848	U
49	Garrison Mobile Engineer Equipment (GMEE)	A	9,429	11,789		11,789	U
50	Material Handling Equip	A	88,813	98,177		98,177	U
51	First Destination Transportation	A	5,789	5,285		5,285	U
General Property							
52	Field Medical Equipment	A	31,137	6,790		6,790	U
53	Training Devices	B	113,644	137,112	4,627	141,739	U
54	Container Family	A	4,385	3,758		3,758	U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
 FY 2011 President's Budget  
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 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2011 Base Quantity	Cost	FY 2011 OCO Quantity	Cost	FY 2011 Total Request Quantity	Cost	S e c
40	Trailers	A		8,075				8,075	U
	Other Support								
41	Items Less Than \$5 Million	A		6,016				6,016	U
	Total Support Vehicles			202,750		224,783		427,533	
Budget Activity 06: Engineer and Other Equipment									
Engineer And Other Equipment									
42	Environmental Control Equip Assort	A		5,110		17,799		22,909	U
43	Bulk Liquid Equipment	A		10,743		1,628		12,371	U
44	Tactical Fuel Systems	A		29,330		83,698		113,028	U
45	Power Equipment Assorted	A		19,419		41,536		60,955	U
46	Amphibious Support Equipment	A		11,718				11,718	U
47	EOD Systems	A		64,093		213,985		278,078	U
Materials Handling Equipment									
48	Physical Security Equipment	A		16,419		5,200		21,619	U
49	Garrison Mobile Engineer Equipment (GMEE)	A		10,976				10,976	U
50	Material Handling Equip	A		24,376		58,264		82,640	U
51	First Destination Transportation	A		2,748				2,748	U
General Property									
52	Field Medical Equipment	A		6,722				6,722	U
53	Training Devices	B		5,668		55,864		61,532	U
54	Container Family	A		897		8,826		9,723	U

Exhibit P-1G: FY 2011 President's Budget (Published), as of January 25, 2010 at 16:17:21

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Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2009 (Base & OCO)		FY 2010 Base & OCO Enacted		FY 2010 Supplemental Request		FY 2010 Total		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
55	Family Of Construction Equipment	A		162,164		73,436				73,436	U
56	Family Of Internally Transportable Veh (ITV)	A	44	21,902	40	10,328			40	10,328	U
57	Bridge Boats	A									U
58	Rapid Deployable Kitchen	A		4,625		2,207				2,207	U
Other Support											
59	Items Less Than \$5 Million	A		16,569		47,820				47,820	U
Total Engineer and Other Equipment				2,018,227		736,113		4,627		740,740	
Budget Activity 07: Spares and Repair Parts											
Spares And Repair Parts											
60	Spares And Repair Parts	A		16,655		41,419				41,419	U
Total Spares and Repair Parts				16,655		41,419				41,419	
Total Procurement, Marine Corps				4,373,537		2,410,009		18,927		2,428,936	

## UNCLASSIFIED

Department of the Navy  
 FY 2011 President's Budget  
 Exhibit P-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request  
 (Dollars in Thousands)

Appropriation: 1109N Procurement, Marine Corps

Date: 25 Jan 2010

Line No	Item Nomenclature	Ident Code	FY 2011 Base Quantity	Cost	FY 2011 OCO Quantity	Cost	FY 2011 Total Request Quantity	Cost	S e c
----	-----	-----	-----	----	-----	----	-----	----	-
55	Family Of Construction Equipment	A		18,261				18,261	U
56	Family Of Internally Transportable Veh (ITV)	A			73	28,401	73	28,401	U
57	Bridge Boats	A		12,567				12,567	U
58	Rapid Deployable Kitchen	A		4,283				4,283	U
	Other Support								
59	Items Less Than \$5 Million	A		7,572				7,572	U
				-----		-----		-----	
	Total Engineer and Other Equipment			250,902		515,201		766,103	
	Budget Activity 07: Spares and Repair Parts								
	-----								
	Spares And Repair Parts								
60	Spares And Repair Parts	A		13,524				13,524	U
				-----		-----		-----	
	Total Spares and Repair Parts			13,524				13,524	
				-----		-----		-----	
	Total Procurement, Marine Corps			1,344,044		1,778,243		3,122,287	

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: February 2010						
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2021				P-1 Item Nomenclature:  AAV7A1 PIP								
Program Element: 0206211M Divisions (Marine)			Code A	Other Related Program Elements:								

	Prior Years	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total
Proc Qty												
Gross Cost	833.0	5.4	6.1	7.7	0.0	7.7	9.9	10.1	10.5	10.9	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	833.0	5.4	6.1	7.7	0.0	7.7	9.9	10.1	10.5	10.9	Cont.	Cont.
Initial Spares	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Proc Cost	843.1	5.4	6.1	7.7	0.0	7.7	9.9	10.1	10.5	10.9	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1		

**Base Appropriation Request:**

The AAV Modification Kit Program provides 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, safety, reduce total ownership costs, and improve fleet readiness. The Modification Kit Program, also known as the Mod Kit Line, primarily supports engineering change proposal work, and the fielding of the Enhanced Applique Armor Kit (EAAK).

The AAVC7 Command and Control (C2) upgrade provides upgrades needed to address the current C2 capabilities gap.

2nd, 3rd, 4th, 5th echelon tool kits are used to repair the vehicle in the field.

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2021				P-1 Line Item Nomenclature  AAV7A1 PIP		Weapon System Type:		Date:  February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
AAV MOD LINE		61035	5462	VAR	VAR	6135	VAR	VAR	7749	VAR	VAR
Tech/Engineering Support		5702									
Thermal Imaging Module		56298									
AAVC7 Upgrade		77651									
Subtotal Baseline		200686	5462			6135			7749		
TOTAL		200686	5462			6135			7749		
ACTIVE			5408			6073			7671		
RESERVES			54			62			78		
<u>Reserves</u>											
AAV MOD LINE			54			62			78		
Reserves Subtotal			54			62			78		

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038						P-1 Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP						
Program Elements: 0206211M Divisions (Marine)				Code: A		Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	1123.2	231.0	74.2	41.3	152.3	193.6	16.4	6.0	145.2	142.6	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												4.0
Net Proc (P-1)	1123.2	231.0	74.2	41.3	152.3	193.6	16.4	6.0	145.2	142.6	Cont.	Cont.
Initial Spares	11.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	1135.0	231.1	74.2	0.0	152.3	193.6	16.4	6.0	145.2	142.6	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	11.5	6.2	7.4	127.5	134.9	3.0	1.1	1.1	1.1	Cont.	Cont.

**Base Appropriation Request: : No major changes since PB10 that have caused any significant impacts.**

**LAV MODIFICATION:** Projects funded under the LAV Modification Program include numerous low-dollar, yet extremely important minor vehicle and weapon modifications, focusing on safety and obsolescence issues, support equipment and tools, and other such projects that increase LAV reliability and readiness while simultaneously reducing operations and support costs. This funding is critical to offsetting support issues generated as a result of the OCO and the advancing age of the family of Light Armored Vehicles, respective of the extended service life through 2025, while maintaining acceptable levels of fleet readiness. PM-LAV Sustainment/Readiness Team uses multi-disciplined integrated project teams consisting of engineering, logistical, contracting and financial personnel to manage Modification projects.

**LAV COMMAND & CONTROL UPGRADE (LAV-C2):** The LAV-C2 Upgrade Program (FY 2009 - FY2012) is designed to meet and maintain the command and control requirements of the Operational Requirements Document (ORD). LAV-C2 upgrade provides a hardware and software module for the LAV-C2 to support complex radio configurations. The upgrade seeks to integrate in the vehicle, those non-developmental hardware and software components that will ensure that the vehicles - and the appropriate LAR unit command element - have the capability to send and receive required voice and data communications to higher, adjacent and subordinate units. The module will provide isolation of critical communications function in a self-contained module to support a mix of legacy radio's. The modification is needed to keep the LAV-C2 a viable weapon system through the service life of the LAV Family of Vehicles.

**LAV LETHALITY:** The LAV Lethality Program (FY 2007-FY2010) will upgrade the LAV 25's M242 gun and associated hardware and software necessary to enable the firing of M919 25mm Armor Piercing, Fin Stabilized, Discarding Sabot (Depleted Uranium) with tracer ammunition. The LAV Lethality upgrade will provide superior lethality resulting in increased survivability. The LAV Lethality program will invest in technologies currently on the U.S. Army's Bradley Fighting Vehicle.

**LAV (LAV-25):** The Light Armored Vehicle (LAV-25) program is for the procurement of LAV's to replace projected reset as a result of Operation Iraqi Freedom/Operation Enduring Freedom. Replacing these vehicles will ensure the USMC Light Armored Reconnaissance (LAR) battalions have adequate numbers of LAVs for continued combat operations.

**FY11 Overseas Contingency Operations Request (OCO): \$152.3M**  
Increases predeployment readiness by providing adequate Home Station Training to OEF without degrading Availability of LAV fleet during continued conversion to A2 configuration. Providing additional LAV's required to Support Enhanced Mojave Viper, as well as an increasing number of alternate training venues, would degrade LAV availability vis-a-vis the PM's requirement to provide vehicles to the depot for conversion to the more survivable A2 configuration.

Unplanned additions of theatre specific IED jamming devices (high current), as well as situational awareness systems have caused a high degree of electrical failures, leading to deadline vehicles and lowering operational availability. This money will provide the ability to design a short-term electrical fix for vehicles in OEF.

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010		
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038				P-1 Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP				
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	FY 2011	OCO FY 2011	Total FY 2011
LAV LETHALITY	A	D	1.5	1.530	0.681	0.000	0.000	0.000
LAV SLEP/PIP (ITSS)	A	D	186.0	0.003	0.000	0.000	0.000	0.000

Exhibit P-5 - Cost Analysis			Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038		P-1 Line Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP		Weapon System Type:		Date: February 2010		
	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
LAV-MODIFICATION	A										
MODIFICATION KITS		55420	24525	1BL	VAR.	4102	1BL	VAR.	4490	1BL	VAR.
TESTING		273	1557			25			27		
INSTALLATIONS		5268	1386			393			431		
SYS. ENGINEERING/PROGRAM MGT SPT		2641	1913			195			4		
ILS		4842	2683			314			334		
LAV-C2 UPGRADE	A										
HARDWARE			15236	9	1692889	25032	16	1564500	31627	18	1757055
ECO			352			596			670		
REFURBISHMENT			330								
SYS. ENGINEERING/PROGRAM MGT SPT			661			1013			1087		
PVT/FAT			4097								
ILS			3168			2510			2196		
NEW EQUIP TRAINING									411		
LAV-MODIFICATION SURVIVABILITY											
MODIFICATION KITS			130615	1BL	VAR.						
TESTING			3840								
INSTALLATIONS			20020								
ILS			4115								
RADIO EQUIPMENT (VRC-110's)						9400	304	30921			
SURVIVABILITY MODIFICATIONS						3000	1BL	VAR.			

Exhibit P-5 - Cost Analysis			Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038		P-1 Line Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP		Weapon System Type:		Date: February 2010		
	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
LAV (LAV-25) HARDWARE ILS DATA  Baseline Subtotal	A	49300	15000	5	3000000	16958 10000 73538	7	2422571	41277		
<u>FY11 OCO</u>											
LAV-MODIFICATION MODIFICATION KITS TESTING INSTALLATIONS	A								3445 100 376	75	46174
LAV (LAV-25) HARDWARE GFM ILS INSTALLATIONS SYS. ENGINEERING/PROGRAM MGT SPT FY11 OCO Subtotal	A								121362 23650 1000 1200 1200 152333	48	2528375
TOTAL		543231	229498			73538			193610		
ACTIVE		357300	217963			67385			186182		
RESERVES		185931	11535			6153			7428		
Reserves											
LAV-MODIFICATION LAV-C2 UPGRADE LAV-MODIFICATION SURVIVABILITY LAV-25			11535			6153			984 6444		
Reserves Subtotal			11535			6153			7428		



Exhibit P-5a - Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038				Weapon System Type:		P-1 Line Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY09										
LAV MODIFICATION	Various	FFP	TACOM, Warren, MI	VAR.	VAR.	1BL	VAR.	NO	N/A	N/A
LAV-MOD SURVIVABILITY	Various	FFP	TACOM, Warren, MI	VAR.	VAR.	1BL	VAR.	NO	N/A	N/A
LAV C2 UPGRADE	LOCKHEED MARTIN, OWEGO, NY	FFP	TACOM, Warren, MI	Nov-09	Mar-10	9	1692889	NO	N/A	N/A
LAV (LAV-25)	GDLS, Sterling Heights, MI	FFP	TACOM, Warren, MI	Jun-09	Jun-10	5	3000000	NO	N/A	N/A
FY10										
LAV MODIFICATION	Various	FFP	TACOM, Warren, MI	VAR.	VAR.	1BL	VAR.	NO	N/A	N/A
LAV-25	GDLS, Sterling Heights, MI	FFP	TACOM, Warren, MI	Jun-10	Jun-11	7	2422571	NO	N/A	N/A
LAV C2 UPGRADE	LOCKHEED MARTIN, OWEGO, NY	FFP	TACOM, Warren, MI	Nov-09	Nov-10	16	1564500	NO	N/A	N/A
LAV MODIFICATIONS										
LAV MOD SURVIVABILITY	Harris Corp., Melbourne, FL	FFP	SYSCOM, Quantico, VA	Feb-10	Jun-10	304	30921	NO	N/A	N/A
LAV MOD SURVIVABILITY	Various	FFP	TACOM, Warren, MI	VAR.	VAR.	1BL	VAR.	NO	N/A	N/A
FY11										
LAV MODIFICATION	Various	FFP	TACOM, Warren, MI	VAR.	VAR.	1BL	VAR.	NO	N/A	N/A
LAV C2 UPGRADE	LOCKHEED MARTIN, OWEGO, NY	FFP	TACOM, Warren, MI	Nov-10	Jul-11	18	1757055	NO	N/A	N/A
FY11 OCO LAV-25	GDLS, Sterling Heights, MI	FFP	TACOM, Warren, MI	Jun-11	Jun-12	48	2528375	NO	N/A	N/A
FY11 OCO LAV MODIFICATION	Various	FFP	TACOM, Warren, MI	TBD	TBD	75	46174	NO	N/A	N/A

MODIFICATION TITLE: **LAV-C2 UPGRADE**MODELS OF SYSTEMS AFFECTED: **LAV Command & Control**

## DESCRIPTION / JUSTIFICATION:

The LAV-C2 Upgrade Program is designed to meet and maintain the command and control requirements of the Operational Requirements Document (ORD). The LAV-C2 upgrade will provide a hardware and software module for the LAV-C2 to support complex radio configurations. The upgrade seeks to integrate in the vehicle, those non-developmental hardware and software components that will ensure that the vehicles - and the appropriate LAR unit command element - have the capability to send and receive required voice and data communications to higher, adjacent and subordinate units. The module will provide isolation of critical communications functions in a self-contained module to support a mix of legacy radio and the Joint Tactical Radio System (JTRS). The modification will ensure that the LAV- C2 Upgrade will be a viable weapon system through the service life of the LAV Family of Vehicles.

## DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

MS B 2Q/05  
 MS C 4Q/09  
 IOC 4Q/10  
 FOC 4Q/12

## Installation Schedule:

###

	Pr Yr					FY 2008				FY 2009				FY 2010				FY 2011			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs															1		6	6	6	6	6
Outputs															1		6	6	6	6	6
	FY2012				FY2013				FY2014				FY2015				To	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
	Inputs	6	6	4														0	47		
Outputs	6	6	4														0	47			

METHOD OF IMPLEMENTATION: CONTRACTOR ADMINISTRATIVE LEADTIME: 10 Months PRODUCTION LEADTIME: 8 Months

Contract Dates: NOV 09, NOV 10, NOV 11

Delivery Dates: MAR 10 delivery is for PVT; JUL 10-MAY 12

EXHIBIT P-3A, INDIVIDUAL MODIFICATION																DATE		February 2010				
MODIFICATION TITLE (Cont): <b>LAV-C2 UPGRADE</b>																						
FINANCIAL PLAN: (\$ in Millions)																						
	PRIOR YEARS		FY 2008		FY 2009		FY 2010		FY 2011		FY 2012								TC		TOTAL	
	Qty	\$	Qty		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity					9	15.236	16	25.032	18	31.627	4	7.002									47	78.897
Inst Kits, Nonrecurring																						0.000
																						0.000
Equipment, Nonrecurring																						0.000
																						0.000
																						0.000
Engineering Change Order						0.352		0.596		0.670		0.152										1.770
																						0.000
Other						8.256		3.523		3.484		3.479										18.742
																						0.000
																						0.000
																						0.000
																						0.000
Installation of Hardware																						0.000
FY 2003 Eqpt -- kits																						0.000
FY 2004 Eqpt -- kits																						0.000
FY 2005 Eqpt -- kits																						0.000
FY 2006 Eqpt -- kits																						0.000
FY 2007 Eqpt -- kits																						0.000
FY 2008 Eqpt -- kits																						0.000
FY 2009 Eqpt -- kits																						0.000
Delivery Dates: MAR 10 delivery is for PVT; JUL 10-MAY 12																						
Installment Cost																						
Total Procurement Cost						23.844		29.151		35.781		10.633										99.409
Note: Other includes System Engineering/Program Management Support, Integrated Logistics Support, and New Equipment Training.																						

## Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No.  
Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038

## Weapon System

P-1 Item Nomenclature:

## LIGHT ARMORED VEHICLE (LAV) PIP

[illegible][illegible][illegible]

Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No.	Weapon System	P-1 Item Nomenclature:
Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038		LIGHT ARMORED VEHICLE (LAV) PIP

[illegible][illegible][illegible]

Delivery Dates: MAR 10 delivery is for PVT; JUL 10-MAY 12

FY 10 BUDGET EXHIBIT P-21 - PRODUCTION SCHEDULE														Date: February 2010																								
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038						Weapon System		P-1 Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP																														
						PRODUCTION RATE			PROCUREMENT LEADTIMES																													
ITEM	Manufacturer's NAME / LOCATION					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure																								
LAV-C2 UPGRADE	LOCKHEED MARTIN/ OWEGO, NY					1	2	3		10	8	8	18	E																								
						Fiscal Year 09								Fiscal Year 10								BALANCE																
						Calendar Year 09																	Calendar Year 10															
ITEM	FY	SVC	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN		FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								
LAV-C2 UPGRADE	09	MC	9	0	9														A				1				2	2	2	2								
LAV-C2 UPGRADE	10	MC	16		16														A											16								
																														0								
																														0								
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																														0								
																														0								
																														0								
						Fiscal Year 11								Fiscal Year 12								BALANCE																
						Calendar Year 11																	Calendar Year 12															
ITEM	FY	SVC	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN		FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								
LAV-C2 UPGRADE	09	MC	9	7	2	2																								0								
LAV-C2 UPGRADE	10	MC	16	0	16		2	2	2	2	2	2	2	2	2															0								
LAV-C2 UPGRADE	11	MC	18	0	18		A								2	2	2	2	2	2	2	2	2							0								
																														0								
																														0								
																														0								
																														0								
Delivery Dates: MAR 10 delivery is for PVT; JUL																														0								

FY 10 BUDGET EXHIBIT P-21 - PRODUCTION SCHEDULE														Date: February 2010																								
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2038						Weapon System		P-1 Item Nomenclature: LIGHT ARMORED VEHICLE (LAV) PIP																														
						PRODUCTION RATE			PROCUREMENT LEADTIMES																													
ITEM	Manufacturer's NAME / LOCATION					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure																								
LAV-RAM SURVIVABILITY (RADIOS)	HARRIS CORP., Melbourne, FL					TBD	TBD	TBD		5		4	9	E																								
						Fiscal Year 09								Fiscal Year 10								BALANCE																
						Calendar Year 09																	Calendar Year 10															
ITEM	FY	SV C	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN		FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								
LAV RAM SURVIVABILITY (RADIOS)	10	MC	304	0	304																	A				50	50	50	50	104								
																													0									
																													0									
																													0									
																													0									
																													0									
																													0									
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																													0									
																													0									
						Fiscal Year 11								Fiscal Year 12								BALANCE																
						Calendar Year 11																	Calendar Year 12															
ITEM	FY	SV C	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN		FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP								
LAV RAM SURVIVABILITY (RADIOS)	10	MC	304	200	104	50	50	4																					0									
																													0									
																													0									
																													0									
																													0									
																													0									
																													0									
																													0									
																													0									
																													0									
Delivery Dates: MAR 10 delivery is for PVT; JUL																													0									

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2095							P-1 Item Nomenclature: M1A1 Firepower Enhancement					
Program Elements: 0206211M Divisions (Marine)		Code: A	Other Related Program Elements:									
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty	314											314
Gross Cost	108.7	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		123.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	108.7	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		123.3
Initial Spares	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		4.4
Total Proc Cost	113.1	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		127.8
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Base Appropriation Request**  
**M1A1 Firepower Enhancement Program (FEP):** The FEP system is a suite of upgrades for the M1A1 tank. It will include a second-generation thermal sight, a north finding/far target location capability, an improved eye safe laser range finder, and an improved loaders weapon station. The systems will increase the M1A1 tank crew's ability to detect, recognize, identify, engage and destroy targets. The system enhances the current firepower of the loader's weapon station by providing a secure remotely operated (under armor) platform. The survivability of the loader is greatly enhanced since he will no longer have to expose himself to enemy fire in order to operate his machine gun. It also increases the accuracy of the weapon and the area effectively covered by its fire. It will integrate current/planned situational awareness systems into the M1A1.

**Tank Safety Mods/Tools and Test Equipment:** Procures and fields the necessary test stands and test support equipment resultant from the fielding of the FEP suite of upgrades to the M1A1 Tank.

**Tool Set, M1A1 Tank, 2D ECH:** Procure and fields the necessary test support equipment resultant from the fielding of the FEP North Finding Module (NFM) Embedded Global Position Sensor (GPS) Enhancement upgrade to the M1A1 Tank.



Exhibit P-5 Cost Analysis	Appropriation/ Budget Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2095		P-1 Line Item Nomenclature: M1A1 Firepower Enhancement		Weapon System Type:			Date: February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY 2009		FY 2010			FY 2011			
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	TotalCost \$000
<u>Baseline</u>											
M1A1 FEP System		82955	11978	42	285190						
System Engineering Support		5449	1706								
Government Engineering Services		1802	492								
Program Management Support		3819	487								
Installation of FEP system		795									
Integrated Logistics Support (Training Equip, Common Support Equip, and Peculiar Support Equip)		3261									
Contractor Logistics Support (CLS) (Repair Facility)		5068									
Retrofit Kits		3660									
Subtotal Baseline		106809	14663								
TOTAL		106809	14663								
ACTIVE		106809	14663								
RESERVES		0	0								

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2095			Weapon System Type:			P-1 Line Item Nomenclature: M1A1 Firepower Enhancement				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY09	Raytheon, McKinney, TX	FFP	MARCORSYSCOM, Quantico	Oct-08	Nov-09	42	285190	N/A	N/A	N/A
REMARKS:										

Date:	February 2010
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P-1 Item Nomenclature:	M1A1 Firepower Enhancement
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REMARKS:
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<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2064					P-1 Item Nomenclature: EXPEDITIONARY FIRE SUPPORT SYSTEM (EFSS)							
Program Elements: 0206211M Divisions (Marine)			Code: A	Other Related Program Elements:								
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	TOTAL
Proc Qty	12	20	20	10	0	10	0	0	0	0		62
Gross Cost	25.9	21.5	19.5	9.7	0.0	9.7	2.0	0.0	0.0	0.0	0.0	78.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	25.9	21.5	19.5	9.7	0.0	9.7	2.0	0.0	0.0	0.0	0.0	78.7
Initial Spares	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Total Proc Cost	26.6	21.5	19.5	9.7	0.0	9.7	2.0	0.0	0.0	0.0	0.0	79.4
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Base Appropriation Request**  
**Expeditionary Fire Support System (EFSS):** This initiative will buy and support 62 Expeditionary Fire Support Systems (EFSS). 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. The 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 will use an evolutionary acquisition strategy with a spiral/incremental development process to maximize the integration of demonstrated technology and existing commercial/government components for best value to the Marine Corps.

Exhibit P-5 - Cost Analysis		Appropriation/ Budget Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles /2064		P-1 Line Item Nomenclature: EXPEDITIONARY FIRE SUPPORT SYSTEM (EFSS)		Weapon System Type:			Date:  February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
EFSS		11954	20000	20	1000000	19000	20	950000	9500	10	950000
First Article Test / Lot Acceptance Test		130									
Integrated Logistics Support (ILS)		1816				531			223		
Factory training		200									
Support Equipment		210	380								
Contractor Consulting Services		495									
Special Purpose Test Equipment		363									
Special Purpose Training Devices		205									
Armoring		8000									
Production Support		974									
LRIP refurbishment		1200									
Mortar Upgrade/Test		400									
PM&E			1117								
Subtotal Baseline		25947	21497			19531			9723		
TOTAL		25947	21497			19531			9723		
ACTIVE		25947	21497			19531			9723		
RESERVE		0	0			0			0		
Notes:											

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2064				Weapon System Type:		P-1 Line Item Nomenclature: EXPEDITIONARY FIRE SUPPORT SYSTEM (EFSS)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>EFSS</b>										
FY09 EFSS SYSTEM	General Dynamics, St. Petersburg, FL	FFP	MARCORSYSCOM	Jul-09	Jun-10	20	1000000	Yes	No	Mar-04
FY10 EFSS SYSTEM	General Dynamics, St. Petersburg, FL	FFP	MARCORSYSCOM	Mar-10	Aug-11	20	950000	Yes	No	Mar-04
FY11 EFSS SYSTEM	General Dynamics, St. Petersburg, FL	FFP	MARCORSYSCOM	Jan-11	Sep-12	10	950000	Yes	No	Mar-04
REMARKS:										

Date: February 2010

P-1 Item Nomenclature:  
EXPEDITIONARY FIRE SUPPORT SYSTEM

[illegible][illegible][illegible]

REMARKS: Delivery schedule is mapped to the fielding schedule.
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Exhibit P-40, Budget Item Justification Sheet							Date: February 2010						
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2185							P-1 Item Nomenclature: 155MM LIGHTWEIGHT TOWED HOWITZER (LW-155)						
Program Elements: 0206211M Divisions (Marine)				Code: B	Other Related Program Elements:								
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog	
Proc Qty	409	62	18	0	22	22	0	0	0	0	0	489	
Gross Cost	911.1	188.7	61.4	10.4	103.6	114.0	5.6	5.6	0.0	0.0	0.0	1286.2	
Less PY Adv Proc	22.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.8	
Plus CY Adv Proc	22.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.8	
Net Proc (P-1)	911.1	188.7	61.4	10.4	103.6	114.0	5.6	5.6	0.0	0.0	0.0	1286.2	
Initial Spares	6.3	4.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	
Total Proc Cost	917.4	193.3	64.3	10.4	103.6	114.0	5.6	5.6	0.0	0.0	0.0	1300.1	
Flyaway U/C												0.0	
Wpn Sys Proc U/C	2.3	3.0	3.0		3.0							11.3	
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

**Base Appropriation Request:**

The Lightweight 155mm Howitzer (LW155), also known as the M777A2, provides direct, reinforcing, and general support fires to maneuver forces. It replaces all howitzers in all missions in the USMC and replaces the M198 howitzer as the general support artillery for light forces in the Army. The LW155 fires unassisted projectiles to a range of 15 miles and assisted projectiles to 19 miles, but the addition of the digital fire control system enables the weapon to program and fire the improved Excalibur precision-guided munitions to ranges in excess of 25 miles with better than 10-meter Circular Error Probable (CEP) accuracy.

The LW155 is the first ground combat system whose major structures are made of high strength titanium alloy and the system makes extensive use of hydraulics to operate the breech, load tray, recoil and wheel arms. The combination of titanium structures and the use of hydraulic systems resulted in a significant weight savings over the M198 system (~7000 lbs.). Compared to the M198, the LW155 emplaces three-times faster and displaces four-times faster. It traverses 32 percent more terrain worldwide and is 70 percent more survivable than the M198.

The LW155 was first introduced into the Marine Corps in April 2005 and since then 10th, 11th, 12th and 14th Marines and the schoolhouses have been fielded. The Army has been fielding the system to its Stryker Brigades and Fires Brigades. The LW155 is currently in OEF with both Services.

**FY11 Overseas Contingency Operations Request (OCO): \$103.6M**

The LW155 is the replacement for the aging M198 Howitzer and provides the USMC cannon artillery capability. The additional quantities are required for pre-deployment training and training pool allowances for maintenance of these new Howitzers in OEF. Requested funding provides for necessary upgrades to address usage problems encountered in Afghanistan - Hydraulic Power Assist (HYPAK), Muzzle Velocity Radar, and Power Distribution Systems. The HYPAK assists the howitzer crew in elevating the howitzer when emplacing and displacing. This increases responsiveness and survivability and addresses the types of missions being conducted in Forward Operating Bases. The Muzzle Velocity Radar is an off-the-shelf replacement for the radar used since the earlier M198 howitzer and which has proven to be problematic. The Power Distribution upgrade allows for use of AC power to recharge on-board batteries that power digital components. Current method of recharge is through running of prime mover (MTVR) and due to 24 hour operations has degraded MTVR assets in theater.

Exhibit P-5 cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2185					P-1 Line Item Nomenclature: 155MM LIGHTWEIGHT TOWED HOWITZER (LW-155)		Weapon System Type:		Date: February 2010				
Weapon System		ID CD	PYs	FY 2009			FY 2010			FY 2011					
Cost Elements			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>															
BAE Lightweight 155MM			667298	145700	62	2350000	42300	18	2350000						
WVA Cannon			83085	15500	62	250000	4500	18	250000						
Primer Feed Mechanism			9228	1240	62	20000	360	18	20000						
Optical Fire Control			12360	2728	62	44000	792	18	44000						
Basic Initial Issue			10633	1481			528								
Systems Engineering/Program Mgt			31501	11245			3180								
Test			26929	2067			583								
Fielding			21177	6200			1734								
TAD Refresh/Upgrades				2493			7420			10356					
Subtotal Baseline			862211	188654			61397			10356					
<u>FY11 OCO</u>															
BAE Lightweight 155MM										51700	22	2350000			
WVA Cannon										5500	22	250000			
Primer Feed Mechanism										440	22	20000			
Optical Fire Control										968	22	44000			
Basic Initial Issue										688					
Systems Engineering/Program Mgt										3876					
Test										711					
Fielding										2117					
TAD Refresh/Upgrades										37600					
Subtotal FY11 OCO										103600					
TOTAL			862211	188654			61397			113956					
ACTIVE			862211	188654			61397			113956					
RESERVE				0			0			0					

Exhibit P-5a, Budget Procurement History and Planning										Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2185			Weapon System Type:			P-1 Line Item Nomenclature: 155MM LIGHTWEIGHT TOWED HOWITZER (LW-155)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail? \$	Date Revsn Avail	RFP Issue Date	
FY09											
GFE-Watervliet Cannon	Watervliet Arsenal	MIPR	N/A	Oct-08	May-09	62	250,000				
GFE - Primer Feed Mechanism	Triump Structures Connecticut, Hartford, CN	MYP/FFP	Picatinny Arsenal, NJ	Oct-08	May-09	62	20,000				
GFE - Optical Fire Control	Seiler, St. Louis, MO	MYP/FFP	Picatinny Arsenal, NJ	Oct-08	May-09	62	44,000				
Lightweight 155MM Howitzer	BAE SYSTEMS	MYP/FFP	Picatinny Arsenal, NJ	Jul-09	Sep-10	62	2,350,000				
FY10											
GFE-Watervliet Cannon	Watervliet Arsenal	MIPR	N/A	Jan-10	May-10	18	250,000				
GFE - Primer Feed Mechanism	Triump Structures Connecticut, Hartford, CN	MYP/FFP	Picatinny Arsenal, NJ	Jan-10	May-10	18	20,000				
GFE - Optical Fire Control	Seiler, St. Louis, MO	MYP/FFP	Picatinny Arsenal, NJ	Jan-10	May-10	18	44,000				
Lightweight 155MM Howitzer	BAE SYSTEMS	MYP/FFP	Picatinny Arsenal, NJ	Mar-10	Oct-11	18	2,350,000				
FY11											
OCO											
GFE-Watervliet Cannon	Watervliet Arsenal	MIPR	N/A	Oct-10	May-11	22	250,000				
GFE - Primer Feed Mechanism	Triump Structures Connecticut, Hartford, CN	MYP/FFP	Picatinny Arsenal, NJ	Oct-10	May-11	22	20,000				
GFE - Optical Fire Control	Seiler, St. Louis, MO	MYP/FFP	Picatinny Arsenal, NJ	Oct-10	May-11	22	44,000				
Lightweight 155MM Howitzer	BAE SYSTEMS	MYP/FFP	Picatinny Arsenal, NJ	Dec-10	Aug-12	22	2,350,000				
Remarks:											

EXHIBIT P-21, PRODUCTION SCHEDULE																	Date:					February 2010										
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2185									Weapon System					P-1 Item Nomenclature: 155MM LIGHTWEIGHT TOWED HOWITZER (LW-155)/2185																		
									PRODUCTION RATE				PROCUREMENT LEADTIMES																			
ITEM		Manufacturer's NAME / LOCATION							MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		TOTAL			Unit of Measure									
Lightweight 155MM		BAE SYSTEMS, Barrow-in-Furness, UK							8	14	14			2		12		12		14			E									
									Fiscal Year 08								Fiscal Year 09								BALANCE							
									Calendar Year 08								Calendar Year 09															
ITEM		FY	SV C	QTY	DEL	BAL	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	
Lightweight 155MM		08	MC	100	0	100		A											7	7	7	7	7	7	7	7	7	7	7	7	16	
		08	Army	203	0	203		A										14	7	7	7	7	7	7	7	7	7	7	7	7	105	
		09	MC	62	0	62																						A			62	
		09	Army	38	0	38																						A			38	
		09	FMS	25	0	25																						A			25	
																															0	
																															0	
									Fiscal Year 10								Fiscal Year 11								BALANCE							
									Calendar Year 10								Calendar Year 11															
ITEM		FY	SV C	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
Lightweight 155MM		08	MC	100	84	16	7	5	4																						0	
		08	Army	203	98	105	7	7	6	10	10	10	10	10	10	10	10	5														0
		09	MC	62	0	62												5	5	5	5	5	5	5	5	7	10	5				0
		09	Army	38	0	38													5	5	5	5	5	5	5	3						0
		09	FMS	25	0	25																						5	10	10		0
		10	MC	18	0	18						A																				18
		10	Army	53	0	53						A																				53
		10	FMS	35	0	35						A																				35
		11	MC	22	0	22															A											22
		11	Army	14	0	14															A											14

## EXHIBIT P-21, PRODUCTION SCHEDULE

Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No.  
Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2185

Weapon System
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P-1 Item Nomenclature:	155MM LIGHTWEIGHT TOWED HOWITZER (LW-155)/2185
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155MM LIGHTWEIGHT TOWED HOWITZER (LW-155)/2185

[illegible][illegible][illegible]

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles /2212							P-1 Item Nomenclature: High Mobility Artillery Rocket System (HIMARS)					
Program Elements for Code B Items: 0206211M (MC) / 0502511M Divisions (MCR)				Code: B	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY 2014	FY 2015	To Complete	TOTAL
Proc Qty												
Gross Cost	402.2	135.1	71.3	22.2	145.5	167.8	14.7	6.8	6.9	7.0	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	402.2	135.1	71.3	22.2	145.5	167.8	14.7	6.8	6.9	7.0	Cont.	Cont.
Initial Spares	13.6	3.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	415.8	138.2	72.4	22.2	145.5	167.8	14.7	6.8	6.9	7.0	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	1.4	1.7	1.7	0.0	1.7	0.0	0.0	0.0	0.0		4.8
<p><b>Base Appropriation Request:</b>  <b>HIMARS</b>            USMC High Mobility Artillery Rocket System (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 Family of Munitions (MFOM). The system includes a launcher, two Re-Supply Systems (RSS) and the MFOM. An RSS consists of a Re-Supply Vehicle (Medium Tactical Vehicle Replacement (MTVR) based truck with Material Handling Equipment) and a Re-Supply Trailer. The MFOM is a family of rockets and missiles capable of attacking a variety of tactical and operational targets, providing the requisite range and lethality to support maneuver commanders.</p> <p>HIMARS will provide the Fleet Marine Force 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 including irregular warfare and distributed operations. HIMARS is a significant improvement over currently fielded ground fire support systems. During a 24-hour period the system will be expected to conduct multiple moves and complete multiple fire missions. HIMARS will satisfy the Marine Corps requirement for an indirect fire system that is responsive, maneuverable, and capable of engaging targets at long range.</p> <p>HIMARS Rockets are procured training and tactical munitions per the USMC HIMARS Total Munitions Requirement (TMR). The training munitions are the Multiple Launch Rocket System (MLRS) Reduced Range Practice Rocket (RRPR). The rocket has an inert payload section with a blunt nose for inducing reduced range for use at multiple ranges in CONUS. The tactical munitions are the Guided Multiple Launch Rocket System (GMLRS) rocket. The GMLRS integrates a guidance and control package and a new rocket motor to achieve greater range and precision accuracy resulting in reduced logistics footprint for deployed forces. GMLRS is effective against counter fire, air defense, light material, personnel targets and provides greater range and significantly enhanced accuracy.</p> <p><b>FY11 Overseas Contingency Operations Request (OCO): \$145.533M</b>            Funding requested to procure rocket pods expended in theater as well as pods required by an additional HIMARS battery. Quantity calculated using recent OCO rocket expenditure data, and adjusting for a second firing unit per guidance.</p>												

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles /2212					P-1 Line Item Nomenclature: High Mobility Artillery Rocket System (HIMARS)			Weapon System Type:			Date: February 2010			
Weapon System		Cost	ID CD	PRIOR YRS			FY 2009			FY 2010			FY 2011			
Elements				TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>Baseline</b>																
GROUND EQUIPMENT HARDWARE																
HIMARS Launcher System*			B	118832				18982	7	2711714						
HIMARS Re-Supply System**				28982												
Re-Supply Vehicle								4950	9	550000						
Re-Supply Trailer								108	2	54000						
P3I Upgrades				28574				9173			4112			2781		
ROCKET MUNITIONS HARDWARE																
M28A2 Reduced Range Practice Rocket				4675				2940	98	30000	3366	110	30600	3600	100	36000
M30 Guided Multiple Launch Rocket System				62916												
M31 Guided Multiple Launch Rocket System				116755				88788	151	588000	57624	98	588000	11172	19	588000
LOGISTICS																
Contractor Logistics Support				8508				2718			470			470		
New Equipment Training Team (NETT)				3800				700								
Peculiar Support Equipment				3705				329								
Integrated Logistics Support				8066				650			510					
PROCUREMENT SUPPORT																
Production Engineering (Launcher)				3629												
Government Testing (Launcher)				2647												
Government Testing (GMLRS)				850				400			400					
Multiple Launch Rocket System (MLRS) PMO				910				265			270			270		
USMC HIMARS PMO				5438				2604			2700			2618		
Contractor Consulting Services				3898				2500			1804			1319		
Subtotal Baseline				402185				135107			71256			22230		
FY11 OCO																
ROCKET MUNITIONS HARDWARE																
M31 Guided Multiple Launch Rocket System														145533	248	588000
Receipt, Storage, Segregation, Inspection																
Subtotal FY11 OCO														145533		
TOTAL				402185				135107			71256			167763		
ACTIVE*				190438				133680			69547			166062		
RESERVE*				211747				1427			1709			1701		
Reserves (where applicable)																
GROUND EQUIPMENT HARDWARE																
HIMARS Launcher System*																
Engineering Services, IES								1427			1709			1701		
* The USMC HIMARS Launcher System unit cost includes cost of the Launcher, Launcher Carrier, Carrier Armor, Carrier Radio Sets.																

Exhibit P-5a, Budget Procurement History and Planning									Date:	
									February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2212				Weapon System Type:		P-1 Line Item Nomenclature: High Mobility Artillery Rocket System (HIMARS)				
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Fiscal Years										
<u>HIMARS Launchers System*</u>										
FY09	Lockheed-Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-08	Mar-10	7	2711714	Yes		
<u>HIMARS Re-Supply System (RSS)</u>										
FY09										
Re-Supply Vehicles	Oshkosh Truck, Oshkosh, WI	SS-FFP	Quantico, VA	Mar-09	Nov-09	9	550000	Yes		
Re-Supply Trailers	Oshkosh Truck, Oshkosh, WI	SS-FFP	Quantico, VA	Mar-09	Nov-09	2	54000	Yes		
<u>Reduced Range Practice Rockets **</u>										
FY08 M28A2	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-08	Mar-10	30	30000	Yes		
FY09 M28A2	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-08	Mar-10	98	30000	Yes		
FY10 M28A2	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-09	Nov-10	110	30600	Yes		
FY11 M28A2	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-10	Nov-11	100	36000	Yes		
<u>Tactical Munitions Systems (GMLRS)</u>										
FY09 M31 GMLRS	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-08	Aug-10	151	588000	Yes		
FY10 Baseline M31 GMLRS	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-09	Feb-11	98	588000	Yes		
FY11 Baseline M31 GMLRS	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Dec-10	Feb-12	19	588000	Yes		
FY11 OCO M31 GMLRS	Lockheed Martin, Dallas TX	SS-FFP	Huntsville, AL	Jul-11	Sep-12	248	588000	Yes		
<b>REMARK</b>										
* The USMC HIMARS Launcher System unit cost includes cost of the Launcher, Launcher Carrier, Carrier Armor, Carrier Radio Sets.										
** FY08 RRPRs were contracted in FY09.										



[illegible]

## Date: February 2010

P-1 Item Nomenclature:

High Mobility Artillery Rocket System (HIMARS)

[illegible][illegible][illegible]

REMARKS: The fluctuations in the Marine Corps schedule above is due to the fact that the Army and FMS order quantities are not included in this exhibit. This is also the reason why the scheduled quantities are below the Economic order quantity.

FY 09/10 BUDGET EXHIBIT P-21, PRODUCTION SCHEDULE															Date: February 2010															
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2212										Weapon System			P-1 Item Nomenclature: High Mobility Artillery Rocket System (HIMARS)																	
										PRODUCTION RATE			PROCUREMENT LEADTIMES																	
ITEM	Manufacturer's NAME / LOCATION									MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure												
Launcher	Lockheed Martin, Dallas Texas									2	7	12	8	3	16	15	18	E												
HIMARS Re-Supply System	Lockheed Martin, Dallas Texas									4	8	24		1	8	8	9	E												
										Fiscal Year 08					Fiscal Year 09				BALANCE											
										Calendar Year 08					Calendar Year 09															
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
HIMARS	2009	MC	7		7															A										7
HIMARS Re-Supply System (RSS)																														
Re-Supply Vehicle	2009	MC	9		9																	A								9
RE-Supply Trailer	2009	MC	2		2																	A								2
										Fiscal Year 10					Fiscal Year 11				BALANCE											
										Calendar Year 10					Calendar Year 11															
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
HIMARS	2009	MC	7		7						1	6																		0
HIMARS Re-Supply System (RSS)																														
Re-Supply Vehicle	2009	MC	9		9		9																							0
RE-Supply Trailer	2009	MC	2		2		2																							0

Remarks: Prior year quantities were procured under BLI 205000 (launchers) and BLI 304001(GMLRS). System and Rockets are a joint procurement with the US Army. The fluctuations in the Marine Corps HIMARS schedule above is due to the fact that the Army and FMS order quantities are not included in this exhibit. This is also the reason why the scheduled quantities are below the Economic order quantity.

## Date: February 2010

P-1 Item Nomenclature:	High Mobility Artillery Rocket System (HIMARS)
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[illegible][illegible][illegible]

REMARKS: Rockets are a joint procurement with the US Army. The fluctuations in the Marine Corps GMLRS schedule above is due to the fact that the Army and FMS order quantities are not included in this exhibit. This is also the reason why the scheduled quantities are below the Economic order quantity.

## Date: February 2010

P-1 Item Nomenclature:

High Mobility Artillery Rocket System (HIMARS)

[illegible][illegible][illegible]Exhibit P-21  
Production Schedule

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2220						P-1 Item Nomenclature: Weapons and Combat Vehicles Under \$5M						
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	349.7	31.5	19.5	26.1	7.3	33.4	18.8	13.6	13.9	13.1		493.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	349.7	31.5	19.5	26.1	7.3	33.4	18.8	13.6	13.9	13.1		493.4
Initial Spares	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.6
Total Proc Cost	350.3	31.5	19.5	26.1	7.3	33.4	18.8	13.6	13.9	13.1		494.0
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

**Base Appropriation Request:**  
This is a roll-up line that contains multiple Weapons and Tracked Combat Vehicle items. The funds are used to enhance the existing kits within the USMC inventory with improved, state-of-the-art electronics and tools for units that have been added/changed due to Table of Organizational (TOO) changes and Table of Equipment (TOE) changes. Funds also support the ongoing changes to the various stock lists prescribing those components of sets of test equipment and tools. The funds included in this budget line support procurement of the following items:

**Company and Battalion Mortars** - Provides responsive, all-weather, organic, indirect fire support to the company and battalion commanders of the Ground Combat Element in support of offensive and defensive operations and maneuver.

**Infantry Automatic Rifle (IAR)** - A magazine-fed, 5.56mm weapon that increases the automatic rifleman's maneuverability and displacement speed, allowing him to keep pace with the rest of the fire team. This program responds to a Universal Needs Statement (UNS) submitted in November 2001 that identified the need for an automatic rifle to replace the Squad Automatic Weapon (SAW) within the infantry. The IAR will be designed for optimal operation by a single Marine and possess increased accuracy and reliability over the M249 SAW.

**Infantry Weapons Modifications** - The Infantry Weapons Modification program develops joint and Marine Corps unique improvements efforts to infantry weapons and fire support technology. The improvements address critical operational and logistics deficiencies in fielded infantry weapon systems and equipment. The funding permits economical level of effort project participation, to analyze, design, develop, and field modifications. This level of effort funding line allows timely response to safety and performance issues that require immediate attention to maintain operational readiness.

**Infantry Weapons Readiness** - Funds procurement and sustainment of Infantry Weapons Gauges for all Infantry Weapons Systems (IWS), Universal Weapons racks for all USMC armories in order to store weapons, and associated optics and modifications necessary for the Family of Heavy Machineguns to include Thermal Weapon Sight Brackets for the MK19 and M2 Heavy Machineguns and Hydraulic buffer and hand guard modifications to the medium machine gun.

**Multi Shot Grenade Launcher** - Additive weapon system to the USMC arsenal to provide a semi-automatic, revolving action, shoulder-fired, 400 mm grenade launcher capable of firing six rounds in three seconds to support Infantry Squads. It will be fielded to support convoy operations at the Division, Regimental, and Battalion level.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2220		P-1 Item Nomenclature: Weapons and Combat Vehicles Under \$5M
Program Elements: 0206211M Divisions (Marine)	Code: A	Other Related Program Elements:
<p><b>Principal End item (PEI) Reprourement</b> - Procures various Infantry Weapons for fielding to Marine Corps Special Operations Command (MARSOC) units and other items which have completed their initial inventory procurement and have no active procurement program for a replacement system, but are still essential to conduct the Marine Corps mission.</p> <p><b>Rifle Team Equipment</b> - These items are required to support the Marine Corps shooting teams authorized to compete with other Services in competitive shooting matches.</p> <p><b>Sniper System Capability Sets</b> - A suite that includes a long range precision rifle capability, a semi-automatic precision rifle capability and all the associated ancillary equipment required to accomplish defined scout sniper mission essential tasks.</p> <p><b>Tank Tools and Test</b> - Includes miscellaneous tools and test items for the M1A1 tank and associated supporting platforms and Material Fielding Support for the Combine Support Function Module, ar the following items: Tool Kit, TV, IM, 3d ECH FM60A1; Tool Set, M1A1 Tank, 4th ECH, ORD Maint Kit; Tool Set, M1A1 Tank, 4th ECH GS Maint Kit; Tool set, M1A1 Tank, 3D ECH, and Test Set, Simplified Test Equipment.</p> <p><b>Tool Sets &amp; Kits</b> - Tool Sets are comprised of special tools and gauges used by Organizational Level maintenance personnel to inspect, repair and replace parts on specific weapon systems, such as M240 Machine Gun, and MK 19 Machine Gun.</p> <p><b><u>FY11 Overseas Contingency Operations Funding (OCO): \$7.329M</u></b>  FY 11 OCO request for PMC funds to procure MEUSOC .45 Pistol (CQC Pistol) from commercial source to meet the increased capacity requirement for USMC Reconnaissance and SOF units. The current AAO is 2873 and the shortfall is 1085. The capacity shortfall is ~ 40% and the current production schedule does not support the requirements for upcoming and planned USMC Recon and MARSOC training/operation cycles and deployments to OEF. The Precision Raid/Direct Action capability is a validated capability set and in high demand in current and ongoing OEF operations. This capability directly affects MEB a capabilities for OEF. Additionally, this request provides PMC funds for replacement of weapons due to combat loss. This request will provide the Ground Combat Element a quantity of 5090 adjustable buttstocks for the M16A4 component of the MWS, 14036 Back-Up Iron Sights (BUIS), and Cantilever Mounts for the Modular Weapon System (MWS).</p>		

Exhibit P-40a, Budget Item Justification for Aggregated Items					Date: February 2010				
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2220				P-1 Item Nomenclature: Weapons and Combat Vehicles Under \$5M					
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	
Tank Safety Mods/Tools and Test	A	D	5.064	0.232	0.000	0.000	0.000	0.000	
		Q	VAR	VAR					
Infantry Weapons Readiness	A	D	1.518	0.015	0.306	0.604	0.564	1.168	
		Q	VAR	VAR	VAR	VAR	VAR	VAR	
Rifle Team Equipment	A	D	0.162	0.140	0.142	0.141	0.000	0.141	
		Q	VAR	VAR	VAR	VAR		VAR	
Sniper System Capability Sets	A	D	0.000	0.000	4.293	1.096	0.000	1.096	
		Q			VAR	VAR		VAR	
Company & Battalion Mortars	A	D	5.550	4.929	2.195	2.178	0.000	2.178	
		Q	VAR	VAR	VAR	VAR		VAR	
Tool Sets and Kits	A	D	0.000	1.814	0.000	0.000	0.000	0.000	
		Q		VAR					
Principal End Item (PEI) Reprocurement	A	D	7.417	5.523	3.436	3.914	0.000	3.914	
		Q	VAR	VAR	VAR	VAR		VAR	
Total			19.711	12.653	10.372	7.933	0.564	8.497	
Active			19.711	12.653	10.422	7.933	0.564	8.497	
Reserve			0.000	0.000	-0.050	0.000	0.000	0.000	



Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2220					P-1 Line Item Nomenclature: Weapons and Combat Vehicles Under \$5M		Weapon System Type:		Date:  February 2010	
Weapon SystemCost Elements	ID C D	PRIOR YRS	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
Infantry Weapons Modifications	A	8256	6454	VAR	VAR	9035	VAR	VAR	6217	VAR	VAR
Multi Shot Grenade Launcher ACQ/Eng/Log Support	A	8095	6878 1106	984	6990						
Ancillary Items- Spares, Ammo, Gages, Special Tools, Shipping Cost, Tech Manuals, Training, Test Support Personnel, Program Management Support Cost.			4391								
Infantry Automatic Rifle Eng/Log Support	A	3321				2	VAR	VAR	11941	3055	3909
Subtotal Baseline		19672	18829			9037			18158		
<u>FY11 OCO</u>											
Infantry Weapons Modifications	A								6765	VAR	VAR
Subtotal FY11 OCO									6765		
TOTAL		19672	18829.16			9037			24923		
ACTIVE		19672	18829			9037			24923		
RESERVE			0			0			0		

Exhibit P-5a - Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2220		Weapon System Type:			P-1 Line Item Nomenclature: Weapons and Combat Vehicles Under \$5M					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY09 Multi Shot Grenade Launcher	TBD	FP	MARCORSYSCOM	Feb-10	Apr-10	984	6990	Yes	N/A	Apr-09
FY11 Infantry Automatic Rifle	TBD	FP	MARCORSYSCOM	Oct-10	Nov-10	3055	3909	Yes	N/A	N/A
REMARKS:										

EXHIBIT P-21 - PRODUCTION SCHEDULE																	February 2010														
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2220						Weapon System					P-1 Item Nomenclature: Weapons and Combat Vehicles Under \$5M																				
						PRODUCTION RATE			PROCUREMENT LEADTIMES																						
ITEM	Manufacturer's NAME / LOCATION					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure																	
Multi Shot Grenade Launcher	TBD					50	140	300		16		2	18	E																	
Infantry Automatic Rifle	TBD					TBD	TBD	TBD		0	1		1	E																	
						Fiscal Year 09											Fiscal Year 10											BALANCE			
						Calendar Year 09											Calendar Year 10														
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		AUG	SEP	
Multi Shot Grenade Launcher	09	MC	984	0	984																	A		82	82	82	82	82	82	492	
Infantry Automatic Rifle	11	MC	3055	0	3055																									3055	
						Fiscal Year 11											Fiscal Year 12											BALANCE			
						Calendar Year 11											Calendar Year 12														
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		AUG	SEP	
Multi Shot Grenade Launcher	09	MC	984	492	492	82	82	82	82	82	82																			0	
Infantry Automatic Rifle	11	MC	3055	0	3055	A	257	257	257	257	257	257	257	257	257	257	257	228												0	
REMARKS:																															

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2334							P-1 Item Nomenclature: Modular Weapon System					
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To complete	Total Prog
Proc Qty	46870											
Gross Cost	193.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		195.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	193.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		195.4
Initial Spares	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.6
Total Proc Cost	194.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		196.1
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
<p><b>Modular Weapon System (MWS)</b> is a program consisting of two main variants of the M16 Family of Rifles. They are the M16A4 rifle and the M4/M4A1 carbine. The MWS consists of a rifle/carbine that has been modified by building into the design a military-standard rail in place of the integral carry handle/sight to permit quick mounting of various night/day/thermal sights. Additionally, hand guards with rails are attached to the barrel assembly to mount various accessories such as a modified M203 grenade launching system, flashlights and infrared laser pointers and other such devices. The MWS reduces the number of components required to attach accessories and allows configuration management at the operator level vice the current second and third echelons of maintenance.</p>												

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2334						P-1 Line Item Nomenclature Modular Weapon System			Weapon System		Date: February 2010		
Weapon System Cost Elements	ID CD	PRIOR	FY 09			FY 10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCos t \$	TotalCos t \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
Modular Weapon System (MWS)		5400												
M16A4 Rifles with Rail Adapter System (RAS)		110671												
M4 Carbines with RAS		56471												
SL3 components for MWS			1892	VAR	VAR									
Subtotal Baseline		172542	1892											
TOTAL		172542	1892			0					0			
ACTIVE		172542	1892			0					0			
RESERVE		0	0			0					0			

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2061					P-1 Item Nomenclature: Modification Kits							
Program Element: 0206211M Divisions (Marine)			Code: A		Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	246.4	177.9	54.9	40.9	12.0	52.9	61.4	111.5	91.6	24.8	Cont	821.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	246.4	177.9	54.9	40.9	12.0	52.9	61.4	111.5	91.6	24.8	Cont	821.5
Initial Spares	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	4.5
Total Proc Cost	250.9	177.9	54.9	40.9	12.0	52.9	61.4	111.5	91.6	24.8	Cont	826.0
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request**

**M1A1 TANK BLADE:** The M1A1 Tank Blade is a semi-fixed earth moving attachment which provides a mobility/counter-mobility capability for the maneuver element, allowing preparation of fighting positions and rapid clearing of obstacles.

**TANK RXBN:** The M1A1 Tank RXBN effort addresses electronic obsolescence issues with the primary Line Replaceable Units (LRUs) within the tank hull and turret through the replacement of major components and obsolete circuit cards and electrical components.

**M1A1 MOD KIT:** The M1A1 Mod Kit Line is established to sustain the technology of the M1A1 Tank, procure and field critical safety related modification kits, and other supporting platforms including Support and Test Equipment while addressing equipment deficiencies, safety related issues, and obsolete components. Funding will also procure and field modifications and upgrade/replace Special Purpose Test Equipment associated with the M1A1 Tank. Also includes miscellaneous tools and test items for the M1A1 tank and associated supporting platforms, and Materiel Fielding Support for the Combined Support Function Module, and the following items: Tool Kit, TV, IM, 3d ECH FM60A1; Tool Set, M1A1 Tank, 4th ECH, ORD Maint Kit; Tool Set, M1A1 Tank, 4th ECH GS Maint Kit; Tool Set, M1A1 Tank, 3D ECH, and Test Set, Simplified Test Equip.

**HMMWV Expandable Capacity Vehicles (ECV):** The ECV is an improved version of the standard Highly Mobile Multipurpose Wheeled Vehicle (HMMWV) based on the M1114 with a heavier chassis and improved engine. The concept and design of the add on armor kits provide greater tactical flexibility for deploying units or training.

ECV variants purchased in this BLI include:

**ECV M1165:** Troop and Shelter Carrier, and Troop/MRC/Command Variants. Base unarmored.

**ECV M1167A1 w/B Armor Kit:** TOW Missile ECV Variant

The current HMMWV ECV procurement strategy is based on the Marine Requirements Oversight Committee (MROC) guidance that every vehicle will have basic armor protection with the capability of taking on full armor protection. The MROC guidance requires 60% of the HMMWV fleet will be fully armored and 40% of the fleet will have the basic Integrated Armor Package (IAP). All ECV with basic IAP are able to be upgraded with additional armor kits.

**Marine Corps Transparent Gun Shield / Battery Powered Motorized Traversing Unit (MCTAGS / BPMTU)** is the Marine Corps protection for the M1151A1B1 Armament Carrier Gunner.

**M1A1 SURVIVABILITY AND LETHALITY ENHANCEMENT:** This enhancement provides 3 crucial product improvements to the M1A1, including added armor, improved weapon station modifications, and counter-sniper protection systems. This effort will ensure that the M1A1 Tank remains combat dominant throughout its life cycle.

**INFANTRY WEAPONS MODIFICATIONS:** This line item is a roll-up program for supporting the enhancement of small arms equipment/systems. These efforts also address emerging requirements and provide support for investigating safety issues that arise.

**TANK, COMBAT, FULL TRACK, 120MM GUN:** This line is in support of the 202K end strength increase adding 44 tanks to the Approved Acquisition Objective (AAO) with one tank company to each of the two Tank Battalions and the Depot Maintenance Float Allowance.

**BRIDGE BOATS:** The Bridge Boat line is a roll up line that provides funds to procure Bridge Erection Boats and associated trailers, Improved Ribbon Bridges, and Rafting Set Ribbon Bridges. These systems provide the Marine Corps with the capabilities required for Marine Expeditionary Forces to overcome wet gap obstacles too wide to be breached or too deep to be forded by combat vehicles. The Bridge Erection Boat supports bridging and amphibious operations. The Improved Ribbon Bridge is a floating wet gap bridge system capable of carrying a MLC 80 (tracked) or 100 (wheeled) ton vehicle in stream currents up to 10 feet per second (5.9 miles per hour) and consists of 5 ramp bays and 12 interior bays. The Rafting Set Ribbon Bridge consists of 2 ramp bays and 5 interior bays and provides a MLC 80/100 rafting capability to ferry vehicles and personnel across wet gaps.

**JOINT ASSAULT BRIDGE:** The Armored Vehicle Launched Bridge (AVLB) Bridge is a scissor type bridge, supporting crossings of up to 70 tons. It is used to cross anti-tank ditches, natural obstacles, road craters and destroyed or weakened bridge spans, using the M60 Tank Chassis as a launch platform.

**FY11 OCO:**

**IMPROVED RECOVERY VEHICLE (IRV):** 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 Track, M88 Equip is required in support of Operation Enduring Freedom (OEF) to achieve pre-war asset inventories and to achieve total AAO.

Funding will procure Original Equipment Manufacturer (OEM) systems technical support, safety and reliability related modification kits, logistics support for technical manual life cycle management, configuration status accounting and field retrofit labor and contractor install efforts. Funding is a mix of OCO and LOE Core funding to sustain the fielded assets and procure additional vehicles.

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010					
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2061				P-1 Item Nomenclature: MODIFICATION KITS (2061)							
Procurement Items	Code	UOM	Prior Years Total	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011			
M1A1 SURVIVABILITY/LETHALITY	A	0.0	0.000	0.041	0.637	0.000	0.000	0.000			
		Q									
M1A1 120MM DATA LINK	A	0.0	0.000	0.000	0.950	0.000	0.000	0.000			
		Q									
M1A1 ABRAMS COOLING VEST	A	0.0	0.000	0.000	2.533	0.000	0.000	0.000			
		Q									
M1A1 DRIVER REAR SENSOR	A	0.0	0.000	0.000	1.140	0.000	0.000	0.000			
		Q									
M1A1 IMPROVED EXTERNAL AUXILARY	A	0.0	0.000	0.000	1.520	0.000	0.000	0.000			
		Q									
Totals			0.000	0.041	6.780	0.000	0.000	0.000			
Active			0.000	0.041	6.780	0.000	0.000	0.000			
Reserve			0.000	0.000	0.000	0.000	0.000	0.000			

Exhibit P-5,  Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2061				P-1 Line Item Nomenclature: Modification Kits			Weapon System Type:			Date:  February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs					FY 2009			FY 2010			FY 2011		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	
<u>Baseline</u>															
Tank Safety Mods/Tools & Test Equip		10020				1653	VAR	VAR							
Tank, Combat, Full Track, 120MM Gun		76270													
M1A1 Modification Kit		18580				9068	VAR	VAR	29855	VAR	VAR	25246	VAR	VAR	
HMMWV M1165A1B3						15756	98	160775							
HMMWV M1167-Tow Missile Carrier w/ Armor						133957	571	234600							
MCTAGS						5708	229	24925							
MCTAGS BPMTU/MTU Only						2116	229	9242							
MCTAGS Turret Assembly						1635	229	7140							
M1A1 Driver's IED Surv. Enhancement.															
2-Ton Belly Armor						6400	160	40000							
Improved Driver Seats						1600	160	10000				10357	VAR	VAR	
M1A1 Survivability/Lethality(SLES)															
Improved Recovery Vehicle															
Logistics Support Activities									856	VAR	VAR	956	VAR	VAR	
Engineering Support									855	VAR	VAR	955	VAR	VAR	
Mod Kits									2480	VAR	VAR	3402	VAR	VAR	
M1A1 Special Mission Kits									5540	22	251810				
Electric Generators (Multiple Models)									8500	VAR	VAR				
(Various Generators, 2KW, 3KW															
10KW, 20KW, 30KW, 60KW, 100KW)															
Subtotal Baseline		104870				177893			48086			40916			
FY11 OCO															
Improved Recovery Vehicle												12000	5	2400000	
Subtotal FY11 OCO												12000			
TOTAL		104870				177893			48086			52916			
ACTIVE		104870				177893			48086			52916			
RESERVES		0				0			0			0			



Exhibit P-5a, Budget Procurement History and Planning									Date:	
									February 2010	
Appropriation / Budget Activity/Serial No:		Weapon System Type:			P-1 Line Item Nomenclature:					
Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles /2061					Modification Kits					
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Fiscal Years										
FY09										
HMMWV M1165A1B3	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Jan-10	May-10	98	160775	Y	N/A	N/A
HMMWV M1167-Tow Missile Carrier w/Armor	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Jan-10	May-10	571	234600	Y	N/A	N/A
MCTAGS	BAE, Santa Clara, CA	FFPO	MCSC, Quantico	Jan-10	May-10	229	24925	Y	N/A	N/A
MCTAGS BPMTU/MTU Only	BAE, Santa Clara, CA	FFPO	MCSC, Quantico	Jan-10	May-10	229	9242	Y	N/A	N/A
MCTAGS Turret Assembly	BAE, Santa Clara, CA	FFPO	MCSC, Quantico	Jan-10	May-10	229	7140	Y	N/A	N/A
M1A1 Driver's IED Survivability Enhancement-FY09	General Dynamics Land Sys.	FFP	Sterling Heights, MI	Mar-09	Oct-09	160	40000	Y	N/A	N/A
2-Ton Belly Armor	General Dynamics Land Sys.	FFP	Sterling Heights, MI	Mar-09	Oct-09	160	10000	Y	N/A	N/A
Improved Driver Seats										
FY10										
M1A1 SPECIAL MISSION KITS FY10	TBD	TBD	TBD	TBD	TBD	22	251810	Y	Feb-09	May-09
FY11										
FY11 OCO										
Improved Recovery Vehicle-FY11	BAE Systems, York, PA	SS-FFP	TACOM, Warren MI	Mar-11	Mar-12	5	2400000	Y	N/A	Nov-10
REMARKS:										

## Date: February 2010

### Modification Kits (2061)

		PRODUCTION RATE			PROCUREMENT LEADTIMES					
ITEM	Manufacturer's NAME / LOCATION	MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure
120 MM Gun	Anniston Army Depot, Anniston AL	1	1	10			3		3	E
M1A1 Driver's IED Survivability Enhancement	General Dynamics Land Systems, Sterling Heights, MI	2	4	10		5	12		17	E
HMMWV ECVs	AM General Corp, South Bend, IN	100	100	2883		1		4	5	E
MCTAGS/BPMTU/Turret Assembly	BAE, Santa Clara, CA	100	200	400		1		4	5	E

[illegible]

					Fiscal Year 10																Fiscal Year 11																B A L A N
					Calendar Year 10																Calendar Year 11																
ITEM	F Y	S V C	Q T Y	D E L	B A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								
2-Ton belly Armor	09	MC	160		160	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	50						
Improved Driver Seats	09	MC	160		160	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	50						
HMMWV ECV M1167	09	MC	571		571				A				2	98	98	98	98	98	79																		
HMMWV ECV M1165	09	MC	98		98				A				98																								
MCTAGS	09	MC	229		229				A				28	28	28	28	28	28	28	28	5																
BPMTU	09	MC	229		229				A				28	28	28	28	28	28	28	28	5																
MCTAGS Turret Assembly	09	MC	229		229				A				28	28	28	28	28	28	28	28	5																
Improved Recovery Vehicle	11	MC	5		5																		A								5						

REMARKS:

**FY 08/09 BUDGET EXHIBIT P-21, PRODUCTION SCHEDULE**

FY 08/09 BUDGET EXHIBIT P-21, PRODUCTION SCHEDULE	Date: February 2010
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FY 08/09 BUDGET EXHIBIT P-21, PRODUCTION SCHEDULE	Date: February 2010
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Appropriation Code/CC/BA/BSA/Item Control No.  
Procurement. Marine Corps (1109) /02 Weapons and Combat Vehicles/ 2061

Weapon System	
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P-1 Item Nomenclature:	Modification Kits (2061)
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P-1 Item Nomenclature:	Modification Kits (2061)
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REMARKS:
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<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2208						P-1 Item Nomenclature: WEAPONS ENHANCEMENT PROGRAM						
Program Elements: 0206211M Divisions (Marine)				Code:	Other Related Program Elements:							

	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	120.9	27.0	31.3	13.1	18.6	31.7	15.8	9.7	15.4	21.4	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	120.9	27.0	31.3	13.1	18.6	31.7	15.8	9.7	15.4	21.4	Cont.	Cont.
Initial Spares												
Total Proc Cost	120.9	27.0	31.3	13.1	18.6	31.7	15.8	9.7	15.4	21.4	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont.

**Baseline Appropriation Request:**

**Family of Marine Enhancement Programs (MEP)** - Congressionally initiated program that provides an avenue for obtaining equipment and end items that would otherwise be considered low visibility, low cost items. It focuses on equipment that will benefit the individual Marine by reducing the load, increasing survivability, enhancing safety and improving combat effectiveness with emphasis on Non-Developmental Items (NDI) and commercially available items which can be quickly evaluated and fielded. This program is coordinated with the Army's Soldier Enhancement Program and the Special Operations Command.

**M203 Grip Pod** - A forward handgrip designed specifically to accommodate the M203 Grenade Launcher.

**Family of Ballistic Protection Systems includes Full Spectrum Battlefield Equipment (FSBE)** -FSBE is designed to replace the old Close Quarters Battle (CQB) suite of equipment and 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. The FSBE has 2 variants (Individual & Platoon), both of which have 4 configurations (A, B, C & D), and each configuration contains up to 43 components purchased from 6 different vendors with various unit prices and different production schedules.

**Operations Other Than War (OOTW)** - Supports emerging needs of the Operating Forces as their critical Force Protection requirements continue to evolve. Based on information collected from Marine Corps Center for Lessons Learned (MCCLL), Marine Corps Forces (MARFOR) surveys, and the December 2006 Capabilities Based Analysis (CBA), the current Non-Lethal Weapon Capability Sets (NLWCS) and Anti-Terrorism/Force Protection Capability Sets (AT/FPCS) and includes Force Protection Capability Sets, the Non-Lethal Tube Launched Munitions System (NL/TLMS) and the Green Beam IIIC Visual Hailing and Warning Device (E00537B).

**Escalation of Force Equipment (EOFE) - Escalation of Force (EoF)**-Supports emerging needs of the Operating Forces as their critical requirements to integrate Escalation of Force into tactics, techniques and procedures (TTP's) continue to grow and maintains legacy systems still utilized by the Operating Forces. Based on information collected from Marine Corps Center for Lessons Learned (MCCLL), Marine Corps Forces (MARFOR) surveys, and the December 2006 Capabilities Based Analysis (CBA), the current Escalation of Force Mission Modules (EoF-MM), Non-Lethal Tube Launched Munitions Systems (NL/TLMS) and LA-9P, and future Mission Payload Module (MPM) and Optical Interruption Device (OID).

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2208		P-1 Item Nomenclature: WEAPONS ENHANCEMENT PROGRAM
Program Elements: 0206211M Divisions (Marine)	Code:	Other Related Program Elements:
<p><b><u>FY11 Overseas Contingency Operations Request (OCO) \$18.571:</u></b>  <b>Escalation of Force Equipment-(EOFE)</b> Supports emerging needs of the Operating Forces as their critical requirements to integrate Escalation of Force into tactics, techniques and procedures (TTP's) continue to grow and maintains legacy systems still utilized by the Operating Forces. Based on information collected from Marine Corps Center for Lessons Learned (MCCLL), Marine Corps Forces (MARFOR) surveys, and the December 2006 Capabilities Based Analysis (CBA), this effort supports the requirement to procure Escalation of Force Mission Modules (EoF-MM) with Optical Interruption Devices.</p>		

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010		
Appropriation / Budget Activity: Procurement, Marine Corps (1109) / 02 Weapons and Combat Vehicles / 2208				P-1 Item Nomenclature: WEAPONS ENHANCEMENT PROGRAM				
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011
Family of Marine Enhancement Program	A	D	14.934	0.000	3.480	3.261	0.000	3.261
		Q			VAR			
M203 Grenade Launcher Grip Pods	A	D	0.000	4.107	0.000	0.000	0.000	0.000
		Q		VAR				

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 02 Weapons and Tracked Combat Vehicles / 2208				P-1 Line Item Nomenclature: Weapons Enhancement Program		Weapon System Type:		Date: February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>Baseline</b>											
<b>Family of Ballistic Protection Systems:</b>											
Full Spectrum Battlefield Equipment (FSBE)	A										
- Platoon Kit (Configuration A)		1952				1933	VAR	VAR			
- Individual Kit (Configuration A)		12196	14634	VAR	VAR	15642	VAR	VAR	9172	VAR	VAR
- Individual Kit (Configuration B)											
- Individual Kit (Configuration C)		92				194	VAR	VAR			
- Individual Kit (Configuration D)						419	VAR	VAR			
FBPS Subtotal		14240	14634			18188			9172		
Operations Other Than War (OOTW)			8241	VAR	VAR	9652	VAR	VAR	0	VAR	VAR
Escalation Of Force Equipment (EOFE)									682	VAR	VAR
Subtotal Baseline		14240	22875			27840			9854		
<b>FY11 OCO</b>											
Escalation of Force Equipment (EOFE)									18571	VAR	VAR

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment/ 3006						P-1 Item Nomenclature: Ground Based Air Defense						
Program Elements: 0206211M Divisions (Marine)					Code: A	Other Related Program Elements						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty												
Gross Cost	20.7	8.8	11.4	5.2	0.0	5.2	6.4	9.7	5.6	5.9	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	20.7	8.8	11.4	5.2	0.0	5.2	6.4	9.7	5.6	5.9	Cont.	Cont.
Initial Spares		0.2	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	20.7	9.0	13.2	5.2	0.0	5.2	6.4	9.7	5.6	5.9	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.

**Baseline Appropriation Request**

**Ground Based Air Defense (GBAD) Transformation** supports the Low Altitude Air Defense (LAAD) Battalion's mission of Short Range Air Defense (SHORAD) and Force Protection Missions. FY-10 funds will be used to procure HMMWVs and upgraded C4 equipment for integration into A-MANPADS vehicles .

The initiatives are:

**Advanced Man Portable Air Defense Systems (A-MANPADS):** Replaced the Avenger and existing MANPADS (Stinger) vehicles, and retains LAAD Battalion's current Air Defense and self- protection (crew-served weapon) capabilities. Components of the A-MANPADS system include: M240 Machine Gun w/ Medium Thermal Weapons Sight, M2 .50cal Machine Gun w/ Heavy Thermal Weapons Sight, and a Defense Advanced GPS Receiver (DAGR) (replaces current GPS receiver-PLGR).

**Remote Terminal Unit (RTU):** The initiative replaces the current 18lb laptop computer that provides Situational Awareness and Command and Control to the Stinger and A-MANPAD teams. The RTU replacement will interface with legacy Marine Air C2 and be capable of receiving a Common Aviation Command and Control Systems (CAC2S) broadcasted link.

**Section Leader Vehicle:** This initiative is to procure/ integrate the equipment necessary to field a Section Leader/ Platoon Commander Vehicle for the LAAD Battalions. In the past this capability had no standardization throughout the fleet.

**Ground Vehicular Radio Communications (VAA for PRC-150 &117) -** The initiative will allow enhancement of the current Marine Corps Air Defense C2 architecture for early warning communication, air and ground situational awareness, and overall control of assets. The PRC-150 & 117 radios will alleviate the data link discrepancy and enable interoperability between Marine Air C2 and the LAAD Battalions by broadcasting an air and ground picture to deployed Stinger Teams.

**Missile Integration:** The Stinger Missile inventory is approaching shelf life expiration. This initiative will provide/procure a new engagement capability that replaces the Stinger Missile.



Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3006						P-1 Line Item Nomenclature:  Ground Based Air Defense		Weapon System Type:		Date:  February 2010				
	Weapon System Cost Elements	ID CD	Prior Yrs	FY09		FY10			FY11						
TotalCost \$000			TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	
<u>Baseline</u>															
Ground Vehicular Radio Communication VAA for PRC-117		A		1277	42	30400	1125	37	30400	456	15	30400			
Ground Vehicular Radio Communication VAA for PRC-150		A		768	24	32000	1024	32	32000	512	16	32000			
M1152 HMMWV		A		1980	12	165000	2640	16	165000	1320	8	165000			
Remote Terminal Unit Replacement		A		1427	30	47564	2236	47	47564	856	18	47564			
Section Leader Gateway		A		977	12	81400	1302	16	81400	651	8	81400			
Refurbishment and Fielding Support		A	287	2128	VAR	VAR	2651	VAR	VAR	1140	VAR	VAR			
JRE Consortium and Software Updates (A-MANPADS)		A		223	VAR	VAR	374	VAR	VAR	240	VAR	VAR			
Subtotal Baseline			9300	8780			11352			5175					
TOTAL			9300	8780			11352			5175					
ACTIVE			9300	8780			11352			5175					
RESERVES															

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment/ 3006		Weapon System Type:			P-1 Line Item Nomenclature:					
					Ground Based Air Defense					
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
0206313M Marine Corps Communication Systems										
<b>FY09</b>										
RTU Replacement	L3 San Diego, CA	C/FP	MCB, Quantico, VA	August-09	March-10	30	47564	Yes	NA	N/A
Section Leader Gateway	NSWC Crane, Bloomington, IA	WR	MCB, Quantico, VA	August-09	March-10	12	81400	Yes	NA	N/A
Vehicular Radio Comm. PRC-117	Harris, Rochester, NY	FFP	MCB, Quantico, VA	August-09	February-10	42	30400	Yes	NA	NA
Vehicular Radio Comm. PRC-150	Harris, Rochester, NY	FFP	MCB, Quantico, VA	August-09	February-10	24	32000	Yes	NA	NA
HMMWV M1152 Up Armored	General Motors, Morgan, MI	FFP	CO US Army Tank Automotive	June-09	March-10	12	165000	Yes	NA	NA
<b>FY10</b>										
RTU Replacement	L3 San Diego, CA	C/FP	MCB, Quantico, VA	November-09	May-10	47	47564	Yes	NA	N/A
Section Leader Gateway	NSWC Crane, Bloomington, IA	WR	MCB, Quantico, VA	November-09	May-10	16	81400	Yes	NA	N/A
Vehicular Radio Comm. PRC-117	Harris, Rochester, NY	FFP	MCB, Quantico, VA	November-09	May-10	37	30400	Yes	NA	NA
Vehicular Radio Comm. PRC-150	Harris, Rochester, NY	FFP	MCB, Quantico, VA	November-09	May-10	32	32000	Yes	NA	NA
HMMWV M1152 Up Armored	General Motors, Morgan, MI	FFP	CO US Army Tank Automotive	November-09	August-10	16	165000	Yes	NA	NA
<b>FY11</b>										
RTU Replacement	L3 San Diego, CA	C/FP	MCB, Quantico, VA	November-10	May-11	18	47564	Yes	NA	NA
Section Leader Gateway	NSWC Crane, Bloomington, IA	WR	MCB, Quantico, VA	November-10	May-11	8	81400	Yes	NA	NA
Vehicular Radio Comm. PRC-117	Harris, Rochester, NY	FFP	MCB, Quantico, VA	November-10	May-11	15	30400	Yes	NA	NA
Vehicular Radio Comm. PRC-150	Harris, Rochester, NY	FFP	MCB, Quantico, VA	November-10	May-11	16	32000	Yes	NA	NA
HMMWV M1152 Up Armored	General Motors, Morgan, MI	FFP	CO US Army Tank Automotive	November-10	August-11	8	165000	Yes	NA	NA
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE																				Date:											
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment/ 3006										Weapon System					P-1 Item Nomenclature:  Ground Based Air Defense																
										PRODUCTION RATE					PROCUREMENT LEADTIMES																
0206313M Marine Corps Communication Systems		Manufacturer's NAME / LOCATION								MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		TOTAL			Unit of Measure							
HMMWV M1152		General Motors, Morgan, MI								1	6	10			9		9		8					EA							
RTU Replacement		L3 San Diego, CA								3	10	15			7		15		5					EA							
Section Leader Gateway		NSWC Crane, Bloomington, IA								1	3	6			7		4		5					EA							
VAA for VRC-117		Harris Corp., Rochester, NY								100	250	350			6		15		5					EA							
VAA for VRC-150		Harris Corp., Rochester, NY								100	250	350			6		8		5					EA							
										Fiscal Year 2009										Fiscal Year 2010										B A L A N	
										Calendar Year 2009										Calendar Year 2010											
ITEM	F Y	S V C	Q T Y	D E L	B A L	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		
RTU Replacement	09	MC	30		30											A								10	10	10					0
Section Leader Gateway	09	MC	12		12											A								6	6						0
VAA for VRC-117	09	MC	42		42											A							14	14	14						0
VAA for VRC-150	09	MC	24		24											A							12	12							0
HMMWV M1152	09	MC	12		12										A									6	6						0
RTU Replacement	10	MC	47		47														A							12		12		12	11
Section Leader Gateway	10	MC	16		16														A						5		6		5	0	
VAA for VRC-117	10	MC	37		37														A						20		17			0	
VAA for VRC-150	10	MC	32		32														A						8	8	8	8		0	
HMMWV M1152	10	MC	16		16														A									8	8	0	
										Fiscal Year 2011										Fiscal Year 2012										B A L A N	
										Calendar Year 2011										Calendar Year 2012											
ITEM	F Y	S V C	Q T Y	D E L	B A L	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		
RTU Replacement	10	MC	47	36	11		11																								0
RTU Replacement	11	MC	18		18		A						10		8																0
Section Leader Gateway	11	MC	8		8		A						4		4																0
VAA for VRC-117	11	MC	15		15		A						10		5																0
VAA for VRC-150	11	MC	16		16		A						8		8																0
HMMWV M1152	11	MC	8		8		A									4	4														0

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3011							P-1 Item Nomenclature: Javelin					
Program Elements: 0206211M Divisions (Marine)				Code:	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												0.0
Gross Cost	0.0	35.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		35.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	35.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Initial Spares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Proc Cost	0.0	35.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

**Base Appropriation Request:**

**Javelin Block 1** - Procures (245) Javelin Block 1 missiles to replenish Operation Enduring Freedom expenditures. The funding buys new Javelin Command Launch Units (CLU) and provides for upgrades of the CLUs to the Block 1 configuration, which incorporates software, propulsion and warhead improvements over the Block 0.

The Command Launch Unit of the Javelin Weapon System will be upgraded from a Blk 0 configuration to a Blk 1 configuration that consists of the following upgrades:

- Larger Diameter AFOCAL for 9X - 12X magnification
- Image Stabilization
- Automatically activates sleep mode when in use
- Optional batteries - BA5390 and BA5590
- Standard Video external output
- Technical manual updates
- Training

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February 2010

P-1 Item Nomenclature:	
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## Javelin

Code

Prior Y

FY 2009

Base  
FY2011

OCO  
FY2011

Total  
FY2011

1

A

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Exhibit P-5a, Budget Procurement History and Planning										Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3011			Weapon System Type:			P-1 Line Item Nomenclature: Javelin					
WBS Cost Elements: Fiscal Years		Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY09 Block 1 Missiles		Javelin Joint Venture Orlando, FL	FFP	CCWS, Redstone Arsenal, AL	Mar-10	Mar-11	245	120000	Y		Apr-09
REMARKS:											

Date:	February 2010
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P-1 Item Nomenclature:	Javelin
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REMARKS:
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<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3016							P-1 Item Nomenclature: Follow on to SMAW (FOTS)					
Program Elements: 0206211M Divisions (Marine)				Code:	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	0.0	0.0	0.0	21.6	0.0	21.6	64.3	34.5	21.2	20.0		161.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	21.6	0.0	21.6	64.3	34.5	21.2	20.0		161.5
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	21.6	0.0	21.6	64.3	34.5	21.2	20.0		161.5
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.0

**Baseline Appropriation Request**

**Follow on to Shoulder-Launched Multipurpose Assault Weapon (SMAW) (FOTS):** The solution to the Follow on to Shoulder-Launched Multipurpose Assault Weapon (SMAW) (FOTS) capability requirement has been defined as the SMAW II system. Marine Expeditionary Forces will employ the SMAW II across the spectrum of conflict, under all environmental conditions, to destroy a variety of ground targets. As defined in the FOTS Capability Development Document (CDD), the program will consist of two distinct blocks which will be fielded using an evolutionary (incremental) acquisition strategy:

**Block 1:** Block 1 will be the SMAW II system consisting of a new launcher, which will be physically and functionally compatible with existing inventory of SMAW rocket variants (High Explosive Dual Purpose, High Explosive Anti-Armor, Novel Explosive and Common Practice (CP)) to replace the existing Mark 153 Mod 0 SMAW launcher. In addition, the SMAW II system will include a multi-purpose (MP), fire-from-enclosure (FFE) encased rocket to be added to the SMAW family of rockets.

**Block 2:** Block 2 will be the SMAW II wall breaching (WB), FFE encased rocket and the Common Practice (CP), FFE encased rocket to be added to the SMAW family of rockets. This will provide an additional target defeat capability with the WB FFE rocket as well as an improved training capability with the CP FFE rocket.

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3016						P-1 Line Item Nomenclature: Follow on to SMAW (FOTS)		Weapon System		Date: February 2010			
Weapon Systems Cost Elements		ID CD	Prior Yrs				FY09			FY10			FY11		
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>															
SMAW II Launcher (TAMCN E01017M)		A											13730	130	105615
SMAW II Block 1 MP FFE Round (Ammunition Item)		A											7653	750	10204
NonRecurring Expenditure (NRE) Production													187		
Subtotal Baseline													21570		
TOTAL ACTIVE RESERVES													21570 21570 0		

# Exhibit P-5a, Budget Procurement History and Planning

Date:

February 2010

Appropriation / Budget Activity/Serial No:

Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3016

Weapon System Type:

P-1 Line Item Nomenclature:

Follow on to SMAW (FOTS)

WBS Cost Elements:

Fiscal Years

Contractor and Location

Contract  
Method &  
Type

Location of PCO

Award  
Date

Date of  
First  
Delivery

QTY  
Each

Unit Cost  
\$

Specs  
Avail?

Date  
Revsn  
Avail

RFP  
Issue  
Date

FY11

SMAW II Launcher (TAMCN E01017M)

NAMMO Talley Mesa, AZ

C/FPI

MCSC, Quantico, VA

Apr-11

Jul-11

130

105615

SMAW II Block 1 MP FFE Rocket

NAMMO Talley Mesa, AZ

C/FPI

MCSC, Quantico, VA

Apr-11

Jul-11

750

10204

REMARKS:

EXHIBIT P-21, PRODUCTION SCHEDULE																								Date: February 2010													
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3016												Weapon System						P-1 Item Nomenclature: Follow on to SMAW (FOTS)																			
												PRODUCTION RATE			PROCUREMENT LEADTIMES																						
ITEM		Manufacturer's NAME / LOCATION										MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder PLT		Mfg		TOTAL		Unit of Measure										
SMAW II Launcher		NAMMO Talley, Mesa AZ										30	100	150			6		3						9		Each										
SMAW II Block 1 MP FFE Rocket		NAMMO Talley, Mesa AZ										50	180	200			6		3						9		Each										
												Fiscal Year 09										Fiscal Year 10										BALANCE					
												Calendar Year 09										Calendar Year 10															
ITEM		FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
												Fiscal Year 11										Fiscal Year 12										BALANCE					
												Calendar Year 11										Calendar Year 12															
ITEM		FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
SMAW II Launcher		11	MC	130		130							A			20	30	30	30	20											0						
SMAW II Block 1 MP FFE Rocket		11	MC	750		750							A			50	50	50	50	50	50	150	150	150							0						
REMARKS:																																					

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3017						P-1 Item Nomenclature: Anti-Armor Weapons System - Heavy (AAWS-H)						
Program Elements: <b>0206211M Divisions (Marine)</b>				Code:	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2104	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	0.0	0.0	71.0	20.3	0.0	20.3	19.9	24.8	0.0	0.0		<b>136.1</b>
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	71.0	20.3	0.0	20.3	19.9	24.8	0.0	0.0		<b>136.1</b>
Initial Spares												
Total Proc Cost	0.0	0.0	71.0	20.3	0.0	20.3	19.9	24.8	0.0	0.0		<b>136.1</b>
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		<b>0.0</b>

**Baseline Appropriation Request:**  
**Anti-Armor Weapon Systems - Heavy (AAWS-H)** -AAWS-H provides long range, lethal heavy anti-armor and assault fire to the anti-armor sections in the infantry and tank battalions. In its primary anti-tank role, the system will be used to destroy main battle tanks and other armored vehicles before the firepower and shock action of enemy armor can be brought to bear on USMC formations. In its secondary role, AAWS-H will be employed against vehicles, helicopters and field fortifications of any type. The Improved Target Acquisition System (ITAS) is the solution to the AAWS-H requirement. This funding procures support equipment and services for ITAS program.

**Improved Target Acquisition System (ITAS)** - An upgrade to the Tube-Launched Optically-Tracked, Wire-Guided (TOW- 2) anti-tank weapon system for the light anti-armor forces. ITAS is considered to be a precision engagement system designed to enhance the Army's ability to dominate the ground maneuver battle. ITAS can be used with all current versions of TOW missiles, and is considered to be the designated primary, future anti-tank missile system platform. This funding procures additional M41 ITAS units and associated support and training equipment. It also procures contractor and government fielding and logistics support.

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3017				P-1 Line Item Nomenclature: Anti-Armor Weapons System - Heavy (AAWS-H)			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs				FY09			FY10			FY11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>Baseline</b>														
Improved Target Acquisition System									61612	98	628694	16023	22	728310
Contractor Production Services									4929			2341		
PMO Engineering and Logistics Support									4464			1951		
<b>Subtotal Baseline</b>									<b>71005</b>			<b>20315</b>		
<b>TOTAL ACTIVE RESERVES</b>									<b>71005</b> <b>71005</b>			<b>20315</b> <b>20315</b>		

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3017		Weapon System Type:			P-1 Line Item Nomenclature: Anti-Armor Weapons System - Heavy (AAWS-H)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY10 Improved Target Acquisition System	Raytheon, McKinney, TX	FFP	CCWS, Redstone Arsenal, AL	Mar-10	Apr-12	98	628694	Y		Nov-09
FY11 Improved Target Acquisition System	Raytheon, McKinney, TX	FFP	CCWS, Redstone Arsenal, AL	Mar-11	Apr-13	22	728310	Y		Nov-10
REMARKS:										

Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No.	Weapon System	P-1 Item Nomenclature:
Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3017		Anti-Armor Weapons System - Heavy (AAWS-H)

[illegible][illegible][illegible]

REMARKS:
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Date:	February 2010
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February 2010

Appropriation Code/CC/BA/BSA/Item Control No.

## Weapon System

P-1 Item Nomenclature:	
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Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3017

Anti-Armor Weapons System - Heavy (AAWS-H)

[illegible][illegible][illegible]

REMARKS:

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3123							P-1 Item Nomenclature: Modification Kits (Missiles)					
Program Elements: 0206211M Divisions (Marine)			Code:		Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	490.9	67.6	10.6	3.8	0.0	3.8	4.2	1.4	1.4	1.5		581.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	490.9	67.6	10.6	3.8	0.0	3.8	4.2	1.4	1.4	1.5		581.4
Initial Spares												
Total Proc Cost	490.9	67.6	10.6	3.8	0.0	3.8	4.2	1.4	1.4	1.5		581.4
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Baseline Appropriation Request:**  
**Anti-Armor Weapon Systems - Heavy (AAWS-H)** - AAWS-H provides long range, lethal heavy anti-armor and assault fire to the anti-armor sections in the infantry and tank battalions. In its primary anti-tank role, the system will be used to destroy main battle tanks and other armored vehicles before the firepower and shock action of enemy armor can be brought to bear on USMC formations. In its secondary role, AAWS-H will be employed against vehicles, helicopters and field fortifications of any type. The Improved Target Acquisition System (ITAS) is the solution to the AAWS-H requirement.  
**AT-4 Launcher Trainers** - AT-4 Launcher Trainers are used to simulate live fire. The launchers simulate the size and weight of the real rocket and utilize a 9mm round to simulate noise. Operation Iraqi Freedom / Operation Enduring Freedom (OIF/OEF) reintroduced the AT-4 missile system back into USMC inventory, thereby requiring the use of the trainer to familiarize the operators in the systems operation.

**TOW Guided Weapon Mod** - The Tube-Launched Optically-Tracked, Wire-Guided (TOW) Missile system modification program will incorporate system safety and capabilities improvements in both the missile and sights. This mod program addresses safety of use issues and system component obsolescence issues, providing corrective integration. Conversion of TOW missiles for training requires the procurement and integration of Missile Ordnance Inhibit Circuit integrated circuitry to preclude missile fly-back and disarming of the warhead in cases of erratic or errant flight.

**SMAW Launcher Refurbishment** - SMAW Shoulder-Launched Multipurpose Assault Weapon launchers to be refurbished to support OEF operations.

**Saber Fielding Support** - Procures contractor fielding and training support for the Saber weapon system.

**Saber Support Equipment** - Procures maintenance and support equipment for the Saber weapon system.

**SMAW Tool Kits** - Procures SMAW Boresight tool kits to replenish deficiencies.

**M72 Trainer Refurbishment** - Returning OIF/OEF M72 trainers will be refurbished and reissued.

**TOW - Bunker Buster Missile** - FY09 funding procures the TOW-BB (Bunker Buster) missile to replenish War Reserve Material Requirements (WRMR) inventories. The TOW-BB provides the capability to defeat the anti-structure target set (i.e. Bunkers, fortifications, and light armored vehicles) defined by the Advanced Anti-Armor Weapon System - Heavy mission requirements.

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date:		February 2010		
Appropriation / Budget Activity					P-1 Item Nomenclature:						
Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3123					Modification Kits (Missiles)						
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011			
Anti-Armor Weapon System Heavy (AAWS-H)	A	D	0.875	2.371	2.114	3.798	0.000	3.798			
		Q	VAR	VAR	VAR	VAR					
TOW Guided Weapon Mod	A	D	0.600	2.539	0.000	0.000	0.000	0.000			
		Q	VAR	VAR				VAR			
SMAW Tool Kits	A	D		0.000	0.010						
		Q			VAR						
M72 Trainer Refurbishment	A	D			0.037						
		Q			VAR						
SMAW Launcher Refurbishment	A	D			0.350						
		Q			VAR						
Saber Support Equipment	A	D			4.610						
		Q			VAR						
Saber Contractor Fielding/Training Support	A	D			3.5						
					VAR						
TOTAL			1.475	4.910	10.613	3.798	0.000	3.798			
ACTIVE			1.475	4.910	10.613	3.798	0.000	3.798			
RESERVE			0.0	0.000	0.000	0.000	0.000	0.000			

Exhibit P-5 Cost Analysis	Appropriation/ Budget Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3123		P-1 Line Item Nomenclature: Modification Kits (Missiles)			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 2009			FY 2010			FY 2011		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	TotalCost \$000
<u>Baseline</u>											
TOW-BB Missile			57720	1200	48100						
Govt Program Management			1673								
Govt Engineering Services			3305								

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3123		Weapon System Type:			P-1 Line Item Nomenclature: Modification Kits (Missiles)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY09  TOW BB Missiles	Raytheon Missile Systems	FFP	CCWS, Huntsville, AL	Dec-09	Dec-11	1200	48100	Yes		Apr-09
REMARKS:										

Date:	February 2010
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Appropriation Code/CC/BA/BSA/Item Control No.	Weapon System	P-1 Item Nomenclature:
Procurement, Marine Corps (1109) / 03 Guided Missiles and Equipment / 3123		Modification Kits (Missiles)

[illegible][illegible][illegible]

REMARKS:
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<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment /4190					P-1 Item Nomenclature: UNIT OPERATIONS CENTER / COMBAT OPERATIONS CENTER							
Program Elements: 0206313M Marine Corps Communication Equipment			Code: A	Other Related Program Elements:								
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty												
Gross Cost	402.4	92.5	19.8	10.8	112.4	123.2	18.0	21.7	18.2	18.7	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	402.4	92.5	19.8	10.8	112.4	123.2	18.0	21.7	18.2	18.7	Cont.	Cont.
Initial Spares	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	404.1	92.5	19.8	10.8	112.4	123.2	18.0	21.7	18.2	18.7	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.

**Baseline Appropriations Request:**  
 Combat Operations Center (COC) - AN/TSQ-239 (V)2/3/4 is a deployable, self-contained, modular, scalable and centralized facility 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. FY09 funds required for hardware refresh for "G" model 2010 upgrades. FY10 funds required for hardware upgrades for MAGTF COC migration and Integrated Logistic Support. This funding is needed to re-equip the OIF systems returning from theatre and upgrading all "E" Model COCs to current "F" Model COCs.

**FY11 Overseas Contingency Operations Request (OCO):**  
 Hardware upgrade of CAPSET II, III, and part of IV to the Model G configuration. The Model G upgrade to the Combat Operations Center (COC) AN/TSQ-239(V)2,3,4 brings an increase in capability: network architecture allowing more managed data flow and cache often used data for faster information response times, improved disconnected operations performance, and increased tactical data reliability. Operating forces will have customization of data dissemination and presentation, making command and control (C2) operations within the COC more Warfighter Centric and Warfighter Responsive. In support of 2nd MEB's virtualization and service-oriented architecture in Operation Enduring freedom (OEF) that was levied on them since deploying to OEF. Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan. This is for required modifications to equipment used in theater in direct support of combat operations.

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment/ 4190				P-1 Line Item Nomenclature: Unit Operations Center / Combat Operations Center			Weapon System Type:		Date:  February 2010		
Weapon System Cost Elements		ID CD	Prior Yrs TotalCost \$000	FY09 TotalCost \$000 Qty Each		FY10 TotalCost \$000 Qty Each		FY11 TotalCost \$000 Qty Each		UnitCost \$			
<u>Baseline</u>													
<b>COC</b>													
(V)2			45000	20370									
Integrated Logistics Support (V)2				2074		451		423					
Program Management Support (V)2			523	1485		807		815					
Capability Blocks				4847		2970		2807					
(V)3			109980	18818	14	1344142							
(V)4			175593	12820									
Integrated Logistics Support (V)3/4			10677	5750		1412		2521					
Program Management Support (V)3/4			23759	5304		2410		1425					
Capability Blocks				21000		11721		2785					
GFE			22660										
Training			15900										
<b>Subtotal Baseline</b>			404092	92468		19771		10776					
<u>FY11 OCO</u>													
<b>COC</b>													
(V)1								30600	3	10200000			
(V)5								5100	36	141667			
COC on the Move								34250	5	6850000			
Refresh & Model G Modkits								42474					
<b>Subtotal FY11 OCO</b>								112424					
<b>TOTAL</b>			<b>404092</b>	<b>92468</b>		<b>19771</b>		<b>123200</b>					
<b>ACTIVE</b>			404092	92468		19771		123200					
<b>RESERVE</b>			0	0		0		0					



Exhibit P-5a, Budget Procurement History and Planning										Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment /4190		Weapon System Type:			P-1 Line Item Nomenclature: Unit Operations Center / Combat Operations Center						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date	
<b>FY09</b> COC (V)3 (OCO)	General Dynamics Scottsdale, AZ	FFP	Scottsdale, AZ	Jun-09	Jan-10	14	1344142	N	N	N/A	
<b>FY11</b> COC (V) 1 (OCO)	General Dynamics Scottsdale, AZ	FFP	Scottsdale, AZ	08/11	03/12	3	10200000	N	N	N/A	
COC (V) 5 (OCO)	TBD	FFP	TBD	08/11		36	141667	N	N	N/A	
COC OTM (M2C2) (OCO)	General Dynamics Scottsdale,	FFP	Scottsdale, AZ	08/11	03/12	5	6850000	N	N	N/A	
REMARKS:											

EXHIBIT P-21, PRODUCTION SCHEDULE																				Date:											
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment /4190										Weapon System					P-1 Item Nomenclature: Unit Operations Center / Combat Operations Center																
										PRODUCTION RATE			PROCUREMENT LEADTIMES																		
Manufacturer's NAME / LOCATION										MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure													
COC (V) 2											2	3		11	12		23	E													
COC (V) 3											3	7		6	15		21	E													
COC (V) 4											3	7		6	12		18	E													
COC (V) 1											1	2		6	12		18	E													
COC (V) 5											12	60		2	6		8	E													
COC OTM (M2C2)											1	7		6	12		18	E													
										Fiscal Year 09							Fiscal Year 10							B A L A N C E							
										Calendar Year 09							Calendar Year 10														
ITEM	F Y	S V C	Q T Y	D E L	B A L	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	
COC (V) 3	09	MC	14		14									A								3	3	3	3	2					0
																															0
																															0
																															0
										Fiscal Year 11							Fiscal Year 12							B A L A N C E							
										Calendar Year 11							Calendar Year 12														
ITEM	F Y	S V C	Q T Y	D E L	B A L	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	
COC (V)1	11	MC	3		3																		1	1	1						0
COC (V) 5	11	MC	36		36													12	12	12											0
COC OTM (M2C2)	11	MC	5		5																	1	1	1	1	1					0
																															0
																															0
																															0
																															0
REMARKS:																															

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4181							P-1 Item Nomenclature: REPAIR AND TEST EQUIPMENT					
Program Elements: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	734.2	89.7	43.9	25.6	16.0	41.6	24.2	26.7	43.4	44.3	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	734.2	89.7	43.9	25.6	16.0	41.6	24.2	26.7	43.4	44.3	Cont.	Cont.
Initial Spares	2.9	1.4	0.3	0.3	0.0	0.3	0.6	0.6	0.6	0.6	Cont.	Cont.
Total Proc Cost	737.1	91.2	44.2	25.9	16.0	41.9	24.8	27.2	44.0	44.9	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	16.0	16.0	0.0	0.0	0.0	0.0	Cont.	Cont.

**Baseline Appropriation Request:**

General Purpose Electronic Test Equipment (GPETE): GPETE items are required to support USMC weapon systems that utilize or consist of electronic components. GPETE is essential to the operational readiness of the Marine Corps for the installation, operation, and maintenance (preventive and routine) of electronic weapon systems and equipment in both the USMC operating forces as well as the supporting establishment (Schools/Bases).

General Purpose Mechanical Test Equipment (GPMTE): This program is a combination of many types of test equipment used to diagnose Motor Transport, Ordnance, and Engineer, tracked, wheeled, and stationary equipment. This test equipment is essential in maintaining the readiness of USMC weapon systems in both the Marine Corps operating forces as well as the supporting establishment (Schools/Bases).

General Purpose Tool, Sets, Chests & Kits (TS&K): Funds are used to buy tools to support all types of Marine Corps ground equipment. The program includes over 40 different types of individual mechanic or technician tool kits as well as the larger, mobile or deployable, organizational tool sets.

Autonomic Logistics (AL): AL provides platform-based situational awareness to Marine Corps ground weapon systems. AL interfaces to a weapon system data bus to collect and process sensor data into actionable information. AL provides systems health, fuel and ammo levels, mobile and troop load information to the combatant commander and his supporting staff.

Third Echelon Test System (TETS): The TETS program provides mobile automatic testing on line replaceable units and circuit card assemblies, enabling rapid restoration of weapon systems. Consisting of hardware and software portable equipment, TETS is used by maintenance personnel in troubleshooting of digital/analog, communication/electronic, electro-mechanical, and electro-optical equipment.

Calibration Facilities (CF): This program specifically supports GPMTE, GPETE, and ATE programs. The CF provides a calibration and repair capability to sustain the maintenance capability of the Marine Expeditionary Forces; to test, calibrate and repair USMC Test, Measurement, & Diagnostic Equipment (TMDE) (GPMTE, GPETE, and ATE). TMDE is used to support pre-combat technical inspections and repair of infantry weapons, armor, artillery, missile systems, communications equipment, computers, chemical-biological-radiological and nuclear detection equipment, engineer and motor transport equipment.

Marine Corps Automatic Test Equipment (ATE): General purpose ATE and Application Program Set (APS). The ATE integration is the process of combining ATE and APS support to provide dynamic test/diagnostic capabilities to Marine Corps Ground Weapons. The Calibration Facilities allows for the comparison of measurement and test equipment or measurement standard of unknown accuracy to a measurement standard of known accuracy in order to detect, correlate, report or eliminate any variation in the accuracy of the instrument being compared. General purpose ATE allows one tester to support testing of digital/analog, communication electronics, electro-mechanical, and electro-optical assemblies and subassemblies. APSs are used for specific weapon systems to test the assembly as if it were installed and operating in the weapon platform.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4181		P-1 Item Nomenclature: <div style="text-align: center;">REPAIR AND TEST EQUIPMENT</div>
Program Elements: 0206315M Force Service Support Group	Code: A	Other Related Program Elements:
<p>Electronic Maintenance Support System (EMSS): The Electronic Maintenance Support System (EMSS) is composed of several main components including the Electronic Maintenance Devices (EMD), regional servers, deployment servers, charger racks, and ruggedized deployment cases. EMSS is a rugged organizational-level (O-level), light-weight, one-man portable maintenance device capable of supporting multiple platforms and systems across maintenance communities. EMSS provides a Commercial Off-The-Shelf (COTS) hardware device equipped with network interfaces, Built-In-Test/Built-In-Test Equipment (BIT/BITE) interfaces, and Software Defined Test Instrument (SDTI) General Purpose Electronic Test Equipment (GPETE) capabilities. These hardware capabilities will enable commercial or custom DoD and USMC software capabilities including Interactive Electronic Technical Manuals (IETMs), Computer Based Training (CBT), access to Subject Matter Experts (SMEs) over USMC networks, and other maintenance applications to be hosted on EMSS. With these capabilities, maintainers will make more informed decisions, thereby sustaining force readiness over time.</p> <p>Marine Corps Expeditionary Shelter System: EMI Maintenance Shelter is a part of the Marine Corps Field Logistics System (MCFLS). This system of support equipment provides for use of standardized shelters which are easily erected, relocated, compatible with current Marine Corps transportation modes, require minimum maintenance, and will protect equipment and functions needed to support Fleet Marine Force (FMF) operations. This shelter presents the unique variation of one 20-foot EMI/EMC shelter and three 10-foot Rigid/EMC shelters being used for special purposes. Each shelter is configured to support its mission. Many of the current communication systems being fielded today require a climate controlled environment in order to perform the required corrective maintenance. These old shelters must be replaced in order to ensure continued support of current and future inventory of Electronic Communication Systems.</p> <p>Tow Test Equipment: Procures various TOW Weapons Systems support and test equipment to replenish OEF assets.</p> <p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$15.962M</u></b></p> <p>General Purpose Tool, Sets, Chests &amp; Kits (TS&amp;K): Funds are used to buy tools to support all types of Marine Corps ground equipment. The program includes over 40 different types of individual mechanic or technician tool kits as well as the larger, mobile or deployable, organizational tool sets.</p>		



Exhibit P-5 Cost Analysis (Page 1 of 2)		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4181				P-1 Line Item Nomenclature:  REPAIR AND TEST EQUIPMENT			Weapon System Type:		Date:  February 2010	
Weapon System Cost Elements		ID CD	Prior Yrs	FY 09			FY 10			FY 11		
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
Baseline												
General Purpose Electronic Test Equip (GPETE)			44167	7344	VAR	VAR	7272	VAR	VAR	3197	VAR	VAR
ENGINEERING SUPPORT			3150	1281			1570			1163		
Navy Activities (NSWC & NRL)												
SOFTWARE SUPPORT			1017	328			449			332		
Operating Software												
LOGISTIC SUPPORT			1286	825			972			720		
Training Material												
Factory Training												
Tech Manuals												
Provisioning Data												
Quality Assurance Testing												
New Equipment Training (CBT)												
GPETE Subtotal			49620	9778	VAR	VAR	10263	VAR	VAR	5412	VAR	VAR
Autonomic Logistics (AL)			87009									
Eng/Tech Svcs			7580									
Training			1630	146			103			96		
Support Equipment			5716	816								
Software Integration			3112									
Logistics Support			4004	1479								
Program Management			4649	2768								
Installation				4643			4449			923		
AL Subtotal			113700	9852			4552			1019		
Tools Sets and Kits			34431	17225	VAR	VAR	9526	VAR	VAR	1657	VAR	VAR
Third Echelon Test System			113733	10377	11	943364						
Eng/Tech Svcs			2787	590			795					
Training												
Support Equipment												
Software Integration			1019	200			265					
Logistics Support												
Program Management			336	198			264					
TETS Subtotal			117875	11365			1324					

Exhibit P-5 Cost Analysis (Page 2 of 2)			Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4181				P-1 Line Item Nomenclature: Repair and Test Equipment		Weapon System Type:		Date:  February 2010		
Weapon System Cost Elements			ID CD	Prior Yrs	FY 09		FY 10			FY 11			
				TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
Baseline													
General Purpose Mechanical Test Equip				76622	10579	VAR	VAR	5402	VAR	VAR	5139	VAR	VAR
Calibration													
Calibration Facility (Transportable)				19092	1252	VAR	VAR	5791	VAR	VAR	5862	VAR	VAR
CAL Engineering & Logistics Support				7,555	880			4050			4056		
Calibration Subtotal				26,647	2132			9841			9918		
Marine Corps Expeditionary Shelter					10127	VAR	VAR						
Marine Corps Automated Test Equip				9141	18672	VAR	VAR	508	VAR	VAR	505	VAR	VAR
Subtotal Baseline				428036	89730			41416			23650		
FY11 OCO													
Tools Sets & Kits											15962	VAR	VAR
Subtotal FY11 OCO											15962	VAR	VAR
TOTAL				428036	89730			41416			39612		
ACTIVE				428036	89730			41416			39612		
RESERVES				0	0			0			0		

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4181				Weapon System Type:		P-1 Line Item Nomenclature: REPAIR AND TEST EQUIPMENT				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>FY09</b> Third Echelon Test System	Diamond Mola Enterprises, FL	FFP	MARCORSYSCOM	Jan-09	Mar-09	11	943364	Yes	N/A	N/A



FY10 BUDGET EXHIBIT P-21, PRODUCTION SCHEDULE																			Date: February 2010											
Appropriation Code/CC/BA/BSA/Item Control No. <b>Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4181</b>										Weapon System				P-1 Item Nomenclature: <b>Repair and Test Equipment</b>																
										PRODUCTION RATE			PROCUREMENT LEADTIMES																	
ITEM	Manufacturer's NAME / LOCATION									MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure												
Third Echelon Test System	DME Orlando, Florida									1	2	4		3	2		5	Each												
										Fiscal Year 08							Fiscal Year 09							BALANCE						
										Calendar Year 08							Calendar Year 09													
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Third Echelon Test System	09	MC	11	0	11																A		3	4	4					0
																														0
										Fiscal Year 10							Fiscal Year 11							BALANCE						
										Calendar Year 10							Calendar Year 11													
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4617							P-1 Item Nomenclature: COMBAT SUPPORT SYSTEM					
Program Elements: 0206313M Marine Corps		Code: A				Other Related Program Elements:						
	Prior Years										To Complete	Total Cost
		FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY2013	FY2014	FY2015		
Proc Qty												
Gross Cost	64.3	17.6	11.8	32.9	0.0	32.9	24.2	8.2	15.9	14.5	CONT	TBD
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	64.3	17.6	11.8	32.9	0.0	32.9	24.2	8.2	15.9	14.5	CONT	TBD
Initial Spares	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONT	TBD
Total Proc Cost	65.0	17.6	11.8	32.9	0.0	32.9	24.2	8.2	15.9	14.5	CONT	TBD
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Baseline Appropriation Request**

GLOBAL COMBAT SUPPORT SYSTEM - MARINE CORPS (GCSS-MC) Global Combat Support System-Marine Corps (GCSS-MC) is the physical implementation of the enterprise Information Technology (IT) architecture designed to support both improved and enhanced Marine Air Ground Task Force (MAGTF) Combat Support Services (CSS) functions and MAGTF Commander and Combatant Commanders/Joint Task Force (CC/JTF) combat support information requirements. The initial program includes all transactional CSS systems related to Supply Chain Management (SCM) and Enterprise Asset Management (EAM) functionality enabled with Service Management functions. When combined, these capabilities are referred to as Logistics Chain Management (LCM) or GCSS-MC/LCM. The primary goal of GCSS-MC/LCM is to provide the capabilities specified in the Logistics Operational Architecture (Log OA). The result of enabling the Log OA is the retirement of legacy applications.

The GCSS-MC/LCM exposes timely mission information to Marine Corps operational and CSS commanders, CC/JTF commanders and their staffs and other authorized users. It exposes information interoperability and common logistics information applications and services across functional areas. GCSS-MC/LCM allows operating forces commanders to base decisions on complete logistics information and make decisions in concert with specific operational tasks. The GCSS-MC/LCM program is procuring capabilities by blocks. The first block is referred to as GCSS-MC/LCM Block 1. GCSS-MC/LCM Block 1 is a subset of the total requirement that focuses on Logistics Management and Execution with Logistics Command and Control requirements necessary to perform those functions in a deployed environment. GCSS-MC/LCM Block 1 is global in scope. It can be deployed under any circumstances, during peace or war, independent of geographical location. The GCSS-MC/LCM Block 1 Capability Development Document (CDD), dated 25 May 2005 and approved in December 2005, establishes the requirements for the entire GCSS-MC portfolio.

Key objectives of the CDD include the following: (1) Deliver integrated functionality across supply, maintenance, transportation, finance, engineering, health, acquisition and manpower systems in accordance with the Marine Corps Logistics Operational Architecture; (2) Provide timely information to Marine Corps operational and CSS commanders, CCs and Joint JTF commanders and their staffs and other authorized users; (3) Allow Operating Forces (OPFORS) commanders to base decisions on complete logistics information and make decisions in concert with specific operational tasks; and (4) Provide users and operators of logistics processes access to information and applications across the spectrum of conflict regardless of location.

The GCSS-MC/LCM Block 1 program received Milestone (MS) A approval on 23 July 2004 from the Milestone Decision Authority, the Deputy Under Secretary of Defense (Networks and Information Integration). The GCSS-MC program was formally designated an Acquisition Category (ACAT) IAM program in March 2004. The GCSS-MC Program successfully completed a Milestone B Review for GCSS-MC/LCM Block 1 on 8 June 2007. The system's current Milestone Decision Authority (MDA) is the Under Secretary of Defense for Acquisition Technology and Logistics (USD AT&L). The GCSS-MC/LCM Block 1 program was re-baselined in December 2008. The program identified the likelihood of a critical change in the September 2008 Major Automated Information Systems (MAIS) MAIS Quarterly Report (MQR) due to the program breaching in the areas of cost, schedule and time to achieve Initial Operating Capability (IOC) within five years of MS A. A Critical Change Team (CCT) was formed and conducted an evaluation of the program. Based on CCT recommendations, the program re-baselined Block 1 cost and schedule and established a revised acquisition strategy.

<b>Exhibit P-40, Budget Item Justification Sheet</b>				Date: <div style="text-align: right; padding-right: 20px;">February 2010</div>	
Appropriation / Budget Activity/Serial No:  Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4617				P-1 Item Nomenclature:  COMBAT SUPPORT SYSTEM	
Program Elements: 0206313M Marine Corps Communication	Code: A			Other Related Program Elements:	
<p>GLOBAL COMBAT SUPPORT SYSTEM - MARINE CORPS (GCSS-MC) Cont'd: The new approach provides for two major independent software releases (Enterprise (Release 1.1) and Deployed Access (Release 1.2)) within Block 1, each with its own IOC and Full Operating Capability (FOC). Combined, these two releases provide the full Block 1 solution capability. The GCSS-MC program is currently pre-MS C. The program will pursue a single MS C decision in February 2010 to authorize entry into limited deployment in support of Enterprise Release First Unit Equipped (FUE) testing and operational testing.</p> <p>SHARED DATA ENVIRONMENT (SDE) is a component of the GCSS-MC. It will support data warehousing technologies and products to provide one-stop shopping for data supporting Combat Service Support Element SDE (CSSE/SDE) decision-making processes. It will stage 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 will eliminate the need for individual applications to perform these tasks for themselves and will contribute 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) provides clinical data collection and data transport capability at Care Echelons, Battalion Aid Station, Field Hospital and In-Theater, Rear Area Hospital in a combat or hostile environment involving deployed forces. Medical data transport will be accommodated by collection of medical services data using a form of "electronic data carrier," IT and communications infrastructure, and computer hardware, including the Secure Internet Protocol Routing Network and secure Local Area Networks within a Combatant Commander's Theater of Operations.</p> <p>FLOODLIGHT SET UPGRADE will provide the Marine Corps with a light, compact, diesel engine, modern trailer mounted, telescopic rotatable floodlight. It will increase lighting capability and availability while decreasing the logistic footprint.</p> <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 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 Monitor Assignment Support System, Performance Evaluation System, Total Force Retention System, Optical Digital Imaging- Records Management System (ODI-RMS), Class I/II/III (composed of Child and Spouse Abuse, Sexual Assault Incident Reporting Database and Rape and Sexual Assault), Marine Corps Medical Entitlements Data System, Civilian Workforce Development Application, and Manpower Mobilization Assignment System. Additionally, the portfolio includes Total Force Administration System (TFAS) and it's associated modules, including Drill Management Module, Secure Personnel Accountability Module, Case Management Module and the Marine On-Line portal. MOS procures IT hardware, software and fielding support to the systems in the MOS portfolio.</p> <p>DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM (DIMHRS) is a joint development and implementation of a single personnel and pay system that will support all Military personnel, active, guard, reserve, and retired, and their families through their entire careers and beyond.</p> <p>AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT) devices encompass a variety of read and write data storage technologies that are used to improve the accuracy, timeliness and handling of combat service support and base support data. These technologies include barcodes, magnetic stripes, integrated circuit cards, optical memory cards, Radio Frequency Identification Devices tags, as well as hardware and software required to create the storage devices, read the information stored on them and integrate that information with other logistics data. Additionally, AIT includes the use of satellites to track and redirect shipments. AIT devices offer a wide range of data storage capacities from a few characters to thousands of bytes. The information on each device can range from a single part number to a self-contained database. The device can be interrogated using a variety of means, including contact, laser of Radio Frequency with the information obtained from those interrogations provided electronically to Automated Information Systems (AIS). Technical services are used to update and maintain fixed infrastructure. Within AIT, the Transportation Systems Portfolio (TSP) funding is utilized for Contract Engineering Technical Support (CETS) and Post Deployment Software Support and emerging multi-service requirements. The CETS provide engineering analysis, program management, logistics, administrative, and acquisition support for milestone and fielding decisions, training, software testing support, fielding, post deployment support, and analytical and technology assessments. Responsibilities entail administrative functions such as programs financial management, operation support and acquisition documentation, development, testing, IA certification, configuration and life cycle management.</p>					

<b>Exhibit P-40, Budget Item Justification Sheet</b>				Date: <b>February 2010</b>	
Appropriation / Budget Activity/Serial No:				P-1 Item Nomenclature:	
Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4617				COMBAT SUPPORT SYSTEM	
Program Elements:		Code:		Other Related Program Elements:	
0206313M Marine Corps		A			
<p>MANPOWER PLANNING SYSTEMS (MPS) is a portfolio of systems, consisting of the legacy Manpower Models, the Total Force Data Warehouse, and the replacement effort of the legacy Manpower Models, the Total Force Manpower Models Re-engineering effort. 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. The funding in MPS will provide the technical solution for process improvement and will strategically align manpower systems/functional process with the Command, Control, Communications and Computers architecture. MPS interfaces with other systems to utilize manpower data in model analysis and future year planning efforts. MPS will procure IT hardware to support the systems in the portfolio.</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 (OSD) 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 employing Cognos Report Net Business Intelligence software for the development of standard and ad-hoc queries. Hardware procurements for disaster recovery/continuity of operation, refresh of production/development, the TFSMS interim training lab as well as migration to Oracle Fusion are planned.</p>					

Exhibit P-40a, Budget Item Justification for Aggregated Items								Date: February 2010						
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4617						P-1 Item Nomenclature: COMBAT SUPPORT SYSTEM								
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Cost
Floodlight Set Upgrade	A	D	4.000	4.152	0.462	0.000	0.000	0.000	0.000	0.000	0.000	0.000	CONT	TBD
		Q												
Theater Medical Information Program (TMIP)	A	D	3.184	1.952	0.137	0.139	0.000	0.139	0.137	0.140	0.143	0.147	CONT	TBD
		Q												
Manpower Operations Systems (MOS)	A	D	1.576	0.617	0.841	0.547	0.000	0.547	0.634	0.651	0.669	0.687	CONT	TBD
		Q												
Defense Integrated Military Human Resources System (DIMHRS)	A	D	0.000	0.097	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	CONT	TBD
		Q												
Manpower Planning Systems (MPS)	A	D	0.199	0.275	0.288	0.280	0.000	0.280	0.289	0.295	0.295	0.312	CONT	TBD
		Q												
Total Force Structure Management Systems (TFSMS)	A	D	0.000	0.000	0.000	0.000	0.000	0.000	4.388	0.000	0.645	0.000	CONT	TBD
		Q												
Transportation Systems Portfolio (TSP)	A	D	0.000	4.724	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	CONT	TBD
Total			8.959	11.817	1.729	0.966	0.000	0.966	5.448	1.086	1.752	1.146		
Active			8.959	11.817	1.729	0.966	0.000	0.966	5.448	1.086	1.752	1.146		
Reserves			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		

Exhibit P-5    Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4617		P-1 Line Item Nomenclature:  COMBAT SUPPORT SYSTEM		Weapon System Type:		Date:  February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY09		FY10			FY11			
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>BASELINE</b>											
GLOBAL COMBAT SUPPORT SYSTEM-MARINE CORPS (GCSS-MC):	A										
<u>LOGISTICS CHAIN MANAGEMENT</u>											
Hardware		10338				2916	VAR	VAR	21300	VAR	VAR
Software		6750				245	VAR	VAR	4400	VAR	VAR
Operations Planning/Preparation/Testing		800				200	VAR	VAR	728	VAR	VAR
Systems Installation		4393				239	VAR	VAR	730	VAR	VAR
Systems Training		1589				970	VAR	VAR			
Specialized Hardware (Secret And Below Information (SABI) Guard	2500										
<u>LOGISTICS COMMAND AND CONTROL SYS</u>	A										
Systems Training		500									
Systems Installation		500									
GCSS TOTAL		27370				4570			27158		
AUTOMATIC INFORMATION TECHNOLOGY (AIT):	A										
Software Licenses (Enterprise Non- Oracle)		1881		VAR	VAR	625	VAR	VAR	628	VAR	VAR
Hardware Equipment (Non- NMCI)		2537	5777	VAR	VAR	4871	VAR	VAR	4125	VAR	VAR
Software		2205				0					
AIT TOTAL		6623	5777			5496			4753		
Subtotal Baseline		33993	5777			10066			31911		
TOTAL	D	33993	5777			10066			31911		
ACTIVE	D	33993	5777			10066			31911		
RESERVES	D	0	0			0			0		

Exhibit P-5    Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4617				P-1 Line Item Nomenclature:  COMBAT SUPPORT SYSTEM		Weapon System Type:		Date:  February 2010			
Weapon System Cost Elements	ID CD	FY12			FY13			FY14			FY15		
		TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>BASELINE</b>													
GLOBAL COMBAT SUPPORT SYSTEM-MARINE CORPS (GCSS-MC):	A												
<u>LOGISTICS CHAIN MANAGEMENT</u>													
Hardware		2600	VAR	VAR				9996	VAR	VAR	9335	VAR	VAR
Software		8300	VAR	VAR									
Operations Planning/Preparation/Testing													
Systems Installation		367	VAR	VAR									
Systems Training													
Specialized Hardware (Secret And Below Information (SABI) Guard													
<u>LOGISTICS COMMAND AND CONTROL SYS</u>													
Systems Training	A												
Systems Installation													
GCSS TOTAL		11267			0			9996			9335		
AUTOMATIC INFORMATION TECHNOLOGY (AIT):													
Software Licenses (Enterprise Non- Oracle)		989	VAR	VAR	1220	VAR	VAR	1193	VAR	VAR	1177	VAR	VAR
Hardware Equipment (Non- NMCI)		6501	VAR	VAR	5911	VAR	VAR	2934	VAR	VAR	2821	VAR	VAR
Software													
AIT TOTAL		7490			7131			4127			3998		
Subtotal Baseline		18757			7131			14123			13333		
TOTAL	D	18757			7131			14123			13333		
ACTIVE	D	18757			7131			14123			13333		
RESERVES	D	0			0			0			0		

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Modification Kits / 4652				P-1 Item Nomenclature: Modification Kits								
Program Elements: 0206313M		Code: A	Other Related Program Elements:									
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	18.5	18.5	0.0	0.0	0.0	0.0	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	18.5	18.5	0.0	0.0	0.0	0.0	Cont	Cont
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	18.5	18.5	0.0	0.0	0.0	0.0	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:** N/A

**FY11 Overseas Contingency Operations Request (OCO):**  
 The Biometric Automated Toolset (BAT) can collect and store biometric information, to include fingerprints, iris scans and facial images, and will be able to "match" personnel whose biometrics corresponds to a record in its stored data. Information from networked BAT-Clients will be sent to BAT-Servers. The BAT-Servers will update other BAT-Servers and will provide information to the biometrics intelligence process for further analysis.

This funding will procure 335 Printers, Laptop computers and Client Suites to support Biometric Automated Toolset System (BATS). BATS is a fully fielded capability with a three-year refresh cycle. This funding will refresh Badge Printers and Client Suites for the MAGTF Integrated Systems Training Center (MISTC) supporting Operation Enduring Freedom (OEF).

Intelligence Analysis System Mod (IAS) Family Of Systems (FoS) provides intelligence support to Marines garrison, shipboard, and battlefield missions at all levels of the MAGTF. This support includes the formulation and/or compilation of the commander's Priority Intelligence Requirements (PIR), Essential Elements of Information (EEI), and Other Intelligence Requirements (OIR); contingency planning; management of MAGTF collection assets; all-source intelligence analysis, briefing support, intelligence product fusion, production, reporting dissemination and training. The IAS FoS has proven to be the All-Source Fusion Center that provides interoperable scalable, semi-automated capabilities to receive, process, analyze, display and disseminate all-source intelligence, including imagery, to support timely tactical decision-making across MAGTF.

Communication Emitter Sensing and Attacking System (CESAS) is an advanced Electronic Attack (EA) system that can be mounted in a variety of platforms including High Mobility Multi-Purpose Wheeled Vehicles (HMMWV), waterborne platforms, helicopters, and the MV-22 aircraft. The system provides Marine Air-Ground Task Forces (MAGTFs) with the capability to detect, disrupt and deny enemy radio communications during amphibious assaults and subsequent operations ashore. The system is being integrated into existing armored vehicle assets, currently M1165s HMMWVs and into an Mine Resistant Ambush Protected (MRAP) vehicle by FY10.



[illegible]

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Modification Kits / 4652						P-1 Line Item Nomenclature: Modification Kits			Weapon System Type:	Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
<u>FY11 OCO</u>														
CESAS														
CESAS Systems									15180	Var	Var			
 Subtotal FY11 OCO									15180					
 TOTAL ACTIVE Reserves									15180 15180					

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4) / 4620						P-1 Item Nomenclature: ITEMS UNDER \$5M (COMM & ELEC)						
Program Elements: 0206315M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	79.3	10.3	7.7	3.4	11.5	15.0	5.9	5.1	5.1	5.2	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	79.3	10.3	7.7	3.4	11.5	15.0	5.9	5.1	5.1	5.2	Cont.	Cont.
Initial Spares	0.5											
Total Proc Cost	79.8	10.3	7.7	3.4	11.5	15.0	5.9	5.1	5.1	5.2	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Baseline Appropriation Request:**

**Public Affairs Equipment:** is to support the United States Marines Joint Force Commander by communicating the truth and factual, unclassified information about DOD activities to the United States, allied, national, international and internal audiences. PAC integrates audio, video, imagery and digital communications equipment into lightweight, modular, deployable packages. PAC allows the Marine Forces to collect, receive, process and disseminate Public Affairs information from overt, controlled, sensitive, technical and tactical operations. The information and data passed by PA detachments is often sensitive both in material contained and for the audience intended. While there will rarely be classified information to be passed, the systems must accommodate a degree of security higher than that normally passed over uncovered radio nets.

**Combat Camera Systems:** Provides equipment to Fleet Marine Force (FMF) Combat Camera Units and training commands. This is imagery acquisition/production equipment used for the collection, editing and dissemination of imagery for use by any Combat Camera customer to include DOD, Joint and Marine forces. 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).

**Command Support Equipment:** Provides equipment to Fleet Marine Force (FMF) Public Affairs (PA) elements for dedicated audiovisual equipment to support national security strategy, the Department of Defense (DOD), Unified Command and Marine Corps objectives in all circumstances to include peacetime, training and contingencies. This line includes funds to provide for the initial outfitting of new construction and selected major Headquarters, U. S. Marine Corps (HQMC) I&L (Facilities) sponsored Facilities Sustainment, Restoration and Modernization (FSRM) projects. This one time first provisioning of CE, includes assets which are loose, portable, or can be detached from the structure.

**Audio Visual and Telecommunication:** Provides for the initial outfitting of new construction and selected major HQMC I&L (Facilities) sponsored Facilities Sustainment, Restoration and Modernization (FSRM) projects. This one time first provisioning of CE, includes assets which are loose, portable, or can be detached from the structure. Funds equipment items costing equal to or greater than \$250K.

**General Purpose Tool, Sets & Kits (TS&K):** Funds are used to buy tools to support all types of Marine Corps ground equipment. The program includes over 40 different types of individual mechanic or technical tool kits as well as the larger, mobile, or deployable, organizational tool sets.

**Expeditionary Shelter System:** EMI Maintenance Shelter is a part of the Marine corps Field Logistics System (MCFLS). This system of support equipment provides for use of standardized shelters which are easily erected, relocated, compatible with current Marine Corps transportation modes, require minimum maintenance, and will protect equipment and functions needed to support Fleet Marine Force (FMF) operations. This shelter presents the unique variation of one 20-foot EMI/EMC shelter and three 10- foot Rigid/EMC shelters being used for special purposes. Each shelter is configured to support its mission. Many of the current communication systems being fielded today require a climate controlled environment in order to perform the required corrective maintenance. These old shelters must be replaced in order to ensure continued support current and future inventory of Electronic Communication Systems.

**Family of Combat Field Feeding System:** Consists of those items used to store, prepare, transport & serve combat rations in a non-garrison environment while maintaining force protection through distributed operations and sanitation capabilities.

**The Multi-Purpose Bayonet** is the military issue bayonet carried by the Marines in theater and will attach to the M-16 and M-4 rifles. The bayonet will increase the war fighters' lethality and survivability on the battlefield by providing a combination bayonet and fighting knife.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4) / 4620		P-1 Item Nomenclature: ITEMS UNDER \$5M (COMM & ELEC)
<p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$11.549M</u></b></p> <p><b>Public Affairs Equipment:</b> Public Affairs Equipment: is to support the United States Marines Joint Force Commander by communicating the truth and factual, unclassified information about DOD activities to the United States, allied, national, international and internal audiences. PAC integrates audio, video, imagery and digital communications equipment into lightweight, modular, deployable packages. PAC allows the Marine Forces to collect, receive, process and disseminate Public Affairs information from overt, controlled, sensitive, technical and tactical operations. The information and data passed by PA detachments is often sensitive both in material contained and for the audience intended. While there will rarely be classified information to be passed, the systems must accommodate a degree of security higher than that normally passed over uncovered radio nets. These items are specialized equipment necessary to accomplish assigned missions in Afghanistan theater of operations, OEF.</p> <p><b>Combat Camera Systems:</b> Provides equipment to Fleet Marine Force (FMF) Combat Camera Units and training commands. This is imagery acquisition/production equipment used for the collection, editing and dissemination of imagery for use by any Combat Camera customer to include DOD, Joint and Marine forces. 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). Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.</p> <p><b>MSIDS:</b> MAGTF Secondary Imagery Dissemination System (MSIDS) is the only Family of Systems (FoS) that 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 adjacent commands. The MSIDS capability resides with the MAGTF G/S-2 sections, Reconnaissance Battalions, Light Armored Reconnaissance Battalions, Infantry Battalion Scout Sniper Platoons and Marine Special Operations Command. The MSIDS 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 and to higher adjacent echelons through the use 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. A recent increase of the MSIDS Video Exploitation Workstation (VEW) requirement within Infantry Battalions and Wing units, down to the squadron level, has grown from 18 to 140 in the past year. The VEW is utilized 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. MSIDS FoS is currently employed in every location world-wide where the Marine Corps participates in contingency operations, and has recently been employed in Iraq, Kuwait, Afghanistan, Haiti, Philippines and Horn of Africa. Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.</p> <p>-These items are specialized equipment necessary to accomplish assigned missions in Afghanistan theater of operations.</p> <p>* All other funding for MSIDS resides under the MIP BLI 4747</p>		

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010		
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4620				P-1 Item Nomenclature: ITEMS UNDER \$5M (COMM & ELEC)				
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY2011	Total FY 2011
Public Affairs Equipment	A	D	2.468	0.334	0.625	0.340	1.073	1.413
		Q	Var	Var	Var	Var	Var	Var
Command Support Equipment	A	D	3.017	0.061				
		Q	Var	Var				
Audio Visual and Telecommunications	A	D		4.026	0.709	0.856	0.000	0.856
		Q		Var	Var	Var	Var	Var
General Purpose Tool, Sets, & Kits (TS&K)	A	D		1.132	0.154			
		Q		Var	Var			
EMI Maintenance Shelter	A	D		0.727	3.653			
		Q		Var	Var			
Family of Combat Field Feeding System	A	D		0.085	0.033			
		Q		Var	Var			
Multi-Purpose Bayonet	A	D			0.027			
		Q			Var			
Civil Affairs Capability Set	A	D					0.278	0.278
		Q					Var	Var
Total			20.834	6.365	5.201	1.196	1.351	2.547
Active			20.834	6.365	5.201	1.196	1.351	2.547
Reserves			0.000	0.000	0.000	0.000	0.000	0.000

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4620				P-1 Line Item Nomenclature: ITEMS UNDER \$5M (COMM & ELEC)			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
Combat Camera		15349	3950	Var	Var	2472	Var	Var						
Program Management Support									1200					
Logistics Support									1009					
Subtotal Baseline			3950			2472			2209					
<u>FY11 OCO</u>														
Combat Camera														
Hardware Refresh									4934	Var	Var			
Software Refresh									213	Var	Var			
MSIDS														
Hardware Refresh									5051	Var	Var			
Subtotal OCO									10198					
Subtotal FY11 OCO														
Total			3950			2472			12407					
Active			3950			2472			12407					
Reserves			0			0			0					

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109 ) / 04 Communications and Electronics Equip / 4640					P-1 Item Nomenclature: AIR OPERATIONS C2 SYSTEMS							
Program Elements: 0206313M Tactical Air Control Systems (Marine Corps)				Code: A	Other Related Program Elements:							
	Prior Years*	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog.
Proc Qty												
Gross Cost	241.2	27.9	48.0	67.6	41.0	108.6	47.7	70.8	52.7	72.2	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	241.2	27.9	48.0	67.6	41.0	108.6	47.7	70.8	52.7	72.2	Cont.	Cont.
Initial Spares	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	247.7	27.9	48.0	67.6	41.0	108.6	47.7	70.8	52.7	72.2	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.

**Baseline Appropriation Request:**

**Marine Air Command and Control (MACCS) Sustainment** - Consists of various command and control units designed to provide the Aviation Combat Element (ACE) commander with the ability to monitor, supervise and influence the application of Marine aviation assets in support of Marine Air Ground Task Force MAGTF operations. The MACCS Sustainment program provides the capability to keep these Aviation Combat Elements ready, relevant and capable until their functions are replaced by the Common Aviation Command and Control System (CAC2S). The supported MACCS systems were to have been replaced by CAC2S beginning in FY09; however, the service life of MACCS has been extended to 2015. The funding procures replacement hardware to aid in the service life extension and supportability of specified MACCS systems. Provide refresh of MACCS systems one MEF at a time, one MEF per year, finishing in FY16. (AAO: Various) (TAMCN: Various)

**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 lead 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. Funds are for New Equipment training and On-Site fielding reps to support updated software and hardware fieldings, and to procure new hardware for TBMCS to leverage new technology and maintain relevance and capability.

**Battlefield Target Identification Device (BTID)** - Consists of an interrogator antenna, transponder antenna, RF receiver, and processor. There are three variants which include 1) Combined Interrogator/Transponder (I/T) for USMC Shooting platforms (LAV-25, M1A1 Tanks, and EFV); 2) Transponder only (T-only) for other tactical vehicles; 3) Interrogator only (I-only) for Javelin, Anti- Tank Guided Missiles (ATGMs), Target Location Designation Handoff System TLDHS, and UAVs. BTID will improve operational capabilities/effectiveness. It will discriminate between friendly and potential hostile platforms, through battlefield obscurants at ranges in excess of 6 KM in less than 1 second. It also decreases fratricide incidents, increases the range at which targets may be engaged without fear of misidentification, and enhances Situational Awareness (SA) by providing redundant Blue Force Tracking and alternative means of tactical communications.

**Composite Tracking Network (CTN)** - 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. 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 Marine Corps unique components include : Vehicle - M1152A-1 (GFE Marine Corps Systems Command (MCSC), Trailer - M102 LTT-MCC (GFE MCSC), 1 OKW Generator - MEP 803 (GFE MCSC), Tactical Radio - AN/MRC103 (GFE MCSC), Global Positioning System - DAGR (GFE MCSC), Environmental Control Unit - BOO03 (GFE MCSC), Shelter - S788 (commercial off-the-shelf (COTS) NSWC Crane), and Antenna Mast - TEAMS EXL 195/26-5.4 (COTS NSWC Crane).

The CTN system will interface with the CAC2S and the AN/TPS-59 radar 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. Future interfaces with CTN will include the Ground/Air Task Oriented Radar (GATOR). In FY 10, the Program Office will produce 9 systems and procure Crypto Modernization as part of the AN/USG-4A Engineering Change Proposal.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: <div style="text-align: right; padding-right: 20px;">February 2010</div>
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109 ) / 04 Communications and Electronics Equip / 4640	P-1 Item Nomenclature: <div style="text-align: right; padding-right: 20px;">AIR OPERATIONS C2 SYSTEMS</div>	
<p><b>Remote Video Viewing Terminal (RVVT)</b> - Remote Video Viewing Terminal (RVVT) - Provides the warfighter with video connectivity to multiple types of aerial platforms (Pioneer, Dragon Eye, Raven B, Shadow, Predator, Fire Scout, and Litening Pod on P-3, AV8-B, and F/A-18). Data is displayed to Regimental Combat Teams and Forward Air Controller operators who coordinate with higher headquarters for fires. This is a New Start for FY10. Program Office is pursuing an AAP designation with MS B in FY10.</p> <p><b>The Common Aviation Command and Control System (CAC2S)</b> 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 the 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 MACCS organic sensors and weapons systems, 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 consists of four variants. Variant 1 (V1) will consist of 1 PDS Capset II, 1 SDS, and 2 CS/MRQ-12's. Total V1 quantity is 4. Variant 2 (V2) will consist of 1 PDS Capset III, 1 SDS, and 2 CS/MRQ-12's. Total V2 quantity is 19. Variant 3 (V3) will consist of 1 PDS Capset III, 1 SDS, and 1 CS/MRQ-12's. Total V3 quantity is 16. Variant 4 (V4) will consist of 1 PDS Capset III and 1 CS/MRQ-12's. Total V4 quantity is 11 (AAO: 50) (TAMCN'S: N/A).</p> <p><b>TIER I (GROUP 1) UAS</b> - The TIER I (Group1) UAS program procures a capability for unmanned aircraft systems (UAS) to provide the company/detachment level with airborne reconnaissance to aid in detecting, identifying and engaging or avoiding enemy units. The UAS air vehicle autonomously gathers and transmits imagery of the tactical situation in near-real time at a range of up to ten kilometers. The material solution for the GROUP 1 requirement is the Raven B UAS. Raven B is a five pound, hand launched, reusable vehicle with a wing span of 55 inches. The air vehicle flies at an altitude of 300-500 feet above ground level (AGL) at a speed of approximately 35 knots. This system has a maximum duration of 90 minutes. Raven B's interchangeable payloads, autopilot and propulsion system are also commercial-off-the shelf (COTS) subsystems. The Ground Control Station (GCS) uses a rugged hand controller connected to a communication control box. A Raven B system consists of three Raven B air vehicles; two GCS; one Reconnaissance, Surveillance, and Target Acquisition (RSTA) Kit; one Field Repair Kit (FRK). The RSTA kit is used for mission planning, autonomous flight operations and mission product archiving. The FRK contains consumable items used during operations and maintenance. Raven B is a joint US ARMY/USSOCOM Program. Funds will be allocated to replace the previously fielded SURSS, Block 0 which are reaching the limit of operational life and provided initial issue spares. In FY10, the Program Office expects to procure the balance of SURSS Block I (Raven B) systems to it's current AAO and commence defelding of all DE block 0 systems. Tier I Group1 UAS also includes the DragonEye hand-launch small unit UAS platform.</p> <p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$41.031M</u></b></p> <p><b>BTID</b> - Equip 22,500 Marines with personnel Combat ID gear. This requirement is based on the I MEF Urgent Universal Need Statement dated April 2005 and is a continuing requirement based on OEF (Afghanistan) and OIF operations. These items are specialized equipment necessary to accomplish assigned missions in OEF/OIF theaters of operation.</p> <p><b>MACCS Sustainment</b> - Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.</p> <p><b>BLOS</b> - Procures additional Gateway devices to be aligned to the DASC (AAO=8). BLOS Gateway devices to provide Command and Control (C2) Situational Awareness (SA) to the Direct Air Support Center (DASC). Will fund the 8 required for the DASC and complete the AAO. The current DASC allows voice-only terminal control of aircraft in close air support missions. The gateway allows controllers to "see" the battlefield = better planning of ingress and egress routes, locations of friendly forces, and positive ID of targets, thus significantly reducing the potential for air-to-ground fratricide incidents. Provides ability to operate in austere environments and echelon control. These items are specialized equipment necessary to accomplish assigned missions in OEF/OIF theaters of operation.</p> <p><b>CDLS</b> - Additional CDLS suites allow Aviation Combat Element (ACE) and Marine Tactical Command Squadron (MTACS) Commanders deployed in OEF to maintain Air Command nodes at multiple locations. This is critical in OEF due to the extreme geographic features of that theater, which inhibit or prevent line-of-sight, and often satellite, communications. Multiple CDLS nodes can be strategically employed to act as relay, gap-filler, and forwarding Command agencies to ensure the ACE Battlestaff has complete tactical situational awareness, the information streams to support decision making, and the communications infrastructure to Command and supervise air combat operations. These items are specialized equipment necessary to accomplish assigned missions in OEF/OIF theaters of operation.</p> <p><b>MERWS</b> - Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan. The MERWS is a hard shelter used by the TACC to house its operational facility. Primary facility for the TACC suite of servers, workstations, tactical networks, personnel, and communications devices. It provides environmental protection, lighting, power distribution, and workspace for the TACC's equipment, personnel and functional cells.</p> <p><b>MIDS</b> - A0099 MIDS terminals to partially replace existing AAO quantities of A0082 Joint Tactical Information Distribution Terminal Systems (JTIDS) assets. The JTIDS is obsolete and not supportable. MIDS is the replacement terminal utilized across DoD and NATO services for access to Link 16. Link 16 is the primary method used to exchange data link information, commands, and engagement data supporting situational awareness and command and control activities. These items are specialized equipment necessary to accomplish assigned missions in OEF/OIF theaters of operation.</p> <p><b>Radios</b> - MACCS is the sole user of this radio variant. Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.</p> <p><b>TBMCS</b> - Funds are for New Equipment training and to procure new hardware for TBMCS to leverage new technology and maintain relevance and capability. These items are specialized equipment necessary to accomplish assigned missions in OEF/OIF theaters of operation.</p>		



[illegible]

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109)/04 Communications and Electronics Equipment/4640				P-1 Line Item Nomenclature:  AIR OPERATIONS C2 SYSTEMS		Weapon System Type:		Date:  February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY09			FY10			FY11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
MACCS SUSTAINMENT (Air Ops C2 Sys/Cmoss)											
CDLS COTS Refresh							2855	VAR	VAR		
COTS Components Refresh			560		VAR	VAR	588	VAR	VAR		
JTIDS/JRE Components Refresh			270		VAR	VAR	284	VAR	VAR	250	VAR
MACCS Components Refresh			224		VAR	VAR	436	VAR	VAR		
Fiber Cable Components Refresh			60		VAR	VAR					
CEOss Contractor Support											
TACC Sustainment		480					306	VAR	VAR	242	VAR
TAOC Sustainment		1303					394	VAR	VAR		
DASC Sustainment		600					220	VAR	VAR	220	VAR
MACCS ISEA											
Comms Data Link System Sustainment		600	209	VAR	VAR	288	VAR	VAR	VAR	254	VAR
ADCP Sustainment/Refurbishment		137	734	VAR	VAR	389	VAR	VAR	VAR		
CIS/CDS/DASCAS Sustainment		821	417	VAR	VAR	402	VAR	VAR	VAR		
****ADCP/MERWS/DASCAS		1370				260	VAR	VAR	VAR	260	VAR
Subtotal Baseline		5311	2474				6422			1226	
<u>FY11 OCO</u>											
MACCS SUSTAINMENT (Air Ops C2 Sys/Cmoss)											
JRE-Palm Procurement										964	VAR
CDLS Production										6000	VAR
MERWS Procurment										2000	VAR
Ground to Air Radio Procurement										350	VAR
MIDS Terminal Procurement										3500	VAR
Wireless Point to Point										1700	VAR
TAOM HF Radios										1600	VAR
TAOC Refresh										16547	VAR
TAOC Life Cycle Support										3000	VAR
Subtotal FY11 OCO										35661	
SubTotal		5311	2474				6422			36887	
Active		5311	2474				6422			36887	
Reserve		0	0				0			0	

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109)/04 Communications and Electronics Equipment/4640				P-1 Line Item Nomenclature: AIR OPERATIONS C2 SYSTEMS		Weapon System Type:		Date: February 2010	
Weapon System Cost Elements		ID CD	Prior Yrs	FY09		FY10			FY11		
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each
<u>Baseline</u>											
TBMCS											
New Equipment Training			10330	1805			1428			1488	
OnSite Fielding Reps			4791	895							
Integrated Logistic Support			5294	1189			750			728	
TBMCS Systems			3329				1277				
CAC2S Subsystems											
Sensor Data Subsystem (SDS)											
PDS Capset III Subsystem										19755	9 2195000
ECP KITS											
PDS Capset III ECP Kit							1300	VAR	VAR	8510	VAR VAR
CS/MRQ-12 ECP Kit							728	VAR	VAR	7497	VAR VAR
Contractor Logistics Support							740			1,209	
Initial Spares							86			986	
Production testing							63			1,171	
COTS software										1,423	
Engineering Change Orders							51			75	
Net Training/Data							10			542	
Production support							1108			1,507	
Subtotal Baseline			23744	3889			7541			44891	
<u>FY11 OCO</u>											
TBMCS											
New Equipment Training										500	
TBMCS Systems										3270	
Subtotal FY11 OCO										3770	
TOTAL			23744	3889			7541			48661	
Active			23744	3889			7541			48661	
Reserves			0	0			0			0	

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109)/ 04 Communications and Electronics Equip /4640				P-1 Line Item Nomenclature: AIR OPERATIONS C2 SYSTEMS		Weapon System Type:		Date February 2010	
Weapon System Cost Elements		ID CD	Prior Yrs	FY09		FY10			FY11		
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each
<u>Baseline</u>											
Battlefield Target Identification Device											
End-Item Procurement											
Low Rate Initial Production											
B-Kit LRIPs				3104	VAR	VAR					
A-Kit LRIPs				1109	VAR	VAR					
Kit Installation											
Other Direct costs			921	973	VAR	VAR					
Investment Program Office			4717	817	VAR	VAR					
BTIS First Article Test			629	231	VAR	VAR					
BTIS First Destination Transportation (FDT)			1	1	VAR	VAR					
BTIS Support Equipment			1095								
BTIS Other			1152								
Composite Tracking Network (CTN)											
CTN Platform Components (Production)			7512	11832	6	1972000	15570	9	1730		
Program Management Support			1546	1277	VAR	VAR	4079	VAR	VAR	1202	VAR
Other Production Support										2604	VAR
CEC ILS			169	257	VAR	VAR	160	VAR	VAR	365	VAR
GFE Components			1138	1101	VAR	VAR	1957	VAR	VAR		VAR
Crypto Signal Data Processor "S"							2985	15	199		
Engineering Change Proposals (ECPs)										11637	VAR
Remote Viewing Video Terminal											
- Tactical Air Command Platform Suite							4805	VAR	VAR	4643	VAR
- Program Management Support/ILS							1500	VAR	VAR	1000	VAR
Subtotoal Baseline			18880	20702			31056			21451	
<u>FY11 OCO</u>											
Battlefield Target Identification Device											
Button IR Reflective Squares 2" x 2" (GloTape)										817	
1" IR Reflective sq for helmets (SCHIMS)										199	
2' x 2' Thermal ID Panel										65	
IR Beacon										49	
IR Reflective Armband										471	
Subtotoal FY11 OCO										1600	
Total			18880	20702			31056			23051	
Active			18880	20702			31056			23051	
Reserve			0	0			0			0	

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109)/ 04 Communications and Electronics		Weapon System Type:			P-1 Line Item Nomenclature: AIR OPERATIONS C2 SYSTEMS (MACCS)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY09 CTN Platform Components	Various	TBD	MCSC, Quantico, VA	Dec-08	Dec-09	6	1972000	Y	N/A	N/A
FY10 CTN Platform Components	Various	TBD	MCSC, Quantico, VA	Dec-09	Dec-10	9	1730	Y	N/A	N/A
Crypto Signal Data Processor "S"	TBD	TBD	NAVSEA, D.C.	Dec-08	Dec-09	15	199	N	N/A	N/A
FY11 PDS Capset III Subsystem	General Dynamics Scottsdale, AZ	FFP	MCSC, Quantico, VA	Feb-11	Jul-11	9	2195000	N	N/A	N/A
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE															Date:																				
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment/ 4640															Weapon System		P-1 Item Nomenclature:  Air Operations C2 Systems																		
PRODUCTION RATE															PROCUREMENT LEADTIMES																				
ITEM	Manufacturer's NAME/LOCATION														MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of												
CTN	Various Manufacturers														1	2	4		2	12	0	14	E												
PDS Capset III	General Dynamics/Scottsdale, AZ														1	3	7		1	3		3	E												
															Fiscal Year 09										Fiscal Year 10										B A L A N C E
															Calendar Year 09										Calendar Year 10										
ITEM	F Y	S V C	Q T Y	D E L	B A L	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						
CTN Platform Components	09	MC	6		6			A												2	2	2								0					
CTN Platform Components	10	MC	9		9														A											9					
CTN Crypto Signal Processor	10	MC	15		15			A												2	2	2	2	2	2	2	1			0					
															Fiscal Year 11										Fiscal Year 12										B A L A N C E
															Calendar Year 11										Calendar Year 12										
ITEM	F Y	S V C	Q T Y	D E L	B A L	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						
CTN Platform Components	10	MC	9		9			2	2	2	2	1																		0					
PDS Capset III	11	MC	9		9					A					3	3	3													0					

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010						
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4650							P-1 Item Nomenclature: RADAR SYSTEMS						
Program Elements: 0206211M Tactical Air Control Systems (Marine Corps)			Code: A		Other Related Program Elements:								
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total Prog.	
Proc Qty													
Gross Cost	185.2	42.4	10.8	0.9	5.5	6.4	12.0	50.1	31.2	32.2	Cont.	Cont.	
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc (P-1)	185.2	42.4	10.8	0.9	5.5	6.4	12.0	50.1	31.2	32.2	Cont.	Cont.	
Initial Spares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.	
Total Proc Cost	185.2	42.4	10.8	0.9	5.5	6.4	12.0	50.1	31.2	32.2	Cont.	Cont.	
Flyaway U/C											Cont.	Cont.	
Wpn Sys Proc U/C													
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.	
<p><b>Base Appropriation Request:</b></p> <p>Ground/Air Task Oriented Radar (G/ATOR) (formerly known as the Multi-Role Radar System (MRRS) - G/ATOR is an expeditionary, 3-dimensional, high-mobility multi-purpose wheeled vehicle, short/medium range multi-role radar designed to detect cruise missiles, air breathing targets, rockets, mortars, and artillery. MRRS and GWLR (Ground Weapons Locating Radar) merged into a single requirement/capability (G/ATOR) and will replace an aging fleet of single mission legacy radar systems. G/ATOR will support air defense, air surveillance, counter-battery/target acquisition, aviation radar tactical enhancements and the final evolution will also support the Air Traffic Control mission.</p> <p>Short/Medium Range Air Defense Radars - The AN/TPS-63B is a two-dimensional, medium-range, medium altitude, transportable, radar system which is employed as a tactical gap-filler or as an early warning system for early 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 (V) 3 three dimensional, long-range, air surveillance radar system. The AN/TPS-63B, like the AN/TPS-59 (V) 3, 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. The FY10 funding profile includes the purchase of various ancillary equipment to include upgrade kits for Receiver Path/Frequency Generator (RF) Suite 1.</p> <p>Family of Target Acquisition Systems (FTAS)/Ground Weapons Locating Radar (GWLR) - 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 Fire finder radar, the AN/TPQ-48 Lightweight Counter Mortar Radar and the Target Processing Set. The FTAS is critical in the execution of counter fire 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 FY10 funding profile includes the purchase of upgrade kits and contractor support services for installation.</p> <p>AN/TPS-59 Long Range Radar Sustainment: The AN/TPS-59 radar provides three-dimensional long range surveillance and detection against air-breathing targets and tactical ballistic missiles. It provides launch/impact point and cueing information to other theater missile defense systems. The AN/TPS-59 Program is currently managing reoccurring sustainment activities, while simultaneously implementing a Three Increment strategy of tech refresh to address obsolete/Diminishing Manufacturing Sources (DMS) issues. The sustainment strategy combines numerous Engineering Change Proposals, which will culminate in an Operational Assessment and Operational Test prior to ECP modkit development and installation. The radar has been continuously deployed in support of OIF/OEF decreasing material readiness.</p> <p>FY11 OCO funding is required to provide technical/logistics support to maintain readiness and fielding of a modified Data Processing Shelter. Funding also supports ongoing engineering changes required to address diminishing manufacturing sources and obsolescence issues. TheTPS-59, the only Long Range Radar in the Marine Corps, was fielded in FY84 with an electronics upgrade fielded in FY98 and has numerous obsolescence issues. Risks decreased operational availability of AN/TPS-59; currently employed in overseas contingency operations. Cannot maintain logistics support to upgraded Data Processor Shelters fielded in FY-10 and delays fielding of 5 shelters until FY-12</p>													

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: February 2010			
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4650					P-1 Item Nomenclature: RADAR SYSTEMS					
Procurement Items	Code	UOM	Prior Years	FY 2009	FY2010	Base FY2011	OCO FY2011	Total FY2011		
Short/Medium Range Air Defense Radar Ancillary Equipment										
Compressor/Dehydrator Update Kits	A		0.428	0.419	0.000	0.000	0.000	0.000		
OEM System ECP Upgrads/Refresh/RF Suite	A		1.304	0.000	0.700	0.694	0.000	0.694		



Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4650				P-1 Line Item Nomenclature: RADAR SYSTEMS			Weapon System Type:			Date: February 2010			
Weapon System Cost Elements		ID CD	Prior Yrs	FY 09		FY 10			FY 11						
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>															
<b>GWLR/FTAS (4650)</b>		A													
Upgrade Kits and Installation				633	VAR	VAR	487	VAR	VAR						
CEOSS				600	VAR	VAR	2025	VAR	VAR	166	VAR	VAR			
Radar Processor LRIP (5) refresh			1257												
Re-Hosted Radar Processor refresh			4795												
Target Processing Set			5000	8000	46	173916									
Q-46A SL3 Radar ancillary equipment			6783												
Integration of systems			110	910	VAR	VAR									
AAO Increase Q-46A Radar Set, 202k			97669												
IIP Plus up for AAO Increase															
FY10 GWOT FTAS ECP's/Mods															
Antenna Transceiver Groups (ATGs)															
LCMR				7520	VAR	VAR	3325	VAR	VAR						
AN/TPQ-48 LCMR refresh			6500												
<b>AN/TPS-59 (4650)</b>		A													
AN/TPS-59 Sustainment				12000											
Diminishing Manufact. Sources Issues - NO END			12215	12230			4193								
Control Shelter Refresh			29606												
Control Shelter Refresh			19500												
Interrogator Mod Kits - NO END ITEMS							92								
<b>GROUND/AIR TASK ORIENTED RADAR</b>		A													
G/ATOR Systems															
Less PY Long Lead															
CY Long Lead Items				56	VAR	VAR									
(T/R Modules, cables, harnesses, connectors)															
<b>Subtotal Baseline</b>			<b>183435</b>	<b>41949</b>			<b>10122</b>			<b>166</b>					
<u>FY11 OCO</u>															
<b>AN/TPS-59</b>		A													
Data Processing Group										2546	VAR	VAR			
Hardware										2947	VAR	VAR			
<b>Subtotal OCO</b>										<b>5493</b>					
<b>TOTAL</b>			<b>183435</b>	<b>41949</b>			<b>10122</b>			<b>5659</b>					
ACTIVE			183435	41949			10122			5659					
RESERVE			0	0			0			0					

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4650		Weapon System Type:			P-1 Line Item Nomenclature: RADAR SYSTEMS					
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Ground Weapons Locating Radar <u>LCMR</u> FY09 AN/TPQ-48 V2+ LCMR Kits	FT MONMOUTH/CECOM	FFP	MARCORSYSCOM	Jul-10	Feb-10	46	173916	Y	N/A	N/A
REMARKS:										

## Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No:  
Procurement, Marine Corps (1109) / 04 Communications and Electronics  
Equipment / 4650

Weapon System:

P-1 Item Nomenclature:

## RADAR SYSTEMS

[illegible][illegible][illegible]

REMARKS:

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4733							P-1 Item Nomenclature: FIRE SUPPORT SYSTEM					
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							

	Prior Year	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total
Proc Qty												
Gross Cost	289.7	5.2	3.1	3.9	4.7	8.6	5.1	8.3	14.7	18.2	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	289.7	5.2	3.1	3.9	4.7	8.6	5.1	8.3	14.7	18.2	Cont.	Cont.
Initial Spares	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	291.9	5.2	3.1	3.9	0.0	8.6	5.1	8.3	14.7	18.2	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.

Common Laser Range Finder - CLRF - The CLRF Pre-Planned Product Improvement (P3I) will provide a lightweight, man portable, True North Azimuth Determination System (TNADS) capable of interfacing with the Common Laser Range Finder (CLRF) and the Defense Advanced Global Positioning System (GPS) Receiver (DAGR). P3I will equip operating forces with a technological capability to reduce the target location error to allow more accurate target locations. If not approved, the Marine Corps will continue to have a deficiency in target location error (TLE) at the dismounted level.

Muzzle Velocity System: The M-94 provides an accurate muzzle velocity reading for a projectile fired from a M-198 or M-777 155mm howitzer and to adjust the gun after several rounds have been fired. The M-94 provides advanced muzzle velocity and gun management functions which enable the operator to store and retrieve adjusted muzzle velocities for the rounds fired for all gun type/projectile/propellant combinations in use. Without this additional rounds will be required to adjust the gun.

Modeled Meteorological Information Manager (MIMM) provides the ability to derive highly accurate meteorological data through the use of Numerical Weather Prediction (i.e. meteorological models). MIMM will provide this meteorological information to correct artillery, mortar, and rocket firing data, as well as corrections for target locating radars such as the AN/TPQ-46A. MIMM is the replacement system for the Meteorological Station Group (MSG) under TM2.

Sight, Grenade Launcher AN/PSQ18A (E1779) - The AN/PSQ-18A, Model 1800, is an enhanced aiming device designed to enable the Marine to rapidly and precisely fire the M203 in daylight, low-light, and night conditions. The AN/PSQ-18A GLDNSM is being procured via the U.S. Special Operations Command (USSOCOM) to fulfill the requirements of the Marine Corps' M203 Enhanced Sighting Device (ESD) program. Fire Support Mods (Sustainment): Funding will provide upgrades to electronic suites/product improvements for Tactical Meteorological Manager (TM2). This will also support the procurement of the Long Range Thermal Imager (LRTI) and Laser Spot Imager. The LRTI LSI will provide a night capability to the LTD and CLRF systems. Additionally, various Fire Support Equipment is required by the Table of Equipment to support the stand-up of new units within the Marine Corps to meet the 202k end-strength. The AAOs and TAMCNs for the funding contained under the sustainment line is various due to the large number of items procured.

Ground Laser Target Designator II (GLTD II): GLTD II is an interim solution to Laser Target Designation. All money for Laser Target Designation will procure the Portable Laser Designated Rangefinder (PLDR), the long term LTD hardware solution. Contract award for the remaining 81 GLTD II units was Nov, 2007 with delivery beginning in Sep, 2008.

PEI Procurement: Provides the thermal sight capability for the Common Laser Range Finder (CLRF) night targeting requirements. It allows the user to locate targets out to 5k at night. Various Fire Support Equipment required by the Table of Equipment to support the stand-up of new units within the Marine Corps to meet the 202k end-strength.

FY 11 - Total includes Overseas Contingency Operation Request (OCO) of: \$4.71M

OCO funding is required to replace the current PGS Survey System and will allow the Marines to provide timely and accurate position and orientation data for artillery and fire support assets in OEF. This GPS survey capability will enable artillery surveyors to accurately, rapidly, and safely extend survey control over great distances in rugged terrain and thereby mitigate the likelihood of fratricide and collateral damage.

## Date: February 2010

P-1 Item Nomenclature:

## FIRE SUPPORT SYSTEM

[illegible]

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747							P-1 Item Nomenclature: Intelligence Support Equipment					
Program Elements: 0206625M USMC Intelligence/Electronic Warfare Systems (MIP)				Code: A		Other Related Program Elements:						
	Prior Years	FY2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog.
Proc Qty												
Gross Cost	705.0	148.5	85.0	92.4	82.9	175.3	57.9	51.0	66.0	65.6	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	705.0	148.5	85.0	92.4	82.9	175.3	57.9	51.0	66.0	65.6	Cont.	Cont.
Initial Spares	18.2	0.0	0.1	0.2	0.0	0.2	0.5	0.5	0.6	0.6	Cont.	Cont.
Total Proc Cost	723.2	148.5	85.2	92.5	82.9	175.4	58.4	51.5	66.5	66.1	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves						0.0						

**Baseline Appropriation Request: \$92.377M**

**TIER I (GROUP 1) UAS** - The TIER I (Group1) Unmanned Aircraft Systems (UAS) program procures a capability to provide the company/detachment level with airborne reconnaissance to aid in detecting, identifying and engaging or avoiding enemy units. The UAS air vehicle autonomously gathers and transmits imagery of the tactical situation in near-real time at a range of up to ten kilometers. The material solution for the GROUP 1 requirement is the Raven B UAS. Raven B is a five pound, hand launched, reusable vehicle with a wing span of 55 inches. The air vehicle flies at an altitude of 300-500 feet above ground level (AGL) at a speed of approximately 35 knots. This system has a maximum duration of 90 minutes. Raven B's interchangeable payloads, autopilot and propulsion system are also commercial-off-the shelf (COTS) subsystems. The Ground Control Station (GCS) uses a rugged hand controller connected to a communication control box. A Raven B system consists of three Raven B air vehicles; two GCS; one Reconnaissance, Surveillance, and Target Acquisition (RSTA) Kit; and one Field Repair Kit (FRK). The RSTA kit is used for mission planning, autonomous flight operations and mission product archiving. The FRK contains consumable items used during operations and maintenance. Raven B is a joint US ARMY/USSOCOM Program. Funds will be allocated to replace the previously fielded SURSS, Block 0 which are reaching the limit of operational life and provided initial issue spares. FY09 funding resides in BLI 4747. Funding in FY10 and beyond resides in BLI 4757. In FY10, the Program Office expects to procure the balance of SURSS Block I (Raven B) systems to it's current approved acquisition objective (AAO) and commence defielding of all SURSS block 0 systems. In FY11 and beyond, the current funding will sustain GROUP 1 to the authorized AAO.

**Micro-Terrain Surveillance System (MTSS)** is a ground based, real-time full motion video surveillance capability that supports the functional areas of intelligence, battle space awareness, force protection, and force application. MTSS provides the Marine company-level units with a ground based unattended, remote, and continuous video monitoring capability to observe activity along key roadways, intersections, choke points and other areas of interest. The system will consist of a ground based unattended sensor, C2 & monitoring stations and supporting communications assets. The system blends into the indigenous environment, is unmanned, is unrestricted by weather and fatigue, and delivers real-time data to a monitoring station via a RF path. The monitoring stations has the capability to store, retrieve and forward any data received to higher and adjacent commands via organic communications systems.

**Trojan Spirit Lite (TROJAN)** is an Super High Frequency (SHF) multi-band satellite communications terminal, available in either High Mobility Multipurpose Wheeled Vehicle (HMMWV)-mounted or transit case configuration, that provides dedicated tactical communications capability at the TS/SCI and Secret Collateral levels to USMC intelligence units. TROJAN SPIRIT terminals provide connectivity into JWICSS, National Security Agency Network (NSANET) and Secret Internet Protocol Router Network (SIPRNET) via the TROJAN Network Control Center. FY 2011 OCO will procure the SWAN D v3 and installation support for increase tactical communication capabilities to the intelligence units support OEF.

**Radio Battalion Modernization and Concept Exploration (RadBn Mods)** is a unique program which seeks to acquire and deliver "niche" capabilities to the Marine SIGINT Radio Battalions for evaluation. The program has been effective in rapidly providing solutions ranging from HMMWV mounted shelters to software controlled receivers capable of exploiting relevant target communication systems.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		P-1 Item Nomenclature:  Intelligence Support Equipment
<p><b>Technical Control and Analysis Center (TCAC)</b> - consisting of the AN/UYQ-83 TCAC Remote Analysis Workstation (RAWS), AN/MYQ-9 TCAC Transportable Workstation, Multi-Level Security (MLS) and One Roof system is the focal point of Radio Battalions (RADBN), Marine Corps Special Operations Command (MARSOC), and Fixed Wing Marine Electronic Attack Squadron (VMAQ) Signals Intelligence (SIGINT) operations. The TCAC automatically collects, stores, retrieves and plays back digital voice signals; 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/EW assets. The TCAC provides termination of national, theater, and tactical data networks for data exchange with the tactical SIGINT/EW assets, the Intelligence Analysis System (IAS), national databases, and provided USMC tactical SIGINT collection and analytical data into the Real-Time Regional Gateway (RT-RG) and Distributed Common Ground System (DCGS). 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 VMAQ 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. OCO funding (PMC) provides audio processing software to allow TCAC's new imbedded Tactical OneRoof capability the ability to provide key word processing, language ID, and voice ID received from USMC POR sensors. The software will be incorporated into the existing TCAC baseline and provided in an annual release directly fielded to OEF/OIF and OCO units.</p> <p><b>Distributed Common Ground/Surface System (DCGS)</b> in compliance with the Department of Defense DCGS Family of Systems concept, is a Service-level effort to migrate select USMC Intelligence, Surveillance and Reconnaissance (ISR) processing and exploitation capabilities into a single, integrated net-centric baseline consisting of functional capability sets that support Marine intelligence analysts across the Marine Air-Ground Task Force (MAGTF) by making organic ISR data more visible, accessible, and understandable. The Distributed Common Ground System-Marine Corps (DCGS-MC) concept originated with the DCGS Mission Area Initial Capabilities Document (MA ICD) Joint Requirements Oversight Council Memorandum (JROCM 001-03) dated 6 Jan 03 which established the overarching requirements for a collection of net-centric capable systems that will contribute to joint and combined War fighter needs for ISR support. Each service is directed to pursue a coordinated developmental path based on a set of common enterprise services consistent with the DoD's net-centric vision. Furthermore, each service's DCGS solution is to evolve independently through the implementation of common enterprise architecture and standards. The DCGS Integration Backbone (DIB) is intended to be the basic building block for interoperability between the Service DCGS programs and is comprised of integrated Commercial Off The Shelf (COTS) and Government Off The Shelf (GOTS) software package originally developed under the Air Force DCGS 10.2 contract with Raytheon. The Air Force has established a separate DIB Management Office (DMO) to direct day-to-day developmental efforts in coordination with the Army, Navy, Marine Corps, and United States Special Operations Command (USSOCOM) DCGS program offices with oversight provided by OUSD (I). The DCGS-MC program is currently evaluating the appropriate implementation of DIB standards and anticipates leveraging heavily from the developmental efforts of its sister Service DCGS programs as its own developmental efforts are fully underway.</p> <p><b>Biometric Communication Architecture (BATS)</b> - Provides a Multi-National Force West (MNF-W) with the proper suite of communications assets which allows the transmission of the Biometric Automated Toolset (BATS) data base from major Forward Operating Bases (FOBs) out to the lowest echelon of Marine units. BATS data contains biometric data collected by both Marines operating within the CENTCOM AOR and other national entities operating around the world, providing a powerful means to positively identify individuals during combat operations.</p> <p><b>Tactical Remote Sensor System (TRSS-PIP)</b> will provide all weather direction, location determination, targeting, and tactical indications and warning of enemy activity in the Marine Air Ground Task Force (MAGTF) Commander's Area of Interest. The TRSS-PIP is an equipment suite consisting of three primary sub-systems: Unattended Ground Miniature Sensors (UGMS); Relay Systems; and monitoring systems. The sensor systems will include seismic/acoustic sensors, electro-magnetic sensors, infrared (passive) sensors; and air-delivered sensors. The relay systems include dual channel duplex commendable and single channel repeaters. The monitoring system includes the Sensor Mobile Monitoring System (SMMS). The composition of the three sub-systems are comprised of several individual components. As the Product Improvement Program proceeds, upgrading of individual components will occur on an as needed basis. FY11 OCO supports procurement of imager modification kits, long range camera sets and common sensor radio(CSR) integration kits for OEF equipment.</p>		

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		P-1 Item Nomenclature:  Intelligence Support Equipment
<p><b>Joint Surveillance Target Attack Radar System (JSTARS)</b> is a long-range, air-to-ground surveillance system, composed of an airborne element and a ground element. The airborne element, the E-8C aircraft contains a large phased array radar on the fuselage and multiple OZ-63 Air Data terminal (ADT) operator terminals. Radar data is distributed via an encrypted, jam-resistant Surveillance and Control Data Link (SCDL) for transmission to one of two JSTARS ground systems; the Common Ground Station or Joint Surveillance Work Station.(CGS/JSWS) The sensor suite provides detection and tracking data on targets through the use of the Moving Target Indicator (MTI), Fixed Target Indicator (FTI), Synthetic Aperture Radar (SAR) and Unmanned Aerial Vehicle (UAV). FTI and MTI data detect, locate and identify the movement of enemy targets, while SAR identifies critical fixed targets such as bridges, harbors, airports, buildings or stopped vehicles. The CGS is aground received and processed displaying system and receives JSTARS data directly from the E-8C JSTARS aircraft through the SCDL to the Ground Data Terminal (GDT). Once JSTARS data is collected at the ground receive site, MTI/FIT/SAR data will be sent across the Marine Air Ground Task Force (MAGTF) Command Control Communications Computers and Intelligence (C4I) network through existing and evolving tactical data networks. The CGS is also capable of receiving and fusing imagery data from Unmanned Aerial Systems (UAS)s directly onto JSTARS data, providing an enhanced collection processing capability. The JSWS is a functionally equivalent, transit cased subset of the CGS. The JSWS can be used in conjunction with a dedicated SCDL, but typically gets its JSTARS data via a Secret Internet Protocol Router Network (SIPRNET) connection or a Satellite Communications (SATCOM) feed.</p> <p><b>Team Portable Collection System - Multi-Platform Capable (TPCS-MPC)</b> is a semi-automated, man/team portable system providing intercept, collection, direction-finding, reporting and collection management to Marine Air Ground Tast Force (MAGTF) commander. It provides special signals intercept, and Direction Finding (DF) capability for each system and is modular, lightweight and team transportable. The next upgrades will be the multi-platform capability and will allow the system to exploit information from more technically advanced target sets and will provide the MAGTF commander with a modular and scalable carry on/carry off suite of equipment. FY11 OCO funds allow for the completion of remaining AAO shortfalls. The TPCS equipment being purchased will be used in direct sport of combat operations in OEF.</p> <p><b>Wide Field of View Persistent Surveillance (WFVPS)</b> (formerly Angel Fire (AF)) is a capability that supports persistent Intelligence, Surveillance and Reconnaissance (ISR), Improvised Explosive Device (IED) mitigation, and actionable intelligence in urban and other operations (e.g. disaster relief, security, etc). It delivers broad area, near real time, geo-registered imagery down to the tactical level of execution. Consisting of airborne and ground components such as the airborne payload consists of an imager sensor (currently Electro-Optical (EO), on-board processors, and an air-to-ground communication link. Ground distribution network consist of the ground receive station, servers, storage and viewer client stations. AF is hosted on manned platforms; currently the King Air A-90p pilots fly the plane while the sensors can be controlled from the ground through autonomous software. The USMC objective WFVPS system will reside on an UAS.</p> <p><b>Tactical Exploitation Group (TEG)</b> funding purchases the hardware and software for 27 TEG Exploitation Workstations (EWS). These workstations will be Window's-based and will leverage off the TEG Remote Workstation hardware. The workstations will be integrated as part of the TEG Main which will provide a new software/hardware baseline and an upgrade of the TEG-EWS from UNIX to Windows. Ultimately it will provide each Intelligence Battalion with a more modular Imagery Intelligence (IMINT) capability and increased deployment options</p> <p><b>First Destination Transportation (FDT)</b> - is utilized to cover program first destination shipping charges in support of programs deliveries.</p>		



<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date:	February 2010
Appropriation / Budget Activity/Serial No:		P-1 Item Nomenclature:	
Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		Intelligence Support Equipment	
<p><b>Topographic Production Capability (TPC)</b> is an integrated, independently deployed, self-contained terrain analysis system designed for data acquisition, manipulation, analysis and output, providing commanders and staff with Geospatial Intelligence (GEOINT) support at the Marine Expeditionary Force (MEF), Major Subordinate Command (MSC), and the Marine Expeditionary Unit (MEU) levels. The TPC configurations consist of Commercial-Off-The-Shelf (COTS), Government-Off-The-Shelf (GOTS) software packages, servers, workstations, large-format printing/plotting devices and large-format scanning devices, all mounted in transit cases. The TPC provides critical, timely, and accurate digital and hardcopy geospatial information to support mission planning and execution. The TPC provides the capability to collect, process, exploit, analyze, produce, disseminate, and use all-source geospatial information as a foundation for the Common Tactical Picture (CTP) for the MAGTF Commander. The TPC is used by the Topographic Platoon of the MEF and provides deployable modules down to the Major Subordinate Command (MSC) and the Marine Expeditionary Unit (MEU). It supports the Commander, Joint Task Force or Marine Component Commander. The TPC provides the foundation for the Common Tactical Picture (CTP) of the battlefield; terrain analysis in support of the Intelligence Preparation of the Battlefield (IPB) process; all source terrain data collection, analysis and integration; and decision-aid development support.</p> <p><b>MAGTF Secondary Imagery Dissemination System (MSIDS)</b> is the only Family of Systems (FoS) that 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 adjacent commands. The MSIDS capability resides with the MAGTF G/S-2 sections, Reconnaissance Battalions, Light Armored Reconnaissance Battalions, Infantry Battalion Scout Sniper Platoons and Marine Special Operations Command. The MSIDS 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 and to higher adjacent echelons through the use 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. A recent increase of the MSIDS Video Exploitation Workstation (VEW) requirement within Infantry Battalions and Wing units, down to the squadron level, has grown from 18 to 140 in the past year. The VEW is utilized 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. MSIDS FoS is currently employed in every location world-wide where the Marine Corps participates in contingency operations, and has recently been employed in Iraq, Kuwait, Afghanistan, Haiti, Philippines and Horn of Africa. FY 2011 OCO funding will allow for the replacement of aging MSIDS equipment in OEF that is unserviceable and allow for the completion of remaining AAO shortfalls.</p>			

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		P-1 Item Nomenclature: Intelligence Support Equipment
<p><b>Intelligence Analysis System Mod (IAS) Family Of Systems (FoS)</b> provides intelligence support to Marines garrison, shipboard, and battlefield missions at all levels of the MAGTF. This support includes the formulation and/or compilation of the commander's Priority Intelligence Requirements (PIR), Essential Elements of Information (EEI), and Other Intelligence Requirements (OIR); contingency planning; management of MAGTF collection assets; all-source intelligence analysis, briefing support, intelligence product fusion, production, reporting dissemination and training. The IAS FoS has proven to be the All-Source Fusion Center that provides interoperable scalable, semi-automated capabilities to receive, process, analyze, display and disseminate all-source intelligence, including imagery, to support timely tactical decision-making across MAGTF. OCO funds will be used to procure IAS FoS Tier III computer equipment (HP 6930p Windows laptops) in support of OCONUS Contingency Operations (OCO). Tier III equipment is supporting all echelons in Afghanistan and Iraq. The Tier III is mission essential to the intelligence effort and supporting the formulation of the commander's Essential Elements of Information (EEI) and other Intelligence Requirements (OIR). The A0874 TAMCN is in full operational use in Afghanistan and Iraq. This will be the final increment purchase for Afghanistan.</p> <p><b>Intelligence Equipment Readiness (IER)</b> provides a responsive capability to alleviate Marine Corps intelligence systems shortfalls created by the rapidly evolving missions, threats and command relationships associated with the Overseas Contingency Operations (OCO) and 21st Century expeditionary military operations. IER provides for rapid technology insertion, as well as quick reaction training and logistics, to meeting the time sensitive intelligence infrastructure requirements of Marine Corps Operating Forces and the theater and service intelligence organizations supporting those forces. IER rapidly mitigates intelligence infrastructure shortfalls through exploitation of COTS, GOTS and Non-Developmental Item technology to the greatest extent practical. IER also centralizes support for Marine Corps intelligence infrastructure items and systems that are not separately identified within the program funding lines. IER provides the capability to address requirements that span across the entire Marine Corps intelligence systems architecture.</p> <p><b>Communication Emitter Sensing and Attacking System (CESAS)</b> is an advanced Electronic Attack (EA) system that can be mounted in a variety of platforms including High Mobility Multi-Purpose Wheeled Vehicles (HMMWV), waterborne platforms, helicopters, and the MV-22 aircraft. The system provides Marine Air-Ground Task Forces (MAGTFs) with the capability to detect, disrupt and deny enemy radio communications during amphibious assaults and subsequent operations ashore. The system is being integrated into existing armored vehicle assets, currently M1165s HMMWVs and into an Mine Resistant Ambush Protected (MRAP) vehicle by FY10. FY 2011 OCO funds support integration of CESAS suites into MRAP vehicles to support MEB-A ground EA mission requirements.</p> <p><b>Radio Reconnaissance Equipment Program (RREP)</b> provides equipment only for special operations capable, foot-mobile signals intelligence (SIGINT) collection teams in the USMC. These Radio Reconnaissance Teams and Marine Corps Forces Special Operations Command (MARSOC) Direct Support Team (DST) are trained and equipped to support the full spectrum of Marine Expeditionary Unit Special Operations Capable (MEU SOC) mission profiles as well as provide real-time imbedded support to any special operations scenario. This provides the supported commander greater flexibility in employing his SIGINT assets when the use of conventional Radio Battalion assets are not feasible. FY 2011 OCO procurement of hardware refresh is planned in direct support of combat operations in OEF.</p>		

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		P-1 Item Nomenclature: Intelligence Support Equipment
<p><b>Counter Intelligence and Human Intelligence Equipment (CIHEP)</b> provides dedicated Marine Air-Ground Task Force (MAGTF) CI/HUMINT support for full spectrum controlled, surreptitious, and tactical CI/HUMINT, Force Protection, and technical collection operations with a suite of integrated, standardized and interoperable equipment. The CIHEP suite of state-of-the-market equipment Commerical Off-The-Shelf (COTS) and Non-Developmental Item (NDI) enhances the CI/HUMINT Company ability to collect, receive, process and disseminate CI/HUMINT information from overt, controlled, sensitive, technical, tactical, CI, HUMINT, and Force Protection operations in the Service, Joint and Combined Forces arenas. CIHEP integrates audio, video, imagery, communications, technical surveillance and automated data processing equipment into lightweight, modular, deployable packages. CIHEP acquisition status is Post Milestone C, a fielded Accelerated Acquisition Program (AAP) System.</p> <p><b>The Joint Tactical Terminal/Common Integrated Broadcast Service – Modules (JTT/CIBS-M) Intelligence Broadcast Receiver (IBR)</b> consists of a family of terminals and CIBS-M hardware and software modules. The Marine Corps IBR systems provide intelligence data to command, control, and intelligence (C2I) elements of the MAGTF. This construct provides a single family of IBRs for use by the armed forces. Currently there are three configurations in use by the Marine Corps; the JTT-T/R (Transmit/Receive); the JTT-R (Receive only), and the Universal Serial Bus Embedded National Tactical Receiver (USB ENTR), which has completed development and is in the operational evaluation phase. The IBR systems provide critical, near-real-time intelligence to the tactical commander. OCO PMC to procure 75 (24%) of the required 285 USB Embedded National Tactical Receivers (ENTR) which provide the only direct access to intelligence data broadcast over the Integrated Broadcast Service (IBS). Access to IBS is essential for 9 Programs of Record currently supporting OIF/OEF.</p> <p><b>Technical Surveillance Countermeasures (TSCM)</b> is a multi-service/agency required "performance level" suite of equipment providing Marine Air-Ground Task Force (MAGTF) Commander with a state-of-the-art, mission critical data protection capability required by national directive for each participant authorized to engage in this activity. Equipment is designed to detect, locate, identify, neutralize and/or exploit hostile audio, Radio Frequency (RF), Laser, Infrared (LI), optical, and telephone surveillance threats in and around areas where classified or sensitive information is discussed, and/or viewed. Equipment is selected based on current threat estimates evaluated by the National Committee for Technical Surveillance (NCTS) Facilities Protection Committee Technical Surveillance Working Group (TSWG). TSCM is in post milestone C and a fielded AAP system. TSCM consists of Commerical Off The Shelf (COTS)/Non-Developmental Items (NDI) equipment selected by the TSWG Preferred Product List (PPL). Equipment is refreshed every two years.</p>		

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		P-1 Item Nomenclature: Intelligence Support Equipment
<p><b>Joint Worldwide Intelligence Communications System (JWICS)</b> is the Top Secret Sensitive Compartmented Information Top Secret/Sensitive Compartmental 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 in both tactical and garrison environments. This intelligence support provides 24-hour TS/SCI intelligence processing, imagery production/manipulation, TS/SCI data dissemination between DoD components, and multimedia communications to include Joint Intelligence Virtual Architecture (JIVA) and Net-Meeting Point-to-Point video teleconferencing, which are required for collaboration with various theater and national intelligence organizations. FY 2011 OCO will procure storage hardware upgrades to the DISN and installation support that will allow for advanced intelligence support to the operating forces during OEF.</p> <p><b>Identity Dominance System (IDS)</b> - IDS will provide a multimodal biometric collection system that collects and compares fingerprints, iris images and facial photos to enroll, identify and track persons of interest and build digital dossiers on individuals that include interrogation reports, biographic information, relationships, etc. for the purposes of force protection and high-value target identification. The system is expected to be a Family of Capabilities with hardware and software that is off-the-shelf, from Government and Commercial sources. The Family of Capabilities will include a server suite capability, a client capability and an untethered/handheld capability. The IDS will interoperate with a variety of other systems and adhere to applicable technical standards, to include the DOD Automated Biometric Identification System (ABIS) and the Electronic Biometric Transmission Standard (EBTS). IDS will incrementally phase out the Biometric Automated Toolset (BAT).</p>		

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		P-1 Item Nomenclature: Intelligence Support Equipment
<p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$82.987</u></b>          Joint Worldwide Intelligence Communications System (JWICS)          Trojan Spirit Lite (TROJAN)          Team Portable Collection System - Multi-Platform Capable (TPCS-MPC)          Technical Control and Analysis Center PIP (TCAC-PIP)          Tactical Remote Sensor System (TRSS)          MAGTF Secondary Imagery Dissemination System (MSIDS)          Intelligence Analysis System (IAS), Mod Kit          Radio Battalion Modernization and Concept Exploration (RadBn Mods)          Communication Emitter Sensing and Attacking System (CESAS)          Intelligence Broadcast Receiver (IBR)          Please see descriptions above for OCO request programs.</p> <p><b><u>FY10 ISR Task Force: \$14.300</u></b>          Intelligence Equipment Readiness (IER)          Joint Worldwide Intelligence Communications System (JWICS)          Distributed Common Ground System-Marine Corps (DCGS-MC)</p> <p><b><u>FY11 ISR Task Force: \$6.000</u></b>          Joint Worldwide Intelligence Communications System (JWICS)</p>		

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: February 2010			
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747					P-1 Item Nomenclature: Intelligence Support Equipment					
Procurement Items	Code	UOM	Prior Years (\$M)	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011		
TSCM	A	D	5.625	0.000	1.382	0.000	0.000	0.000		
Topographic Production Capability (TPC)	A	D	0.0	3.200	0.000	0.000	0.000	0.000		
Wide Field of View Persistent Surveillance (WFVPS)	A	D	0.0	0.000	0.000	4.652	0.000	4.652		
First Destination Transportation (FDT)	A	D	0.0	0.061	0.000	0.000	0.000	0.000		
Totals			5.625	3.261	1.382	4.652	0.000	4.652		
Active			5.625	3.261	1.382	4.652	0.000	4.652		
Reserves			0.000	0.000	0.000	0.000	0.000	0.000		

Exhibit P-5		Cost	Appropriation/ Budget Activity/Serial No:				P-1 Line Item Nomenclature:			Weapon System Type:			Date:		
Analysis			Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747				Intelligence Support Equipment						February 2010		
Weapon System		Cost	Prior Yrs	FY 09		FY 10			FY 11						
Elements		ID CD	TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>															
Tier I UAS (GROUP 1)		A													
- Raven B UAS (8 channel variant)			37472	5293	48	110268									
- Raven B UAS (DDL variant)				6361	50	127213									
Components				2700	VAR	VAR									
Government Furnished Equipment			3444	450	VAR	VAR									
-Contractor Support				544											
TCAC															
Software Licenses				1926	VAR	VAR									
Contractor Support				621	VAR	VAR	515	Var	Var	1101	VAR	VAR			
RAWS Software Licenses							458	Var	Var						
TWS Software Licenses							458	Var	Var						
Laptop Refresh										4250	VAR	VAR			
Software Refresh				1000	VAR	VAR				5000	VAR	VAR			
Server Refresh				460	VAR	VAR				2174	VAR	VAR			
IBR															
System Upgrades							3406	VAR	VAR						
Program Support				3148	VAR	VAR	3400	VAR	VAR	1051	VAR	VAR			
JSTARS															
Program Support				2381	VAR	VAR	6338	VAR	VAR	4843	VAR	VAR			
Subtotal Baseline			40916	24884			14575			18419					
<u>FY11 OCO</u>															
TCAC															
RECORDER REPRODUCER										1082	VAR	VAR			
Software Licenses										256	VAR	VAR			
Contractor Support										1000	VAR	VAR			
RAWS Software Licenses										110	VAR	VAR			
TWS Software Licenses										764	VAR	VAR			
IBR															
USB Embedded National Tactical Receivers(ENTR)										3199	VAR	VAR			
Subtotal FY11 OCO										6411					
TOTAL			40916	24884			14575			24830					
ACTIVE															
RESERVE															
Reserves															
Subtotal Reserves															

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747				P-1 Line Item Nomenclature: Intelligence Support Equipment			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11			TotalCost \$000	Qty Each	UnitCost \$
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<b>Baseline</b>														
<b>TRSS PIP</b>	A													
UNATTENDED GROUND MINIATURE SENSOR (UGMS)														
Encoder Transmitter Unit II		13411												
Detectors		8366	660	VAR	VAR									
Radio Repeater		5032												
Hand Held Programmer Monitor		941	992	VAR	VAR									
Thermal Imagers		13722												
Sensor Mobile Monitoring Systems		25331												
TRSS Test Set		103												
Single Battery Power Units		7221												
Iridium Modems for SDR II		1189												
Laptops and Software		125	1122	136	8250	1000	VAR	VAR						
Imagers Phase 1 & 2		4755	5926	100	59255									
Sensor Upgrade/Spares		1514												
Blue Radio NRE/MCSR/CSR/HHPM		4009				1590	VAR	VAR	2275	VAR	VAR			
- Technical Documentation		2365	625						700	VAR	VAR			
- Software/Instructor Support/MCSC			340											
- Eng/ALA Support			354			1085	VAR	VAR	355	VAR	VAR			
- Project Management		7860	2288			1728	VAR	VAR	1891	VAR	VAR			
<b>Team Portable Collection System</b>	A	9545												
Program Management		6687	5368	VAR	VAR	858	VAR	VAR	2161	VAR	VAR			
Upgrades									14950	23	650000			
Mod Kit		2183							2744	VAR	VAR			
ILS (PIKS)		3550	302											
Training		364												
TPCS Systems		6000	3624	VAR	VAR									
Spares		3547							2937	VAR	VAR			
Long Lead Items		4045												
Hardware Support														
SIGINT Fix			3000	var	var									
<b>TEG</b>														
TEG RWS REFRESH		9598	4814	var	var									
Video Cards			2000	var	var									
<b>Intelligence Equipment Readiness</b>														
Video Exploitation Workstation			1278	VAR	VAR									
CATEIS (software)														
Integrated Logistic Support (FY10 ISR TF)			3183	VAR	VAR	2100	VAR	VAR	1645	VAR	VAR			
Tech Documentation (FY10 ISR TF)		2331	818	VAR	VAR	3507	VAR	VAR	3789	VAR	VAR			
Eng/Program Mgmt Support (FY10 ISR TF)		2000	231	VAR	VAR	5412	VAR	VAR						
<b>Subtotal Baseline</b>		145794	36925			17280			33447					
<b>FY11 OCO</b>														
<b>TRSS PIP</b>	A													
SATCOM Kits/Iridium Modems for SDR II									593	VAR	VAR			
Imagers Phase 1 & 2														
Long Range Cameras									3403	VAR	VAR			
Blue Radio NRE/MCSR/CSR/HHPM									913	VAR	VAR			
- Project Management														
MAINT KIT, TRSS, ELECTRONIC EQUIP									12	VAR	VAR			
ADAPTER TEST (TRSS)									107	VAR	VAR			
<b>TPCS</b>														
Collection Systems Team Portable									24500	VAR	VAR			
Artemis/Nemesis									1500	VAR	VAR			
Support									516					
<b>Subtotal FY11 OCO</b>									31544					
<b>TOTAL</b>		145794	36925			17280			64991					
<b>ACTIVE</b>		145794	36925			17280			64991					
<b>RESERVE</b>														
Notes: FY10 ISR TF Increase to IER Integrated Logistics Support 2.1M Tech Documentation \$2.1M Eng/Prog Mgmt \$2.1M														



Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747				P-1 Line Item Nomenclature: Intelligence Support Equipment			Weapon System Type:		Date: February 2010				
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11						
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$				
<b>Baseline</b>															
<b>Intelligence Analysis System (FOS)</b>															
Eng/Mgmt Support			122	VAR	VAR	1516	VAR	VAR	698	VAR	VAR				
IOS Refresh (IOSV2A)			787	14	56200				1767	30	58900				
IOS Refresh (IOSV3)						1536	48	32000							
Software Refresh/Maint									1298	VAR	VAR				
MEF IAS Refresh									3200	VAR	VAR				
Program Technical Support			150	VAR	VAR	1482	VAR	VAR	578	VAR	VAR				
Laptops									6811	VAR	VAR				
<b>Radio Recon Equipment Program (RREP)</b>															
<b>MCSC Internal Withholds</b>															
SS-3 Upgrades		5165	363	VAR	VAR										
Special Purpose Equipment		3344	1852	VAR	VAR										
Program Support		1816	1345	VAR	VAR										
Next Generation Systems			1427	VAR	VAR	1081	VAR	VAR	1300	VAR	VAR				
			2258						4682	VAR	VAR				
<b>Program (CIHEP)</b>															
- Hardware Upgrades		15767	4254	VAR	VAR	6138	VAR	VAR	9716	VAR	VAR				
Data Processing Module		3000													
Surveillance Upgrades		1247		VAR	VAR		VAR	VAR							
- Software Upgrades		1384	760	VAR	VAR	240	VAR	VAR	240	VAR	VAR				
- Ancilliary Equipment		1483													
- Program Support		4857	77			77	VAR	VAR							
<b>DCGS</b>															
COTS Items															
Integrated Logistic Support			115	VAR	VAR										
Program Management Support						535	VAR	VAR							
DGIL Suites (FY10 ISR TF)						2000	VAR	VAR							
<b>Subtotal Baseline</b>		38063	13510			14605			30290						
<b>FY11 OCO</b>															
<b>Intelligence Analysis System (FOS)</b>															
Eng/Mgmt Support									166	VAR	VAR				
IOS Refresh (IOSV2A)									419	VAR	VAR				
IOS Refresh (IOSV3)															
Software Refresh/Maint									308	VAR	VAR				
MEF IAS Refresh									760	VAR	VAR				
Program Technical Support									137						
COMPANY LEVEL INTEL CELL INTEL OPERS WORKSTATION (CLIC-IOW)									3990	VAR	VAR				
<b>Radio Recon Equipment Program (RREP)</b>															
Hardware Refresh									6984	VAR	VAR				
<b>Subtotal FY11 OCO</b>									12764						
<b>TOTAL</b>		38063	13510			14605			43054						
ACTIVE*		38063	13510			14605			43054						
RESERVE*															
<b>Reserves</b>															
<b>Subtotal Reserves</b>															

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747						P-1 Line Item Nomenclature: Intelligence Support Equipment			Weapon System Type:	Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
<b>MSIDS</b>		17997												
Suites			2990	VAR	VAR	2866	VAR	VAR						
Data Controllers									15	VAR	VAR			
Software		108							50	VAR	VAR			
NVD Adapters		9												
Camera Equipment						1525	VAR	VAR						
Computers														
CLS			554	VAR	VAR	746	VAR	VAR	768	VAR	VAR			
Program Support		1463	1796	VAR	VAR	3355	VAR	VAR	3354	VAR	VAR			
<b>CESAS</b>														
Program Management			1496	VAR	VAR				167	VAR	VAR			
ILS			1200	VAR	VAR									
System Upgrades			6180	VAR	VAR									
<b>TROJAN</b>														
Program Management			8478	VAR	VAR	107	VAR	VAR	107	VAR	VAR			
ILS														
System Upgrades														
<b>IDS</b>														
Program Management			1200	VAR	VAR	3706	VAR	VAR						
Wireless Point to Point Link (WPPL)			29177	VAR	VAR									
System Upgrade			10000	VAR	VAR									
Progr														
<b>MTSS</b>														
System Upgrades			5000	VAR	VAR	16500	VAR	VAR						
Support			1000	VAR	VAR	1500	VAR	VAR						
<b>JWICS</b>														
SCI IT & Hardware		3170	826	VAR	VAR	867	VAR	VAR	1108	VAR	VAR			
Storage Hardware (FY10 ISR TF)						4500	VAR	VAR						
Software (FY10 ISR TF)						520	VAR	VAR						
Integration Support (FY10 ISR TF)						980	VAR	VAR						
<b>Subtotal Baseline</b>		<b>22747</b>	<b>69897</b>			<b>37172</b>			<b>5569</b>					
<u>FY11 OCO</u>														
<b>MSIDS</b>														
Data Controllers									1050	VAR	VAR			
Computers									1389	VAR	VAR			
CAMERA SUITE, DIGITAL, VIDEO									1219	VAR	VAR			
BASE STATION WS/COMM INTERFACE									1234	VAR	VAR			
COMPUTER SYSTEM, DIG									3447	VAR	VAR			
DAY/NIGHT IMAGER, V2 (IMAGER 2)									744	VAR	VAR			
THERMAL COMPONENTS									3295	VAR	VAR			
<b>CESAS</b>														
System Upgrades									2000	VAR	VAR			
<b>TROJAN</b>														
SWAN D v3									11800	VAR	VAR			
<b>JWICS</b>														
Storage Hardware (FY11 ISR TF)									5035	VAR	VAR			
Integration Support (FY11 ISR TF)									965	VAR	VAR			
<b>Subtotal FY11 OCO</b>									<b>32178</b>					
<b>TOTAL</b>		<b>22747</b>	<b>69897</b>			<b>37172</b>			<b>37747</b>					
ACTIVE		22747	69897			37172			37747					
RESERVE														

Exhibit P-5a, Budget Procurement History and Planning								Date:		
								February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747		Weapon System Type:			P-1 Line Item Nomenclature:  Intelligence Support Equipment					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<u>TIER I UAS</u> FY09 RAVEN B UAS	AeroVironment, Simi Valley, CA	FFP	PM-UAS, Redstone, AL	Jan-09	Sep-09	98	118913	Yes	N/A	N/A
<u>TPCS - MPC</u> FY11 TPCS Systems	Various	FFP	SPAWAR, Charleston, SC	Jul-11	Sep-11	23	650000	YES	N/A	N/A

## Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No.  
Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747

## Weapon System

P-1 Item Nomenclature:	INTELLIGENCE SUPPORT EQUIPMENT
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[illegible][illegible][illegible]

REMARKS:

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4757				P-1 Item Nomenclature: RQ-11 Unmanned Air Systems								
Program Elements: 0305232M / 0305234M Marine Corps Communications Equipment			Code: A	Other Related Program Elements:								
	Prior Years	FY 2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Compl	Total Cost
Proc Qty	0.0											
Gross Cost		0.0	41.5	32.5	0.0	32.5	44.8	72.4	69.9	71.7	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	41.5	32.5	0.0	32.5	44.8	72.4	69.9	71.7	Cont	Cont
Initial Spares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont
Total Proc Cost	0.0	0.0	41.5	32.5	0.0	0.0	44.8	72.4	69.9	71.7	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont

**Baseline Appropriation Request:**

TIER I (GROUP 1) UAS - The TIER I (Group1) UAS program procures a capability for unmanned aircraft systems (UAS) to provide the company/detachment level with airborne reconnaissance to aid in detecting, identifying and engaging or avoiding enemy units. The UAS air vehicle autonomously gathers and transmits imagery of the tactical situation in near-real time at a range of up to ten kilometers. The material solution for the GROUP 1 requirement is the Raven B UAS. Raven B is a five pound, hand launched, reusable vehicle with a wing span of 55 inches. The air vehicle flies at an altitude of 300-500 feet above ground level (AGL) at a speed of approximately 35 knots. This system has a maximum duration of 90 minutes. Raven B's interchangeable payloads, autopilot and propulsion system are also commercial-off-the shelf (COTS) subsystems. The Ground Control Station (GCS) uses a rugged hand controller connected to a communication control box. A Raven B system consists of three Raven B air vehicles; two GCS; one Reconnaissance, Surveillance, and Target Acquisition (RSTA) Kit; one Field Repair Kit (FRK). The RSTA kit is used for mission planning, autonomous flight operations and mission product archiving. The FRK contains consumable items used during operations and maintenance. Raven B is a joint US ARMY/USSOCOM Program. Funds will be allocated to replace the previously fielded SURSS, Block 0 which are reaching the limit of operational life and provided initial issue spares. FY09 funding resides in BLI 4747. FY10 and beyond resides in BLI 4757. In FY10, the Program Office expects to procure the balance of SURSS Block I (Raven B) systems to it's current AAO and commence defielding of all DE block 0 systems. In FY11 and beyond, the current funding will sustain GROUP 1 to the authorized AAO.

Tier II UAS - This is a combined Navy (PE 0305204N) and Marine Corps (PE 0305234M) budget submission. The Tier II/UAS will provide persistent, Intelligence, Surveillance, and Reconnaissance (ISR) support for tactical level maneuver decisions and unit level force defense/force protection for Navy ships and Marine Corps land forces. This system will fill the ISR capability shortfalls identified by the Navy Small Tactical Unmanned Aircraft System (STUAS) and Marine Corps Tier II UAS efforts. Consisting of four air vehicles, two ground control stations, multiple payloads, and associated launch, recovery and support equipment this system will support the Navy missions including building the Recognized Maritime Picture, Maritime Security Operations, Maritime Interdiction Operations, and support of Navy units operating from sea/shore in the GWOT and the Marine Corps close range (<50 nautical miles (nm)) Unmanned Aerial Systems (UAS) enabling enhanced decision-making and improved integration with ground schemes of maneuver. This submission is the Marine Corps portion of the program and has been coordinated with the Navy budget submission PE 0305204N. This program was moved to PE 0305234M in FY10.

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4757						P-1 Line Item Nomenclature: RQ-11 UAV			Weapon System Type: Unmanned Air Systems		Date: February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>Baseline</b>														
<b>Tier I (GROUP 1) UAS</b>														
Tier I System (3 Air Vehicles, 2 Ground Control Stations, 1 RSTA Kit)	A					17689	135	131029						
Components						6510	VAR	VAR	5989	VAR	VAR			
Initial Spares Package						3538	VAR	VAR						
Government Furnished Equipment						755	VAR	VAR	200	VAR	VAR			
Tier I System w/ Distributed Data Links(DDL) (3 Air Vehicles, 2 Ground Control Stations, 1 RSTA Kit)						3931	30	131029						
Initial Spare Package						1921	VAR	VAR						
Tier I Systems DDL Retro Fit Upgrade ECP						7000	VAR	VAR						
Government Furnished Equipment						148	VAR	VAR						
<b>Tier II (Group 3 UAS)</b>														
System Purchase (4 Air Vehicles per Sys)	A								20576	4	5144000			
Test and Evaluation Support									1800	VAR	VAR			
General Purpose Test Equipment									500	VAR	VAR			
Integrated Lostistics Support									1065	VAR	VAR			
Contractor Consulting Services									2000	VAR	VAR			
Destination Transportation									240	VAR	VAR			
Program Support									120	VAR	VAR			
Subtotal Baseline						41492			32490					
TOTAL						41492			32490					
ACTIVE						41492			32490					
Reserve						0			0					

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4757		Weapon System Type: Unmanned Air Systems			P-1 Line Item Nomenclature: RQ-11 Unmanned Air Systems					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b><u>FY10</u></b>										
Tier I	AeroVironment Inc, Simi Valley, CA	FFP	PM-UAS, Redstone, AI	Jan-10	May-10	135	131029	Y	N/A	N/A
Tier I with DDL	AeroVironment Inc, Simi Valley, CA	FFP	PM-UAS, Redstone, AI	Jan-10	May-10	30	131029	Y	N/A	N/A
<b><u>FY11</u></b>										
Tier II	TBD	TBD	TBD	TBD	TBD	4	5144000	TBD	TBD	TBD
REMARKS: Tier I UAS consists of the Raven B UAV and USMC GFE. The Raven B and all GFE is being procured using existing Army contracts. The USMC quantities are in addition to what the Army is procuring.										

EXHIBIT P-21, PRODUCTION SCHEDULE																		Date:														
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 04 Communications & Electronics Equipment / 4757																		February 2010														
Weapon System Unmanned Air Systems										P-1 Item Nomenclature: RQ-11 Unmanned Air Systems																						
PRODUCTION RATE										PROCUREMENT LEADTIMES																						
ITEM		Manufacturer's NAME / LOCATION								MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure														
Tier I UAS (FY10)		AeroVironment, Simi Valley, CA								50	150	300		3	4	1	7	Each														
										Fiscal Year 08										Fiscal Year 09										BALANCE		
										Calendar Year 08										Calendar Year 09												
ITEM		FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	
										Fiscal Year 10										Fiscal Year 11										BALANCE		
										Calendar Year 10										Calendar Year 11												
ITEM		FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	
Tier I UAS		FY10	MC	165	0	165				A					25	25	25	25	25	15											0	
Remarks																																



<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4767							P-1 Item Nomenclature: Distributed Common Ground System-Marine Corps (DCGS-MC)					
Program Elements: 0305208M USMC Intelligence/Electronic Warfare Systems (MIP)				Code: A		Other Related Program Elements:						
	Prior Years	FY2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog.
Proc Qty												
Gross Cost	0.0	0.0	0.0	4.6	21.8	26.4	4.5	6.1	2.2	2.1	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	4.6	21.8	26.4	4.5	6.1	2.2	2.1	Cont.	Cont.
Initial Spares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	0.0	0.0	0.0	4.6	21.8	26.4	4.5	6.1	2.2	2.1	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves						0.0						

**Baseline Appropriation Request:**

Distributed Common Ground/Surface System (DCGS), in compliance with the Department of Defense DCGS Family of Systems concept, is a Service-level effort to migrate select USMC Intelligence, Surveillance and Reconnaissance (ISR) processing and exploitation capabilities into a single, integrated net-centric baseline consisting of functional capability sets that support Marine intelligence analysts across the Marine Air-Ground Task Force (MAGTF) by making organic ISR data more visible, accessible, and understandable. The Distributed Common Ground System-Marine Corps (DCGS-MC) concept originated with the DCGS Mission Area Initial Capabilities Document (MA ICD) Joint Requirements Oversight Council Memorandum (JROCM 001-03) dated 6 Jan 03 which established the overarching requirements for a collection of net-centric capable systems that will contribute to joint and combined War fighter needs for ISR support. Each service is directed to pursue a coordinated developmental path based on a set of common enterprise services consistent with the DoD's net-centric vision. Furthermore, each service's DCGS solution is to evolve independently through the implementation of common enterprise architecture and standards. The DCGS Integration Backbone (DIB) is intended to be the basic building block for interoperability between the Service DCGS programs and is comprised of integrated Commercial Off The Shelf (COTS) and Government Off The Shelf (GOTS) software package originally developed under the Air Force DCGS 10.2 contract with Raytheon. The Air Force has established a separate DIB Management Office (DMO) to direct day-to-day developmental efforts in coordination with the Army, Navy, Marine Corps, and United States Special Operations Command (USSOCOM) DCGS program offices with oversight provided by OUSD (I). The DCGS-MC program is currently evaluating the appropriate implementation of DIB standards and anticipates leveraging heavily from the developmental efforts of its sister Service DCGS programs as its own developmental efforts are fully underway.

**FY11 OCO Request:**

Replace critical servers and laptops that are currently being used in OEF and other OCO activities. These servers and laptops are nearing end of life in FY10 and will become obsolete. The servers and laptops provide the means to scale capability up or down, dependent on the type of mission, size of the force, and geospatial requirements, in OEF and OCO, to support the development of Geospatial mapping products. The servers and laptops ensure connectivity is maintained with internal/external agencies to push-pull Geospatial Intelligence in order to provide deployed unit commander with near real time mapping products. The servers and laptops are high end technology that provides the capability to host a myriad of software that enables unit commanders to produce Geospatial mapping products locally.

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: February 2010			
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4767					P-1 Item Nomenclature: Distributed Common Ground System-Marine Corps (DCGS-MC)					
Procurement Items	Code	UOM	Prior Years (\$M)	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011		
DCGS	A	D	0.000	0.000	0.000	4.582	0.000	4.582		
Totals			0.000	0.000	0.000	4.582	0.000	4.582		
Active			0.000	0.000	0.000	4.582	0.000	4.582		
Reserves			0.000	0.000	0.000	0.000	0.000	0.000		

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4747				P-1 Line Item Nomenclature: Intelligence Support Equipment			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>FY11 OCO</u>														
DCGS														
WORKSTATION, GEOSPATIAL INFO LIBR, DEPLOY (DGIL)									3145	VAR	VAR			
LIBRARY, GEOSPATIAL INFO, TACTICAL (TGIL)									645	VAR	VAR			
SERVER, GEOSPATIAL INFO LIBR, DEPLOY (DGIL)									1500	VAR	VAR			
MAPPING SYSTEM, TERRAIN ANALYSIS, DIGITAL (DTAMS)									3780	VAR	VAR			
TOPOGRAPHIC PRODUCTION CAPABILITY (TPC) SET									74	VAR	VAR			
SUPPORT									2845	VAR	VAR			
TPC TECH REFRESH									9800	VAR	VAR			
Subtotal FY11 OCO									21789					
TOTAL									21789					
ACTIVE*									21789					
RESERVE*														
Reserves														
Subtotal Reserves														

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4930								P-1 Item Nomenclature: NIGHT VISION EQUIPMENT (493000)				
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	1355.6	53.1	10.3	0.0	0.0	0.0	8.9	10.8	13.0	13.4		1465.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1355.6	53.1	10.3	0.0	0.0	0.0	8.9	10.8	13.0	13.4		1465.1
Initial Spares	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.1
Total Proc Cost	1356.7	53.1	10.3	0.0	0.0	0.0	8.9	10.8	13.0	13.4		1466.2
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

**Base Appropriation Request:**

**FAMILY OF INDIVIDUAL OPTICS (FOIO)** - Provides handheld, helmet mounted and weapons optics systems including various thermal, image intensifier, magnified optical, laser range-finding, illuminating, and pointer functionalities. Replaces multiple single-purpose night vision equipment (NVE) fielded to the Marine Corps.

**FAMILY OF OPTICAL SYSTEMS (FOS)** - Transitions Family of Individual Optics to Family of Optical Systems to encompass all Optical systems into this program. Provides handheld, helmet mounted and weapons optics systems including various thermal, image intensifier, magnified optical, laser range-finding, illuminating, and pointer functionalities. Replaces multiple single-purpose night vision equipment (NVE) fielded to the Marine Corps.

**NIGHT VISION EQUIPMENT (NVE)** - Multiple optical and Electro-Optical (EO) systems to allow the dismounted Marine the ability to acquire, locate, identify, and engage targets during daylight/limited visibility conditions, perform navigation and manual tasks during limited visibility conditions utilizing ambient or covert illumination. Current systems typically comprise of a single operating modality, such as direct viewing of visible wavelengths, low light image intensification (I2), or thermal imaging. Complementary systems, such as near-infrared laser pointers viewable only through I2 devices, provide additional enhancement of capabilities. A more recent development consists of "clip-on" EO systems allowing use of alternative operating modes without removing or disrupting the alignment of the base optic, and minimizing impact on employment techniques.

**NIGHT VISION MODIFICATION (NVM)** - Procures and install modification kits and provide essential services to maintain and improve quality of service, performance, safety and life-cycle support of in excess of 620,000 legacy Principle End Items (PEI). The NVM provides a means of maintaining and upgrading the Marine Corps NVE through technological advances and to develop Engineering Change Proposals (ECPs) for legacy PEIs.

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4930							P-1 Item Nomenclature: NIGHT VISION EQUIPMENT (493000)					
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	1355.6	53.1	10.3	0.0	0.0	0.0	8.9	10.8	13.0	13.4		1465.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1355.6	53.1	10.3	0.0	0.0	0.0	8.9	10.8	13.0	13.4		1465.1
Initial Spares	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1.1
Total Proc Cost	1356.7	53.1	10.3	0.0	0.0	0.0	8.9	10.8	13.0	13.4		1466.2
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

**PRINCIPLE END ITEM (PEI) REPROCUREMENT** - Procures systems lost or damaged beyond economical repair due to combat loss, increased training, and normal u  
The focus of PEI Reprocurement is to support those items that have no active procurement program to quickly replenish inventory due to combat losses and high rate of usage.

**SNIPER SYSTEM CAPABILITY SETS (SSCS) (OPTICS)** - Procures Sniper Day/Night Target Acquisition and Surveillance (SDNTAS) devices for the Marine Corps. The SDNTAS capabilities provide the scout sniper the ability to detect, recognize, identify and accurately engage targets day, night and in obscure battlefield conditions to maximum effective ranges of the sniper's weapon in all environments where the sniper may be employed. The SSCS funding will provided funding for the the following systems: The Scout Sniper Day Scope (SSDS) is a variable power scope that provides scout sniper with the capability to clearly, easily and quickly acquire and engage in close-in targets, and targets out to the maximum effective range of the host weapon. The Scout Sniper Observation Telescope (SSOT) is a variable powered observation telescope with a reticule similar to the SSDS allowing the sniper scout shooter-observer team to observe and engage targets near and far. The Scout Sniper Mid Range Night Sight (SSMRNS) is an in-line, image intensification device that clips to the sniper rifles in front of the SSDS and provides capability of night vision to the scout sniper teams. The Sniper Observer Night Observation Device (SONOD) is a lightweight, night vision device for detecting, recognizing, observing, identifying, and ranging targets during reduced light. The SONOD will be used in conjunction with the SSOT. The Scout Sniper Urban Night Sight (SSUNS) is a lightweight, weapon-mounted and batter/-operated imaging device for engagement of targets at night and low light conditions. The SSUNS will be used in conjunction with the SSDS. This program moves to BLI 222000 Weapons and Combat Vehicles Under \$5M in FY10.

**RIFLE COMBAT OPTICS** - Handheld binocular used for target detection, recognition and identification.

[illegible]

Exhibit P-5 Cost analysis		Appropriation/ Budget Activity/Source Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4930		P-1 Line Item Nomenclature:  NIGHT VISION EQUIPMENT (493000)			Weapon System Type:			Date:  February 2010		
Weapon System		ID CD	Prior Yrs	FY 09			FY 10			FY 11		
Cost Elements			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>												
Family of Individual Optics			23135	18376	VAR	VAR	2295	VAR	VAR			
Night Vision Equipment			285768									
Night Vision Modifications			34634	8950	VAR	VAR	8033	VAR	VAR			
Sniper System Capability Sets			33835	24656	VAR	VAR						
Subtotal Baseline			377372	51982			10328					
TOTAL			377372	51982			10328			0		
ACTIVE			377372	51982			10328			0		
RESERVE			0	0			0			0		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2010

Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment /4630							P-1 Item Nomenclature: COMMON COMPUTER RESOURCES					
Program Elements: 0206313M Marine Corps Communication Equipment							Code: A	Other Related Program Elements:				
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY2015	TO COMP	TOTAL
Proc Qty												
Gross Cost	769.6	88.4	138.0	258.9	29.4	288.4	212.5	282.9	217.6	187.3	CONT	TBD
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	769.6	88.4	138.0	258.9	29.4	288.4	212.5	282.9	217.6	187.3	CONT	TBD
Initial Spares	0.0	0.0	0.0	1.2	0.0	1.2	7.5	7.6	0.6	0.2	CONT	TBD
Total Proc Cost	769.6	88.4	138.0	260.2	29.4	289.6	220.0	290.5	218.2	187.5	CONT	TBD
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**

MARINE CORPS COMMON HARDWARE SUITE (MCHS) provides Commercial-Off-The-Shelf (COTS) workstations (desktop/laptop), servers and other Information Technology (IT) hardware to support the Operating Forces and other non-Navy Marine Corps Intranet (NMCI) Marine Corps customers. MCHS provides support for two principal groups: 1) approximately 50 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 NMCI such as Marine Corps Forces, Europe/Marine Corps Forces, Korea and stand-alone Marine Corps units and schoolhouses.

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 will realign the existing USMC environment of applications, databases, networks, and facilities into an integrated architecture and programs to deliver new information technology capabilities based on a common infrastructure and shared services. 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. Initially it will encompass the Operational, Technical and Systems architectures of the garrison environment. Ultimately, it will extend to transform Command and Control (C2) both in garrison and in the deployed environment.

Combined with policy, procedure, and standards provided by HQMC Command, Control, Communications and Computers; MCEITS will allow for achievement of architectural standardization, consolidated management, seamless interoperability, and access to the data residing in our currently fielded applications (business and tactical). MCEITS enables access to enterprise information and provides the ability to collaborate and share information across the business and warfighter domains.

Marines.mil is a sub-project under MCEITS that represents the Marine Corps brand as the global public web communications strategy. This effort is the enterprise solution for the centralized management of more than 400 public web sites; delivering news, images, press releases, audio, video, administrative and career related information, products and support services, and Community Relations activities. Marines.mil supports the Commandant's strategic communications initiative providing a means for communicating and engaging with active duty, reserve and retired Marines, as well as their families, civilian Marines and the public. Based on a Commander, Marines Corps Systems Command memorandum dated 19 February 2009, MCEITS will manage the Marines.mil system and be established as the hosting site to include the sustainment of Interim Portal Services.

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. FY11 funding is needed to provide a Disaster Recovery/Continuity of Operations capability. In addition, funding is required to refresh equipment reaching the end of vendor warranty support (tech refresh). 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.



<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment /4630		P-1 Item Nomenclature: COMMON COMPUTER RESOURCES
Program Elements: 0206313M Marine Corps Communication Equipment	Code: A	Other Related Program Elements:
<p>MARINE CORPS SOFTWARE ENTERPRISE LICENSE MANAGEMENT SYSTEM (MCSELMS) is a concept of enterprise licensing, embodied by MCSELMS, is based on commercial "best practices" and focuses on reducing total ownership costs. MCSELMS is the USMC implementation of the Department of Defense (DOD) Enterprise Software Initiative (ESI) responsible for managing enterprise licensing contract vehicles for Oracle, Microsoft, Cognos, Red Hat, VMware, Siemens, Adobe, Mercury, Jabber, Circadence, BelArc, and Infonics to include funding for out year maintenance support of the Marine Corps software investment portfolio. MCELMS supports tactical and non-tactical enterprise contracts worldwide in accordance with DOD ESI guidelines by providing firm fixed price enterprise contract vehicles offering competitive pricing and volume discounts.</p> <p>MARINE CORPS NETWORK OPERATIONS SECURITY CENTER (MCNOSC) operates and defends the Marine Corps Enterprise Network (MCEN) and provides secure network communications for Marine forces worldwide. MCNOSC is the Marine Corps Service Component to the Joint Task Force - Global Network Operations and provides network C2 and operational support to Marine organizations, NMCI, and to deployed and tactical forces. MCNOSC also defends all deployed Marine tactical and garrison networks and supports Marine Corps mainframe applications that are critical to warfighting and enterprise operations. MCNOSC further provides technical support for the DOD-mandated solution for record message traffic and supports the solution for encrypting network communications and authoritatively identifying people and computer resources.</p> <p>SECURE OPERATIONAL NETWORK INFRASTRUCTURE CAPABILITY (SONIC) provides funding to procure critical infrastructure hardware and software for the secure data network initiatives (Secure Internet Protocol Routing Network (SIPRNET) and related classified networks) needed to sustain and improve critical C2 network operations. This funding enables central management of SIPRNET to ensure enterprise architecture goals and standards are established and maintained and to take advantage of quantity-related discounts.</p> <p>NEXT GENERATION ENTERPRISE NETWORK (NGEN) is an enterprise network that will provide secure, net-centric data and services to both the Navy and Marine Corps personnel. NGEN forms the foundation for the Department of the Navy's future Naval Network Environment that will be interoperable with other DOD provided Net-Centric Enterprise Services. NGEN will provide funding to transition from the 2010 NMCI environment/capability with no break in service through a continuity of services contract bridge with the NMCI incumbent and other NGEN early transition activities. Beginning in FY11 funding will support the purchase of NMCI contractor owned Information Technology equipment to include all Infrastructure and licenses to use Intellectual Property during the transition phase of the program.</p> <p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$29.4</u></b></p> <p>Funding is required to purchase software and hardware for Tactical Collaborative Work Suite (TCWS) deployments in theatre and to have Net centric capabilities with his battle force. Additional requirements received by the operating forces for chat and collaboration using of Adobe Connect functionality on all suites, Jabber licensing and support, chat/collection, and data replication for displaced operations in support of OEF-A. Target audience is 1st and 2nd Marine Expeditionary Brigades (MEBs). If unfunded, the impact will result in a degradation of the 1st and 2nd MEBs commanders' ability to effectively employ TCWS and provide collaboration, collection and data replication for his forces in theater.</p> <p>Funds are also intended to replace assets used by deployable forces. Numbers shown are based on a nominal 10% refresh rate on revised T/Es driven by MCCDC AAO reconciliation, soon to be loaded in TFSMS. Any quantities in excess of 10% of displayed AAOs account for various MARSOC and other MARFOR deploying units.</p> <p>Funds will also provide an in-depth, Computer Network Defense (CND) analysis capability by providing tools that enable critical Battle Damage Assessment of enemy actions against deployed Marine Corps networks in support of OCO. These new forensic tools and equipment allow analysis of network traffic and identification of malicious and unauthorized activity that run well beyond a current network attack. This includes a look at enemy signatures and activities that have occurred from 90 days to two years prior to the date of an attack allowing Marine Corps units to better determine the true nature of enemy actions in the network.</p>		

[illegible]

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment /4630		P-1 Line Item Nomenclature: COMMON COMPUTER RESOURCES		Weapon System Type:		Date: February 2010				
Weapon System Cost Elements		ID CD	Prior Yrs	FY09		FY10			FY11			
			Total Cost \$000	Total Cost \$000	Qty Each	UnitCost \$	Total Cost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>												
<b>MARINE CORPS COMMON HARDWARE SUITE (MCHS)</b>												
Tactical and Non-Tactical MCHS Workstations/Servers		A	1271713	60807	VAR	VAR	33065	VAR	VAR	5951	VAR	VAR
<b>MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS)</b>												
Hardware/Software for Enterprise IT platforms		A	27363	4156	VAR	VAR	3473	VAR	VAR	9143	VAR	VAR
Tactical Collaboration Work Suite (TCWS) Upgrades				16700	VAR	VAR	7900					
<b>MARINE CORPS ENTERPRISE NETWORK OPERATIONS SECURITY CENTER (MCNOSC)</b>												
MCNOSC NETCOP INFRASTRUCTURE (Network Ops,ALTNOSC, and Network Defense)		A	25509	6033	VAR	VAR	9082	VAR	VAR	2342	VAR	VAR
<b>SECURE OPERATIONAL NETWORK INFRASTRUCTURE CAPABILITY (SONIC)</b>		A					18193	VAR	VAR	5913	VAR	VAR
<b>NEXT GENERATION ENTERPRISE NETWORK (NGEN) Tech Refresh (Hardware/Software)</b>		A					66299	VAR	VAR	235490	VAR	VAR
<b>Subtotal Baseline</b>			<b>1324585</b>	<b>87696</b>			<b>138012</b>			<b>258839</b>		
<u>FY11 OCO</u>												
MARINE CORPS COMMON HARDWARE SUITE (MCHS)		A								17850	VAR	VAR
Tactical and Non-Tactical MCHS Workstations/Servers		A										
Tactical Collaboration Work Suite (TCWS) Upgrades										7992	VAR	VAR
MARINE CORPS ENTERPRISE NETWORK OPERATIONS SECURITY CENTER (MCNOSC)		A								3570	VAR	VAR
<b>Subtotal FY11 OCO</b>										<b>29412</b>		
<b>TOTAL</b>			<b>1324585</b>	<b>87696</b>			<b>138012</b>			<b>288251</b>		
ACTIVE		D	1324585	87696			138012			288251		
RESERVE		D	0	0			0			0		

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, 04 Marine Corps (1109) / 04 Communications and Electronics Equipment / 4631							P-1 Item Nomenclature: COMMAND POST SYSTEMS					
Program Elements: 0206313M Marine Corps Communication Equipment				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty												
Gross Cost	303.3	144.8	72.7	33.0	36.3	69.3	21.4	79.6	80.1	45.0	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	303.3	144.8	72.7	33.0	36.3	69.3	21.4	79.6	80.1	45.0	Cont.	Cont.
Initial Spares	1.5	0.6	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.
Total Proc Cost	304.8	145.4	90.2	33.0	36.3	69.3	21.4	79.6	80.1	45.0	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.

**Baseline Appropriation Request:**

Global Command and Control System (GCCS) - Consists of Command and Control (C2) subsystems which provide Combatant Commanders, the Joint Staff and other Tactical Commanders a near real time picture of the battle space necessary to conduct joint and multinational operations of U.S. Military Forces. The FY10 initiative will replace aging GCCS capability with both hardware and software. This will provide for increased capabilities needed to run new software and software upgrades for continued interoperability with Joint forces. FY09 funding includes \$0.500 to procure 130 TCO and 38 GCCS Clients for the Reserve Component.

Tactical Combat Operations System (TCO) - TCO is the principle tool within the Marine Air-Ground Task Force (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 Intel Operations Workstations/Servers. Increases in PMC funding are to allow for system refresh and replacements to match the program's acquisition objective. The FY10 initiative will replace aging TCO capability with both hardware and software. This will provide for increased capabilities needed to run new software and software upgrades for continued interoperability with Joint forces.

Advanced Field Artillery Tactical Data Systems (AFATDS) - Consists of fire support C2 software fielded on Marine Corps common hardware. AFATDS provides the MAGTF with the ability to rapidly integrate all supporting arms assets into maneuver plans via a digital link utilizing currently fielded communications equipment. AFATDS automates the fire planning, tactical fire direction, and fire support coordination required to support maneuver from the sea and subsequent operations ashore. The Backup Computer System (BUCS) Block I is a small, portable, Ruggedized Personal Data Assistant (R-PDA) that is capable of performing and displaying artillery survey computations and artillery technical firing solutions, safety computations and serve as a backup for the technical fire direction functions of AFATDS. The Mobile Tactical Shelter (MTS) serves as environmental protection for units operating AFATDS in tactical environments. Changes in funding through FYDP is based on cyclical hardware refresh cycles of all three subcomponents of the AFATDS suite of equipment. In years where cycles are gapped there is a low level of funding. During years where cycles converge there is a high level of PMC support. The AFATDS Program Office will be conducting a complete refresh of AFATDS hardware during the FY09-10 timeframe. Successfully fielding these systems will require new equipment training and robust logistical support for shipping and procurement.

Target Location Designation & Hand-Off System (TLDHS) - Includes the Military Ruggedized Tablet (MRT) and provides the Forward Observer (FO), Forward Air Controller (FAC), Joint Tactical Air Controller (JTAC), and Naval Gunfire Spotter (NGFS) with the ability to observe their area of interest, locate ground targets quickly and accurately, and digitally request and coordinate target engagements by Field Artillery (FA), Close Air Support (CAS), and Naval Surface Fire Support (NSFS). TLDHS will also provide the capability to designate targets for laser-guided munitions and laser spot trackers. The FY10 initiative be utilized for HW refresh and new equipment training for newly fielded systems.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: <div style="text-align: right; padding-right: 10px;">February 2010</div>
Appropriation / Budget Activity/Serial No: Procurement, 04 Marine Corps (1109) / 04 Communications and Electronics Equipment / 4631		P-1 Item Nomenclature: <div style="text-align: center; padding-top: 10px;">COMMAND POST SYSTEMS</div>
Program Elements: 0206313M Marine Corps Communication Equipment	Code: A	Other Related Program Elements:
<p>Marine Corps Information Operation Center (MCIOC) - The MCIOC supports the MAGTF C2 program providing tactically focused, deployable, Information Operation (IO) support teams who assist in formulating requirements and "reach-across" capability to support joint operations</p> <p>Blue Force Situational Awareness (BFSA) -The Marine Corps' Situational Awareness family of systems comprised of the Mounted and Dismounted variants of a terrestrial Enhance Position Location Reporting System/Single Channel Ground Airborne Radio Systems (EPLRS/SINGARS) and the mounted celestial (SATCOM) system.</p> <p>BFSA/Data Automated Communications Terminal (DACT) - The Data Automated Communications Terminal (DACT) is current Marine Corps' Blue Force Tracking Program of Record. It provides tactical ground tracks below the Marine battalion, and is a primary provider of Position Location Information (PLI) into the Combat Operations Center (COC) and to Joint forces viewing the Common Operational Picture (COP). DACT is one tool in the Joint Combat ID toolbox that the Marine Commander uses to reduce the potential for fratricide. The Mounted Refresh Computer (MRC) (IOC for MRC is planned for May 2010) is the BFT Family of Systems (FoS) based replacement (IAW with JRCOM directed convergence) for the Mounted DACT and consists of militarized central processing unit with Command and Control Compact Edition (C2CE) software (SW) integrated with various tactical vehicle platforms and communications systems through the use of a vehicle Installation Kit (I-Kit). MRC will be mounted in vehicles within the battalion.</p> <p>BFSA/The Dismounted DACT (D-DACT) - is a smaller, lighter handheld device having greater battery life, consisting of the Rugged Personal Digital Assistant (R-PDA) running C2CE SW. The Dismounted DACT is intended for the dismounted user at the platoon level and below. Capabilities will include enhanced communication paths; near future combined BFSA COP with BFT FoS products via new BFT SW (Joint Capabilities Release (JCR) SW), improved Graphic User Interface (GUI) software, and Selective Availability Anti-Spoofing Module (SAASM) GPS integration.</p> <p>BFSA/Blue Force Tracker (BFT) - The BFT System is a commercial satellite-based Tracking and Communication System. The USMC was directed to converge to the BFT FoS by JROCM and MROC direction based on recent OIF/OEF lessons learned. The BFT FoS is composed of the BFT, MRC, TOC-kit and BP products. BFT provides the near real time capability to identify vehicle/squad/rotary aircraft position, track progress, and communicate with other operators of these tactical "platforms" in OIF, OEF, other OCONUS operations and CONUS training for wartime deployment.</p> <p>Combat Operations Center (COC) - AN/TSQ-239 (V)2/3/4 is a deployable, self-contained, modular, scalable and centralized facility 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. FY09 funds required for hardware refresh for "G" model 2010 upgrades. FY10 funds required for hardware upgrades for MAGTF COC migration and Integrated Logistic Support. This funding is needed to re-equip the OIF systems returning from theatre and upgrading all "E" Model COCs to current "F" Model COCs.</p> <p><b><u>FY11 Overseas Contingency Operations Request (OCO):</u></b></p> <p>Tactical Combat Operations (TCO) TCO is comprised two hardware platforms, the Intelligence Operations Server (IOS) (V)1 and the Intelligence Operations Workstation (IOW) (V)1. IOS (V)1 is the TCO Server hardware platform employing GCCS-J Software. TCO is the principal tool within the MAGTF for situational awareness through the Common Tactical Picture (CTP) and Common Operation Picture (COP). This provides Commanders at all echelons with rapid receipt and data storage of maps and friendly/enemy location. TCO also transmits overlays and plans of intended movement which are displayed on the COP. Request for funds in FY11 will allow an advanced purchase of high level IOS platforms which are required for the successful migration of TCO to the JC2 environment as mandated by DOD Joint Forces. The upgraded servers will continue to perform current functionality, while allowing for additional JC2 capabilities to be added as the program advances. This ensures platform continuity across the FMF, provides the necessary technological upgrades needed to run new software and complies with the DoD mandate of remaining interoperable with other services and the joint community.</p> <p>Target Location Designation &amp; Hand-Off System (TLDHS) - Procuring an additional 50 TLDHS hand-off systems to be fielded to Expeditionary Warfare Training Groups Atlantic (25 systems) and Pacific (25 systems). This is specialized equipment that is required to support combat operations in OEF and is required to support deployment-specific training. The target location and designation hand off system is the only equipment used by the Marine Corps that gives Forward Air Controllers (FAC) and Joint Terminal Attack Controllers (JTAC) the ability to digitally communicate with Fixed Wing, Close Air Support Aircraft. With the increased use of NATO aircraft in OEF, this system helps to bridge the voice communication gap during Close Air Support missions. The intent is to increase both Expeditionary Warfare Training Groups' Tables of Equipment by 25 additional Military Ruggedized Tablets so that students receive more hands-on training with technologically complex systems prior to deployments into theater. After Action reports from both OEF and OIF highlight the immediate need to improve not only our school-house training, but also our pre-deployment training on the system.</p> <p>BFSA/Blue Force Tracker (BFT) - The BFT System is a commercial satellite-based Tracking and Communication System. The USMC was directed to converge to the BFT FoS by JROCM and MROC direction based on recent OIF/OEF lessons learned. The BFT FoS is composed of the BFT, MRC, TOC-kit and BP products. BFT provides the near real time capability to identify vehicle/squad/rotary aircraft position, track progress, and communicate with other operators of these tactical "platforms" in OIF, OEF, other OCONUS operations and CONUS training for wartime deployment.</p>		

[illegible]

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No Procurement, 04 Marine Corps (1109) / 04 Communications and Electronics Equipment / 4631				P-1 Line Item Nomenclature: COMMAND POST SYSTEMS			Weapon System Type:		Date: February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY09			FY10			FY11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
GCCS														
4.1 System Architecture Refresh		16663	2550	850	3000	1775	546	3250						
4.1 ARCH Set-up, Training & Site Support		13531	1732			2871			2999					
Refresh						2250	90	25000	4000	160	25000			
Various Equipment		296	390	VAR	VAR	460	VAR	VAR	588	VAR	VAR			
<u>TCO</u>														
4.1 System Architecture Refresh		49												
4.1 ARCH Set-up, Training & Site Support		6443	843			772			3712					
Refresh									750	30	25000			
Various Equipment									1419	VAR	VAR			
<u>AFATDS</u>														
Program Management		3784	1131			965			988					
Mobile Tactical Shelter Integration		8496	6088			6426			3678					
Hardware Refresh (BUCS)														
Hardware Refresh (AFATDS)		10376				6486	215	30168	7391	245	30168			
OIF Reset/II MEB Equip Density List						2460	36	68350						
<u>TLDHS</u>														
STRIKELINK Systems		25383	2806	102	27505									
STRIKELINK Systems Refresh						7701	280	27505	3438	125	27505			
OIF Reset/II MEB Equip Density List						2107	43	49000						
Support		2225	1347			389			485					

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No Procurement, 04 Marine Corps (1109) / 04 Communications and Electronics Equipment / 4631					P-1 Line Item Nomenclature: COMMAND POST SYSTEMS		Weapon System Type:		Date: February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY09			FY10			FY11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
*BFSA														
Program Management		7900	1476			1646								
NET/Training/Logistics		32081	4028			6000			1683					
D-DACT II MEB Equip Density List						120	12	10000						
BFT HW-(JV-5) Refresh		30953	9758	618	15790				1547	91	17000			
BFT II MEB Equip Density List						18354	1158	15850						
FBCB2-BFT Mounted Kits		16075	6368	VAR	VAR	11589	VAR	VAR						
BFT-II SATCOM Antennas			48000	9600	5000									
KVG-72 (Type-1, Encryptors)			55200	9600	5750									
Subtotal Baseline		174255	141717			72371			32678					
FY11 OCO														
TCO														
Advance IOS Procurement									24381	135	181000			
TLDHS														
STRIKELINK Systems									1375	50	27500			
BFSA														
FBCB2-BFT Mounted Kits									10500					
Subtotal FY11 OCO									36256					
TOTAL		174255	141717			72371			68934					
Active		174255	141717			72371			68934					
Reserves		0	0			0			0					



Exhibit P-5a, Budget Procurement History and Planning								Date:		
								February 2010		
Appropriation / Budget Activity/Serial No: Procurement, 04 Marine Corps (1109) / 04 Communications and Electronics Equipment / 4631		Weapon System Type:			P-1 Line Item Nomenclature: COMMAND POST SYSTEMS					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>GCCS</b>										
FY09 4.1 System Architecture Refresh	SSC Charleston, SC	FFP	MCSC, Quantico, VA	Jan-09	Aug-09	850	3000	Yes	N/A	N/A
FY10 4.1 System Architecture Refresh	SSC Charleston, SC	FFP	MCSC, Quantico, VA	Jan-10	Aug-10	546	3250	Yes	N/A	N/A
FY10 Refresh	SSC Charleston, SC	FFP	MCSC, Quantico, VA	Jan-09	Aug-09	90	25000	Yes	N/A	N/A
FY11 Refresh	SSC Charleston, SC	FFP	MCSC, Quantico, VA	Jan-11	Aug-11	160	25000	No	N/A	N/A
<b>TCO</b>										
FY11 Refresh	SSC Charleston, SC	FFP	MCSC, Quantico, VA	Jan-11	Aug-11	30	25000	No	N/A	N/A
FY11 OCO	TBD	FFP	MCSC, Quantico, VA	Jan-11	Aug-11	135	181000	No	N/A	N/A
<b>AFATDS</b>										
FY10 Refresh/AFATDS	General Dynamics, MA	FFP	Ft Monmouth, NJ	Feb-10	Nov-10	215	30168	N/A	N/A	N/A
FY10	General Dynamics, MA	FFP	Ft Monmouth, NJ	Feb-10	Nov-10	36	68350	N/A	N/A	N/A
FY11 Refresh/AFATDS	General Dynamics, MA	FFP	Ft Monmouth, NJ	Nov-10	Sep-11	245	30168	N/A	N/A	N/A
<b>TLDHS</b>										
FY09 STRINKLINK Systems	Stauder Tech, MO	FFP	MCSC, Quantico, VA	Dec-08	Sep-09	102	27505	N/A	N/A	N/A
FY10 STRIKELINK Systems Refresh	Stauder Tech, MO	FFP	MCSC, Quantico, VA	Feb-10	Nov-10	280	27505	N/A	N/A	N/A
FY10 OIF RESET/II MEB EDL	Stauder Tech, MO	FFP	MCSC, Quantico, VA	Feb-10	Nov-10	43	49000	N/A	N/A	N/A
FY11 STRIKELINK Systems Refresh	Stauder Tech, MO	FFP	MCSC, Quantico, VA	Dec-10	Sep-11	125	27505	N/A	N/A	N/A
FY11 OCO	Stauder Tech, MO	FFP	MCSC, Quantico, VA	Dec-10	Sep-11	50	27500	N/A	N/A	N/A
<b>BFSA/BFT</b>										
FY09 HW (JV5) Refresh	DRS TDS, Melbourne, FL	FFP	Ft Monmouth, NJ	May-09	Dec-09	176	15790	N/A	N/A	N/A
FY09 HW (JV5)	DRS TDS, Melbourne, FL	FFP	Ft Monmouth, NJ	May-09	Dec-09	442	15790	N/A	N/A	N/A
FY09 BFT-II SATCOM Antennas	TBD	FFP	Ft Monmouth, NJ	TBD	TBD	9600	5000	N/A	N/A	N/A
FY09 KVG-72 (T-1 Encryptors)	TBD	FFP	Ft Monmouth, NJ	TBD	TBD	9600	5750	N/A	NA	N/A
FY10 DDACT II MEB EDL	DRS TDS, Melbourne, FL	FFP	Ft Monmouth, NJ	Mar-10	Oct-10	12	10000	N/A	N/A	N/A
FY10 BFT II MEB EDL	DRS TDS, Melbourne, FL	FFP	Ft Monmouth, NJ	Mar-10	Oct-10	1158	15850	N/A	N/A	N/A
FY11 HW Refresh Procurement	DRS TDS, Melbourne, FL	FFP	Ft Monmouth, NJ	Mar-11	Oct-11	91	17000	N/A	N/A	N/A
REMARKS:										

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4633				P-1 Item Nomenclature: <div style="text-align: center;">RADIO SYSTEMS</div>								
Program Elements: 0206313M Marine Corps Communication Equipment			Code: A	Other Related Program Elements:								

	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	TOTAL
Proc Qty												
Gross Cost	2774.7	62.8	81.4	40.6	155.5	196.1	48.8	33.9	50.9	38.1		563.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2774.7	62.8	81.4	40.6	155.5	196.1	48.8	33.9	50.9	38.1		563.9
Initial Spares	26.8	3.1	4.4	0.2	0.0	0.2	0.2	0.2	0.2	0.2		
Total Proc Cost	2801.5	65.9	85.9	40.7	155.5	196.3	49.0	34.1	51.1	38.3		565.0
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves												

**Base Appropriation Request:**

**Legacy Communications/Electronics Modifications and Sustainment:** Encompass post production sustainment of fielded tactical communication and networking systems and Service Life Extension Programs (SLEP) of aging communications equipment reaching the end of their life cycle. The post production sustainment provides necessary engineering and logistic support to maintain the existing operational capability above threshold operational readiness. The support provides equipment specialists, configuration management, supply/control support coordination, depot maintenance control, and warranty administration. The AN/TSQ-227 Digital Technical Control (DTC) upgrades are driven by Department of Defense (DoD) mandated interoperability and security requirements, which includes technology insertion and evolutionary equipment improvements.

**AN/TRC-170 :** The AN/TRC-170 is a transportable, self-enclosed troposcatter terminal (multi-channel) capable of transmitting and receiving digital data over varying distances (up to 100 miles). This terminal is comprised of modular electronic equipment in various configurations with Government Furnished Equipment (GFE) multi-plexers and cryptographic items all housed in a modified S-250/G shelter.

**Global Broadcast Service (GBS):** Provides a worldwide, high capacity, one-way transmission of video, imagery, and other information as required to support joint military forces in garrison, in transit, and in theater. The GBS system will broadcast via communication payloads on a constellation of DoD satellites augmented by leased commercial satellite services. Information (data and video) is collected, organized, and fed to the satellite uplink by fixed or transportable injection points. Services provided by GBS include File Transfer Protocol (FTP), Non-Secure Internet Protocol Router Network (NIPR)/Secret Internet Protocol Router Network (SIPRNET) access, audio and video such as Cable News Network (CNN), and imagery dissemination. GBS consists of space, transmit, and receive segments. The Marine Corps is procuring only the GBS Receive Suite (RS) which is comprised of the Receive Broadcast Manager (RBM) and receive antennas. The RBM consists of a microcomputer, monitor, Integrated Receive Decoder (IRD), and KG-250 cryptographic equipment. The RS receives information from the transmit segment, decodes it and then distributes the information to users. The Marine Corps is purchasing both the fixed station RS and the transportable RS.

**Tactical Communications Modernization (TCM):** Procures state of the art radio systems (IISR, PRC-117, PRC-150 and PRC-148) as interim solutions to Joint Tactical Radio System (JTRS) products which are presently in development but not available for immediate procurement in response to wartime requirements. The current TCM program schedule and budget profile for TCM: (1) has replaced legacy radio systems at or past the end of their service life, (2) is modernizing tactical radio capabilities consistent with JTRS, and (3) is "resetting the force" to effectively meet any post- Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) threat. TCM also includes the High Frequency ManPack AN/PRC-150 long-haul communication radio system, and the Enhanced Position Location Reporting System enabling wireless point to point and mesh networking for MS chat, position location reporting, and standard message formatting capability to Marine Division units.

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2010

Appropriation / Budget Activity/Serial No:

Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4633

P-1 Item Nomenclature:

RADIO SYSTEMS

**Base Appropriation Request:**

**Joint Tactical Radio System (JTRS):** provides a family of software-programmable and hardware configurable radio systems that will deliver unprecedented interoperability and operational flexibility to support the varied mission requirements of the warfighter. The Marine Corps' initial procurement investment in the JTRS product line will be the procurement of the Ground Mobile Radio (GMR) system as a multi-channel, vehicle-mounted radio system. Procurement of Low Rate Initial Production (LRIP) items occurs in FY10 and FY11, and these items will support vehicle integration efforts on a variety of USMC platforms, such as the Expeditionary Fighting Vehicle (EFV). In FY11 the Marine Corps will commence LRIP procurement of a 2-channel manpack radio system that provides Mobile User Objective System (MUOS) capability. MUOS is the next-generation of Tactical Satellite (TACSAT) communications technology based on a new constellation of satellites. Timely procurement of the MUOS capability is vital for the Marine Corps to fill what would otherwise be a mission-critical gap in tactical radio communications for beyond-line-of-sight command and control voice/data nets.

**Enterprise Land Mobile Radio (ELMR):** provides a modern, digital, trunked radio system at all bases, posts and stations across the Marine Corps. It will provide coverage both mainside and in training areas to provide positive command and control over training units. It will also provide a safety of life and safety of flight system that enables emergency personnel to respond to problem during normal, crisis, and recovery operations.

There are three capability objectives for the initial procurement and installation of ELMR systems:

- (1) First Responder Capability/Interoperability. In the wake of 9/11, it was recognized that effective emergency communications is a key element in providing homeland security while reducing the loss of life in any crisis or incident.
- (2) Compliance with the Federal Communications Commission (FCC) Narrowbanding mandate for Land Mobile Radio (LMR) frequency spectrum management. Failure to meet this 1 Jan 08 deadline has already forced training "shut downs" at critical pre-deployment training bases and events.
- (3) Provide operational capabilities to reset, expand, and modernize the deficient LMR infrastructure which is inadequate to fully support the warfighters' security, safety, and overall combat effectiveness.

The ELMR capability will be achieved through two procurement efforts.

- (1) Subscriber Units: Procurement of the radio systems for personnel and vehicles.
- (2) Infrastructure: Procurement of ELMR tower and networking infrastructure that allows for radio trunking, remote operations, monitoring, and Continuity Of Operations (COOP).

Procurement and installation of ELMR subscriber units and infrastructure will be executed incrementally -- addressing one or several bases each year in order to deliver an immediate 100% "turnkey" solution for the base(s) funded that year.

**Command-and-control, On-the-move, Network, Digital, Over-the-horizon, Relay (CONDOR):** procures systems that will allow tactical forces to extend units Beyond Line-of-Sight (BLOS) while maintaining friendly and enemy locations and posture by maintaining data network connectivity over great distances while On-the-move (OTM).

**Very Small Aperture Terminal (VSAT):** Procurement of the Ka upgrade for VSAT terminals is a one-time investment across the entire inventory of VSAT terminals. This upgrade provides access to more economical government-owned Ka bandwidth. Migration to Ka bandwidth from the current commercially-owned Ku bandwidth would eliminate commercial satellite access fees. Furthermore, use of Ka bandwidth mitigates any risk associated with commercial management of Ku bandwidth during a crisis period.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4633	P-1 Item Nomenclature: <div style="text-align: center; padding-top: 10px;">RADIO SYSTEMS</div>	

**Base Appropriation Request:**

**Lightweight Multiband Satellite Terminal (LMST):** Phoenix Tactical SHF Satellite Terminal (TSST): LMST and Phoenix are quad-band Super High Frequency (SHF) satellite terminals that provide wideband communications capabilities. Systems have similar capability sets. LMST can be employed in a transit case configuration or mounted on High Mobility Multi-Purpose Wheeled Vehicles (HMMWVs). Phoenix terminals are permanently mounted on HMMWVs. These terminals provide the primary communications link between deployed forces and Satellite Tactical Entry Points (STEP) and Teleports.

**Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T):** The Secure, Mobile, Anti-jam, Reliable, Tactical-Terminal (SMART-T), provides tactical users with protected data & voice Extremely High Frequency (EHF) 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 if removed from the HMMWV. Improvements to use Advanced EHF (AEHF) satellites and the extended data rate (XDR) waveform are planned in the near future. The upgraded SMART-T will be nomenclatured as the AN/TSC-154A.

**Tactical Elevated Antenna Mast Systems (TEAMS):** A single HMMWV (High Mobile Multi-purpose Wheeled Vehicle) mounted 100' telescoping antenna mast replacing the two AN/MRC - 142 50' antennas. TEAMS provides a safer more efficient mast to allow up to twice the current height capability to overcome obstructions caused by overhead canopy and obstructing ridges which minimizes the need to set up additional relay sites as well as ship to shore communications. TEAMS will support any antenna.

**Blue Force Situational Awareness (BFSA):** The Marine Corps' Situational Awareness family of systems comprised of the Mounted and Dismounted variants of a terrestrial Enhance Position Location Reporting System/Single Channel Ground Airborne Radio Systems (EPLRS/SINGARS) and the mounted celestial (SATCOM) system.

**FY11 Overseas Contingency Operations Request (OCO):**

**Defense Advanced Global Positioning System (GPS) Receiver (DAGR)** provides the warfighter with anti-spoofed navigation and timing information. The recent MEB deployment to OEF required 574. These had to be sourced from other efforts. MCSC fields frequent requests from the MARFORs for GPS, and due to contracting issues can only place orders twice a year, so some units do not receive this capability for up to 12 months. This request would fund replenishment, which MCSC could perform within 12 months.

**AN/TRC-170** provides the warfighter with a line-of-sight and beyond-line-of-sight communications capability. The current system is a HMMWV mounted shelter that requires a waiver to deploy, since it exceeds weight restrictions when armored. The mounted shelter contains several critical items that require constant maintenance (at increasing cost to the warfighter) and are reaching end of life. This request will fund a new antenna trailer that will house these critical components, in turn replacing the shelter, reducing manpower, and enabling faster operator set-up/tear-down time. MCSC can deliver this trailer within 12 months of funding. Additional requirement for performance acceptance testing, training, TMs, log support analysis, etc

2 **FSR** to support High Frequency and Multi-band Harris radios in theater. Funds 2 **FSR** to support PM-Toc for the intercoms in theater with FSR Team.

Present MRAP intercom systems were purchased without logistics support package. Sustainment of these systems would require equipment refresh to ensure combat capability. Without use of intercom systems drivers and gunners will not be able to communicate.

**IISR headsets** are used with the IISR radio. These headsets provide hands-free communications and eardrum protection from rifle fire and explosion. Anticipating approximately 500 of the 1500 IISR headsets (33%) in theater will need to be replaced. Marines will face a shortfall of headsets and be required to use the radio alone, forcing them to manually key the radio or exposing them to hearing loss.

**Lightweight Multiband Satellite Terminal (LMST)** has been deployed in OIF since the start of operations. The LMST provides the commander with the means to exchange mission critical information, including video over a satellite communication network. The terminals have been in constant use so will require extensive refurbishment from their long deployment. Marine Corps Systems Command (MCSC) is upgrading LMST terminals to Ka-band during FY09, which will enable operations on the new Wideband Global SATCOM constellation in the Ka frequency band. MARCENT has cancelled the OIF terminal upgrades because of operational tempo, so they will not be upgraded until they return to CONUS in FY10. This request provides funding for that upgrade, and in turn enables MCSC to maintain configuration control while providing the warfighter increased mission critical data exchange. MCSC can deliver these upgrades within 12 months of funding.

**Global Broadcast System (GBS)** provides the tactical commander with large quantities of mission critical data, including UAV video. The system is highly mobile due to its compact size. This request would fund these low density high demand items in support of the MARSOC in OEF/OIF due to increased Optempo and small unit ops conducted by them requiring this connectivity. MCSC can deliver these JIPM-capable systems within 12 months of funding.

**Support Wide Area Network (SWAN)** is a satellite communications terminal with a network package that provides tactical commanders at the Battalion and above echelons with the means to exchange mission critical information beyond-line-of-sight, including video. Deployed SWAN terminals have been in use for several years. Many of the systems have suffered excessive wear and tear and are in need of replacement. MCSC can deliver these refits within 12 months of funding.

**Joint Internet Protocol Modem (JIPM)** is a GBS-upgrade which enables tactical commanders to receive greater quantities of mission critical information (including UAV video). The existing GBS systems will require this capability in order to enable and participate in COCOM broadcasts. MCSC can upgrade the remaining 81 systems within 12 months of funding. GBS terminals have a high demand for use by MARSOC and other opfors.

**Range Land Mobile Radio (RLMR)** repeater system currently consists of four repeater sites. The four Radio Frequency (RF) Repeater sites provide radio users with access to six trunked repeater channels at three remote sites and nine repeaters. A radio user within the RF coverage area of any of the four repeater sites can initiate a trunked radio call within a single repeater site's coverage area and/or to radio users located in the collective wide-area RF coverage of the four repeaters sites. Increasing the number of repeater sites and increasing the number of repeaters located at the current and proposed expansion sites shall greatly enhance operational Safety Posture for all personnel in Marine Corps Air Ground Combat Center (MCAGCC) ranges reliant upon the RLMR system for repeated radio communications.

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: February 2010						
Appropriation / Budget Activity					P-1 Item Nomenclature:								
Procurement Marine Corps (1109)/ 04 Communication and Electronics Equipment / 4633					RADIO SYSTEMS								
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011					
Lightweight Multi-Band Satellite	A	D	0.000	1.413	1.350	1.464	3.167	4.631					
Global Broadcast Service	A	D	14.845	0.699	0.000	0.000	0.000	0.000					
DAGR	A	D	0.000	0.000	0.000	0.000	3.730	3.730					
MRC-142	A	D	0.000	0.000	0.000	0.000	4.950	4.950					
EPLRS	A	D	0.000	0.000	2.263	0.000	3.257	3.257					
TEAMS	A	D	0.000	0.000	0.000	0.000	3.700	3.700					
Blue Force Tracker	A	D	0.000	0.000	0.000	0.000	0.048	0.048					
TOTAL			14.845	2.112	3.613	1.464	18.852	20.316					

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement Marine Corps (1109) / 04 Communication and Electronics Equipment / 4633				P-1 Line Item Nomenclature: Radio Systems			Weapon System Type:			Date: February 2010			
Weapon System Cost Elements		ID CD	Prior Yrs Total Cost \$000	FY 09 Total Cost \$000	Qty Each	Unit Cost \$	FY 10 Total Cost \$000	Qty Each	Unit Cost \$	FY 11 Total Cost \$000	Qty Each	Unit Cost \$			
<u>Baseline</u>															
<u>Tactical Communications Modernization</u>															
Vehicle Mounted Radios															
AN/PRC-152		A	13861				1772	VAR	TBD						
UHF/VHF AN/PRC-117(AN/VRC 103)		A	62267	4903	161	30454	4600	VAR	TBD						
MBR AN/PRC-117F							7500	VAR	TBD						
THHR (PRC-152/PRC-148							3000	VAR	TBD						
Tactical Handheld Radio		A	2310												
Integrated InterSquad Radio (IISR)		A		8750	3500	2500									
AN/PRC-150		A					1287								
THHR COMSEC Upgrade		A					10395	VAR	TBD	2724	VAR	TBD			
MBR COMSEC Upgrade		A					9149	VAR	TBD	5918	VAR	TBD			
HFR COMSEC Upgrade		A					5422	VAR	TBD	721	VAR	TBD			
Contract Management & Engineer Support		A	10430	4113			10511			577					
Spares		A	10818												
<u>Joint Tactical Radio System</u>															
Manpack Radio Systems (2-channel)		A								7134	50	142680			
Ground Mobile Radio (GMR) Systems		A					4350	9	483333	13387	30	446233			
<u>Legacy Communication Electronics</u>															
DTC SLEP support		A		2036											
DTC TECHCON Tool Kits		A					2003	VAR	TBD						
TRC-170 Logistics Support		A		2000			2003			1826					
DTC-R Refresh		A								1877	VAR	TBD			
Subtotal Baseline			99686	21802			61992			34164					
<u>FY11 OCO</u>															
<u>Tactical Communications Modernization</u>															
Tactical Handheld Radio		A													
FSR Support		A								4000					
Universal Remotes for Tactical Radios		A								22400	VAR	TBD			
MBR COMSEC Upgrade		A								12770	VAR	TBD			
<u>Legacy Communication Electronics</u>															
Comsec Cable KIV-7M		A								6418	VAR	TBD			
TRC-170 Obsolescence Upgrade		A								21087	VAR	TBD			
Subtotal FY11 OCO										66675					
Total			99686	21802			61992			100839					
Active			99686	21802			61992			100839					
Reserves			0	0			0			0					

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement Marine Corps (1109) 04 Communication and Electronics Equipment / 4633				P-1 Line Item Nomenclature: Radio Systems		Weapon System Type:		Date: February 2010					
Weapon System Cost Elements		ID CD	Prior Yrs Total Cost \$000	Total Cost \$000	FY 09 Qty Each	Total Cost \$000	FY 10 Total Cost \$000	Qty Each	Total Cost \$000	FY 11 Total Cost \$000	Qty Each	Total Cost \$000			
<u>Baseline</u>															
<u>Very Small Aperture Terminal</u>															
Very Small Aperture Terminal		A	48000												
Comsec Equipment		A	600												
Logistics/Fielding Support		A	13000				20								
Wireless Point to Point (WPPL)		A													
VSAT Ka Terminal Upgrade							9487	136	69758						
Program Support Logistics, Training FSR															
<u>Enterprise Land Mobile Radio (ELMR)</u>															
Project Office Support		A	46000	1200											
MCAS Yuma, infrastructure upgrade		A		6270	VAR	VAR	4898	VAR	VAR	4923	VAR	VAR			
MCAS Beaufort, infrastructure upgrade		A		6270	VAR	VAR									
MCI East, Regional RF subsystem		A		3100	VAR	VAR									
MCI West, Regional RF subsystem		A		3100	VAR	VAR									
Contract Management & Engineer Support		A		4365											
MCI East Radio Infrastructure		A													
<u>C2 On-the-Move Network Over-the Horizon</u>															
Relay (CONDOR)															
Project Office Support		A	400	4832											
WIN X LRIP Systems		A		3516	VAR	VAR									
		A													
<u>SMART-T UPGRADES</u>															
Upgrades SMART-T Terminals (AN/TSC-154)		A		5895	9	655000									
Program Support		A	2458	370			545								
Tactical MPSS		A					881	31	28406						
Ancillary Equipment		A	498												
Subtotal Baseline			110956	38918			15831			4923					
<u>FY11 OCO</u>															
<u>Very Small Aperture Terminal</u>															
Comsec Equipment		A								500	VAR	VAR			
CISCO/IA Support		A								3300					
Program/Fielding Support		A								4178					
Tech Refresh		A								2000	VAR	VAR			
SWAN equipment and services		A								8100	VAR	TBD			
WPPL equipment and services		A								6700	VAR	TBD			
<u>Enterprise Land Mobile Radio (ELMR)</u>															
Project Office Support				700											
Engineer Support				4940											
Camp Pendleton Infrastructure				8500	VAR						VAR	TBD			
Camp LeJeune Infrastructure				16400	VAR						VAR	TBD			
Blount Island Infrastructure				4700	VAR						VAR	TBD			
Beaufort Infrastructure				10000	VAR						VAR	TBD			
Subtotal FY11 OCO										70018					
Total			110956	38918			15831			74941					
Active			110956	38918			15831			74941					
Reserves			0	0			0			0					

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement Marine Corps (1109) / 04 Communication and Electronics Equipment / 4633				Weapon System Type:		P-1 Line Item Nomenclature: Radio Systems				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b><u>Tactical Communications Modernization</u></b>										
<b>FY09</b>										
<b>Vehicle Mounted Radios</b>										
Integrated InterSquad Radios (IISR)	Motorolla	FFP	MarCorSysCom	Dec-08	Feb-09	3500	2500	Y	NA	NA
<b><u>Joint Tactical Radio System</u></b>										
<b>FY11</b>										
Manpack Radio Systems (2-channel)	General Dynamics Scottsdale AZ	FFP		Feb-11	Nov-11	50	142680	Y	NA	NA
Ground Mobile Radio (GMR) Systems	Boeing, Anaheim, CA	FFP		TBD	TBD	30	446233	Y	NA	NA
Remarks										



Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement Marine Corps (1109) / 04 Communication and Electronics Equipment / 4633		Weapon System Type:			P-1 Line Item Nomenclature: Radio Systems					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>FY10</b> VSAT Ka-band Upgrade	TBD	FFP	MarCorSysCom	Feb-10	May-10	136	69758	Y	NA	NA
<b><u>SMART-T Terminal Upgrade</u></b> <b>FY09</b> Upgrades SMART-T Terminals (AN/TSC-154)	Raytheon Corp, Largo FL	FFP	CECOM	Mar-09	Jun-09	9	655000	Y	NA	NA
Remarks										

## Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No.  
Procurement, Marine Corps (1109) / 04 Communication and Electronics Equipment / 4633

Weapon System

P-1 Item Nomenclature:

## RADIO SYSTEMS

[illegible][illegible][illegible][illegible]

Exhibit P-40, Budget Item Justification Sheet										Date: February 2010			
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4634						P-1 Item Nomenclature: Communication Switching and Control Systems							
Program Elements: 0206313M Marine Corps Communication Equipment				Code: A		Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total	
Proc Qty												0.0	
Gross Cost	839.6	64.4	94.0	32.3	63.3	95.6	9.8	26.2	49.2	41.6		1220.5	
Less PY Adv Proc												0.0	
Plus CY Adv Proc												0.0	
Net Proc (P-1)	839.6	64.4	94.0	32.3	63.3	95.6	9.8	26.2	49.2	41.6		1220.5	
Initial Spares	5.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		5.9	
Total Proc Cost	845.0	64.9	94.0	32.3	63.3	95.6	9.8	26.2	49.2	41.6		1226.4	
Flyaway U/C												0.0	
Wpn Sys Proc U/C													
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

**Base Appropriation Request**

**Joint Communications Support Equipment (JCSE):** Funds the Marine Corps share of efforts to keep the JCSE equipped with the latest state-of-the-art equipment to accomplish its Joint Staff Mission.

**Expeditionary Command & Control Suite (ECCS):** A transit case solution that provides Secret Internet Protocol Router Network (SIPRNet) email and web access, secure Video Teleconference (VTC), Command and Control Personal Computer (C2PC), and collaborative planning with the Defense Information Systems Agency (DISA) Standard to initial response teams to communicate with higher HQ until larger Command and Control (C2) systems are established. This is an On-The-Move/Enroute Capability.

**Communications Security (COMSEC):** Supports Marine Corps interface requirements in a timely and cost effective manner. A continuous emerging requirement to provide the FMF (Fleet Marine Force) with new ancillaries and cable interfaces for interconnection between COMSEC devices and MAGTF C4I systems, C4I IT (Information Technology) Network Security systems, C4IAD (Air Defense) systems, and other systems with interface requirements for stand-alone COMSEC devices during acquisition, implementation, fielding and life cycle.

**Tactical Data Network (TDN):** Augments the existing MAGTF communications infrastructure to provide the commander an integrated data network, forming the communications backbone for Tactical Data Systems (TDS) and the Defense Messaging System (DMS). TDN consists of Gateways (AN/TSQ-222) and Data Distribution Systems (DDS) (AN/TSQ-228), interconnected with one another and their subscribers via a combination of common user long-haul transmission systems, local area networks (LAN), and switched telephone systems. The TDN PIP provides a smaller and more mobile variant of DDS for the Battalion, Secure Wireless LAN capability for enhanced mobility, integrates security interdiction products into the Gateway, and provides critical refresh of non-Marine Common Hardware Suite (MCHS) network components such as routers, switches, converters, and peripheral tactical gear.

**Warfighter Network-Tactical (WFN-T):** WFN is a portfolio of systems of tactical network programs. Tactical Data Network (TDN) and First In Command and Control (FICCS) program acquisition rolls up to Warfighter Network in FY 2010. WFN-T will provide a standard data and voice architecture for voice, Secret Internet Protocol Router Network (SIPRNet), Non-Classified Internet Protocol Router Network (NIPRNet), coalition, data, and video services that is interoperable with Joint communications systems. Specifically, it provides interoperability with Defense Information Systems Agency (DISA) net-centric Global Information Grid (GIG) convergence architecture, provides network optimization (accelerators) to best utilize precious satellite and terrestrial bandwidth, replaces copper and fiber optic cable infrastructure assemblies that are outdated, provides Voice over Internet Protocol (VoIP) that efficiently shares the IP transport data, and provides Multi-level security cross domain solutions mandated by the DISA GIG IP convergence (black core).

**Transition Switch Module (TSM):** A replacement for the Unit Level Circuit Switch (ULCS) family of equipment. It will provide a flexible Unit Level Switch that bridges legacy Tri-Tac switches with current commercial technology to provide Marine maneuver elements with a more robust voice/data switching, data transport and bandwidth management capabilities. This program will maintain United States Marine Corps (USMC) joint interoperability as all Services transition to Commercial Off-The-Shelf (COTS) switching technologies, Government Off-The-Shelf (GOTS), and Non-developmental Items (NDI) Technical Control and ancillary equipment. The shelter houses a facility management terminal, patch panels, multiplexers, modems, circuit switches, test equipment, Communication Security (COMSEC) equipment, and miscellaneous support equipment.

**FY11 Overseas Contingency Operations Request (OCO): \$63.3M**  
 Required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan. These items are specialized equipment necessary to accomplish assigned missions in Afghanistan theater of operations.

**Warfighter Network-Tactical (WFN-T):** FY11 OCO funding will be used to procure Data Distribution Systems (DDS).

**Commercialization of Communication:** This is part of an overall strategic plan to commercialize communications nodes which directly support OpForces in support of OEF. This includes Main Distribution Frame, Network Plant, Central Microwave System, Telephone Switching equipment, and system integration. This is for required modifications to equipment used in theater in direct support of combat operations.

Date: February 2010

February 2010

P-1 Item Nomenclature:	
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Communication Switching and Control Systems

BLI No. 463400

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4634			P-1 Line Item Nomenclature: Communication Switching and Control Systems		Weapon System Type:		Date:  February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 2009			FY 2010			FY 2011		
		Total Cost \$000	Total Cost \$000	Qty Each	Unit Cost \$	Total Cost \$000	Qty Each	Unit Cost \$	Total Cost \$000	Qty Each	Unit Cost \$
<u>Baseline</u>											
<u>Expeditionary Command and Control Suite (See Note 1)</u>											
Base Stations						355	2	177700			
Deployable Systems (RRK)						4335	17	255000	3060	12	255000
Deployable Systems (Cmdr Kit)						1862	14	133000	1995	15	133000
Modification Kits Remotes											
Modification Kits Base Stations											
Satellite Bandwidth						1720			1609		
Program Management Support						542			650		
ILS/Contractor Support/Training/Tools			625			1050			994		
First Article Test											
<u>COMSEC CABLE</u>											
Simple Key Loader (SKL)		12676									
KOV-21 CE		1825									
Secure Telephone Equipment (STE)		18698									
ECC		1950									
OMNI XI		3570									
Data STE		8514									
KG-175		2650									
KIV-7M											
Program/Fielding Support		8491	3566			829			822		
Subtotal Baseline		58374	4191			10693			9130		

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4634				P-1 Line Item Nomenclature: Communication Switching and Control Systems			Weapon System Type:		Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 2009			FY 2010			FY 2011				
		Total Cost \$000	Total Cost \$000	Qty Each	Unit Cost \$	Total Cost \$000	Qty Each	Unit Cost \$	Total Cost \$000	Qty Each	Unit Cost \$		
<u>Baseline</u>													
<u>Tactical Data Network (See Note 1)</u>													
DDS File Server Software		8500											
Program Support		3100	1679										
TDN Gateway		94											
Data Distribution System (DDS) Upgrades		30500	17414	VAR	VAR								
<u>Transition Switch Module (TSM)</u>													
Deployable Integrated Transport Suite (DITS)		37525											
Deployable End Office Suite (DEOS)		118872											
Remote Subscriber Access Module (RSAM)		56443											
TSM Increment I Upgrades		12531	1564	VAR	VAR	1341	VAR	VAR					
TSM Increment II Upgrades		1008	6487	VAR	VAR	7236	VAR	VAR					
TSM Increment III Upgrades			7785	VAR	VAR	17657	VAR	VAR					
Program/Fielding/ILS/Training		41109	2458			7442			1850				
<u>Warfighter Network</u>													
Network Optimiz (Accelerator) TDN						11106	VAR	VAR					
VoIP Mod Kits (TSM D)						6133	VAR	VAR					
Data Distribution System (DDS)			22400	VAR	VAR	30544	VAR	VAR	19840	VAR	VAR		
Program/Fielding/ILS/Training						1439			1044				
Subtotal Baseline		309682	59787			82898			22734				
<u>FY11 OCO</u>													
<u>Warfighter Network</u>													
Data Distribution System (DDS)									10500	VAR	VAR		
Commercialization of Communication									52780	VAR	VAR		
Subtotal FY11 OCO									63280				
Total		313873	63978			93591			95144				
Active		313873	63978			93591			95144				
Reserves		0	0			0			0				

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4634		Weapon System Type:			P-1 Line Item Nomenclature: Communication Switching and Control Systems					
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b><u>Expeditionary Command and Control Suite</u></b>										
<b><u>(ECCS)</u></b>										
<b>FY10</b>										
BASE STATIONS	TBD	FFP	MCSC, Quantico VA	Jun-10	Oct-10	2	177700	Y	NA	NA
DEPLOYABLE SYSTEMS, RRK	TBD	FFP	MCSC, Quantico VA	Jun-10	Oct-10	17	255000	Y	NA	NA
DEPLOYABLE SYSTEMS, Cmdr Kit	TBD	FFP	MCSC, Quantico VA	Jun-10	Oct-10	14	133000	Y	NA	NA
<b>FY11</b>										
DEPLOYABLE SYSTEMS, RRK	TBD	FFP	MCSC, Quantico VA	Jun-11	Oct-11	12	255000	Y	NA	NA
DEPLOYABLE SYSTEMS, Cmdr Kit	TBD	FFP	MCSC, Quantico VA	Jun-11	Oct-11	15	133000	Y	NA	NA
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE																	Date:														
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4634							Weapon System			P-1 Item Nomenclature: Communications Switching and Control Systems							February 2010														
							PRODUCTION RATE			PROCUREMENT LEADTIMES																					
ITEM		Manufacturer's NAME / LOCATION					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL		Unit of Measure															
ECCS Base Station		TBD					2	3	4		9	4	4	13		E															
ECCS Deployable System, RRK		TBD					2	12	24		9	4	4	13		E															
ECCS Deployable System, Cmdr Kit		TBD					2	12	24		9	4	4	13		E															
							Fiscal Year 08							Fiscal Year 09							B A L A N C E										
							Calendar Year 08							Calendar Year 09																	
ITEM		F Y	S V C	Q T Y	D E L	B A L	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	
							Fiscal Year 10							Fiscal Year 11							B A L A N C E										
							Calendar Year 10							Calendar Year 11																	
ITEM		F Y	S V C	Q T Y	D E L	B A L	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	
ECCS Base Station		10	MC	2	0	2									A				2												0
ECCS Deployable System, RRK		10	MC	17	0	17									A				3	4	4	4	2								0
ECCS Deployable System, Cmdr Kit		10	MC	14	0	14									A				4	5	5										0
ECCS Deployable System, RRK		11	MC	12	0	12																						A			12
ECCS Deployable System, Cmdr Kit		11	MC	15	0	15																						A			15



EXHIBIT P-21, PRODUCTION SCHEDULE															Date:															
Appropriation Code/CC/BA/BSA/Item Control No.															February 2010															
Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4634															Weapon System		P-1 Item Nomenclature:													
															Communications Switching and Control Systems															
PRODUCTION RATE															PROCUREMENT LEADTIMES															
ITEM	Manufacturer's NAME / LOCATION					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure																
ECCS Base Station	TBD					2	3	4		9	4	4	13	E																
ECCS Deployable System, RRK	TBD					2	12	24		9	4	4	13	E																
ECCS Deployable System, Cmdr Kit	TBD					2	12	24		9	4	4	13	E																
															Fiscal Year 12		Fiscal Year 13		BALANCE											
															Calendar Year 12		Calendar Year 13													
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OC		NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ECCS Deployable System, RRK	11	MC	12	0	12	4	4	4																						0
ECCS Deployable System, Cmdr Kit	11	MC	15	0	15	5	5	5																					0	
															Fiscal Year 14		Fiscal Year 15		BALANCE											
															Calendar Year 14		Calendar Year 15													
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OC		NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serail No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4635						P-1 Item Nomenclature: COMM & ELEC INFRASTRUCTURE SUPPORT						
Program Elements: 0206313M Marine Corps Communication Equipment				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	TO COMPLETE	TOTAL
Proc Qty					1	1						
Gross Cost	637.0	23.7	15.5	15.3	0.0	15.3	25.7	26.1	22.6	23.6	CONT	TBD
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	637.0	23.7	15.5	15.3	0.0	15.3	25.7	26.1	22.6	23.6	CONT	TBD
Initial Spares												
Total Proc Cost	637.0	23.7	15.5	15.3	0.0	15.3	25.7	26.1	22.6	23.6	CONT	TBD
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONT	TBD

**Base Appropriation Request:**  
 DEFENSE MESSAGE SYSTEM (DMS) supports organizational messaging for all classification levels from General Service (GENSER) unclassified through Top Secret/Sensitive Compartmented Information (TS/SCI). Telos Automated Message Handling System allows Web-interface for system administration for user messaging (including readers). DMS organizational messages are used to direct and commit resources, provide user authentication, non-repudiation, confidentiality, and integrity. It also maintains an archive and retrospective search capability to the warfighter and requires security at the Class 4 level. The Defense Information Systems Agency (DISA) is the lead agency and Global System Manager for DMS. A favorable Milestone III decision for unclassified through top secret collateral level messaging was achieved. The Department of Defense Intelligence Information System is the Operations Manager for the Intelligence Community to support TS/SCI messaging. Within the Marine Corps, there are two distinct acquisition efforts to field DMS to strategic and tactical communication centers to all classification levels. Authorized Acquisition Objective (AAO) is a quantity of 100.

BASE TELECOMMUNICATIONS INFRASTRUCTURE (BTI) provides all Marine Corps installations with the communications infrastructure service that connects the end-user to the DISA network. BTI sustains, upgrades and enhances the telecommunications systems infrastructure for all Marine Corps Installations in order 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 as they relate to technological capabilities. All non-Navy Marine Corps Intranet voice, video and data services are transported via each installation's infrastructure. These data services include, but are not limited to: Enhanced 911, 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, voicemail, conferencing, and Outside Plant infrastructure. The ongoing focus is standardization on DISA Unified Capabilities (voice, video, collaboration, and data) through modernization of installation infrastructure in order to maintain connection to the DISA network.

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 Information Technology (IT) systems. PKI has the ability to electronically sign documents, encrypt messages and documents, and to authenticate and protect web access. PKI is an initiative designed to support all United States Marine Corps (USMC) users and applications in Public Key Enablement and reduce overall cost to the Marine Corps. Marine Corps Systems Command (MCSC) has developed and the Department of Defense (DOD) has adopted a Protection Profile to provide a standard of "security goodness" against which a Public Key-Enabled application can be tested. The PKI program is responsible for deploying public key infrastructure to support tactical and Secret Internet Protocol Router Network users throughout the Marine Corps. This infrastructure includes tokens, card readers, servers and workstations that will support the deployment of Common Access Cards to the operating forces and enhance the Marine Corps Defense-in-Depth posture in accordance with DOD requirements.

TACTICAL SYSTEM SUPPORT EQUIPMENT (TSSE) requires equipment and support for the Marine Corps Tactical System Support Activity (MCTSSA) to satisfy the demand from operational MAGTFs, staff, and acquisition agencies for support in assessing the level of integration of systems within the MAGTF network architecture. MCTSSA has established a Systems Integration Environment (SIE) that is made up of the data, communication, and transmission systems fielded to the Operating Forces. The SIE provides interoperability and integration assessments to decision-makers at MCSC. This includes testing and assessing new software and systems, replicating and exploring interoperability problems encountered by the Operating Forces, and analyzing systems for the proper implementation of standards, protocols, and interfaces prior to fielding. In addition, the equipment provides the Marine Corps with a controlled test environment that reflects the network configuration of an operational Marine Expeditionary Force level MAGTF employed alone or as part of a Joint Task Force. Equipment is required to support MCTSSA's effort on Life Cycle Software Support for tactical systems. Items are essential to provide hardware and software support for the Marine Corps tactical data systems that are fielded. The SIE gives the Marine Corps the ability to assess the usability, functionality, and interoperability of multiple systems employed by the MAGTF.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4635		P-1 Item Nomenclature: COMM & ELEC INFRASTRUCTURE SUPPORT
Program Elements: 0206313M Marine Corps Communication Equipment	Code: A	Other Related Program Elements:
<p>MARINE CORPS INFORMATION OPERATIONS CENTER (MCIOC) provides Marine Air Ground Task Force (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. MCIOC also provides IT infrastructure for voice, video and data. Multiple classification levels require separate 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>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 will realign the existing USMC environment of applications, databases, networks, and facilities into an integrated architecture and programs to deliver new information technology capabilities based on a common infrastructure and shared services. 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. Initially it will encompass the Operational, Technical and Systems architectures of the garrison environment. Ultimately, it will extend to transform Command and Control (C2) both in garrison and in the deployed environment.</p> <p>Combined with policy, procedure, and standards provided by HQMC Command, Control, Communications and Computers; MCEITS will allow for achievement of architectural standardization, consolidated management, seamless interoperability, and access to the data residing in our currently fielded applications (business and tactical). MCEITS enables access to enterprise information and provides the ability to collaborate and share information across the business and warfighter domains.</p> <p>TACTICAL REMOTE SENSOR SYSTEM Product Improvement (TRSS-PIP) will provide all weather direction, location determination, targeting, and tactical indications and warning of enemy activity in the Marine Air Ground Task Force (MAGTF) Commander's Area of Interest. The TRSS-PIP is an equipment suite consisting of three primary sub-systems: Unattended Ground Miniature Sensors (UGMS); Relay Systems; and monitoring systems. The sensor systems will include seismic/acoustic sensors, electro-magnetic sensors, infrared (passive) sensors; and air-delivered sensors. The relay systems include dual channel duplex commendable and single channel repeaters. The monitoring system includes the Sensor Mobile Monitoring System (SMMS). The composition of the three sub-systems are comprised of several individual components. As the Product Improvement Program proceeds, upgrading of individual components will occur on an as needed basis.</p>		

Exhibit P-40a - Item Justification for Aggregated Items									Date: February 2010			
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 04 Communications and Electronic Equipment / 4635							P-1 Item Nomenclature: COMM & ELEC INFRASTRUCTURE SUPPORT					
Procurement Items	Code	UOM	Prior Years	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011				
TACTICAL SYSTEM SUPPORT EQUIPMENT (TSSE)	A	D	4.841	1.143	1.161	1.182	0.000	1.182				
		Q										
PUBLIC KEY INFRASTRUCTURE (PKI)	A	D	7.464	0.799	0.930	0.998	0.000	0.998				
		Q										
MARINE CORPS INFORMATION OPERATIONS CENTER (MCIOC)	A	D	0.000	1.027	0.324	0.826	0.000	0.826				
		Q										
TACTICAL REMOTE SENSOR SYSTEM (TRSS)	A	D	0.000	2.250	0.000	0.000	0.000	0.000				
		Q										
DEFENSE MESSAGE SYSTEM (DMS)	A	D	41804.000	0.000	0.525	0.464	0.000	0.464				
		Q										
TOTAL			41816.305	5.219	2.940	3.470	0.000	3.470				
Active			41816.305	5.219	2.940	3.470	0.000	3.470				
Reserves			0.000	0.000	0.000	0.000	0.000	0.000				

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 04 Communications and Electronics Equipment / 4635				P-1 Line Item Nomenclature: COMM & ELEC INFRASTRUCTURE SUPPORT		Weapon System Type:		Date:  February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
MARINE CORPS ENTERPRISE INFORMATION TECHNOLOGY SERVICES (MCEITS)											
Infrastructure build-out of Kansas City facility			5,949		VAR						
BASE TELECOMMUNICATIONS INFRASTRUCTURE (BTI) : Base telecommunications systems aboard Marine Corps installations worldwide.	A	151,355	12,512		VAR			VAR		11,808	VAR
							</				

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5003							P-1 Item Nomenclature: Commercial Passenger Vehicles						
Program Elements: 0206496M Base Operations, Forces (Marine Corps)					Code: A	Other Related Program Elements:							
	Prior Years	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total	
Proc Qty													
Gross Cost	28.3	1.2	1.3	1.2	0.0	1.2	0.9	0.9	0.9	1.0	Cont	Cont	
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc (P-1)	28.3	1.2	1.3	1.2	0.0	1.2	0.9	0.9	0.9	1.0	Cont	Cont	
Initial Spares													
Total Proc Cost	28.3	1.2	1.3	1.2	0.0	1.2	0.9	0.9	0.9	1.0	Cont	Cont	
Flyaway U/C													
Wpn Sys Proc U/C													
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
<p><b>Base Appropriation Request:</b>  <b>Commercial Passenger Vehicles</b> - Funds in this line are used for the replacement of centrally managed sedans, station wagons and buses at Marine Corps overseas bases and stations and non-tactical passenger vehicles for use in theater. Commercial Passenger Vehicles are acquired through commercial contracting procedures.</p>													

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5003					P-1 Item Nomenclature: Commercial Passenger Vehicles						
Procurement Items	Code	UOM	Prior Years		FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011		
Commercial Passenger Vehicles	A	D	28.3		1.197	1.261	1.157	0.000	1.157		
		Q	VAR		VAR	VAR	VAR	VAR	VAR		
				</							

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5006							P-1 Item Nomenclature: Commercial Cargo Vehicles						
Program Elements: 0206496M Base Operations, Forces ( Marine Corps)					Code: A	Other Related Program Elements:							
	Prior Years	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total	
Proc Qty													
Gross Cost	94.1	17.6	13.6	12.7	0.0	12.7	14.3	14.6	15.0	15.4	Cont	Cont	
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc (P-1)	94.1	17.6	13.6	12.7	0.0	12.7	14.3	14.6	15.0	15.4	Cont	Cont	
Initial Spares													
Total Proc Cost	94.1	17.6	13.6	12.7	0.0	12.7	14.3	14.6	15.0	15.4	Cont	Cont	
Flyaway U/C													
Wpn Sys Proc U/C													
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

**Base Appropriation Request:**

**COMMERCIAL CARGO VEHICLES** - Funds in this line are used for the replacement of centrally managed general purpose heavy duty and light trucks and special purpose trucks; refuse collection trucks; and all types of trailers and motor scooters at bases and stations throughout the Marine Corps. Commercial Cargo Vehicles are procured through General Services Administration (GSA) and the Defense Supply Center Philadelphia (DSCP).

**EMERGENCY RESPONSE VEHICLES (ERV)** - Funds in this line are used for the replacement of fire fighting apparatuses for maintaining the minimal installations ERV requirements for structural and airfield operations capabilities throughout the Marine Corps.



## Date: February 2010

Appropriation / Budget Activity
Procurement, Marine Corps (1109) / 05 Support Vehicles / 5006

P-1 Item Nomenclature:

### Commercial Cargo Vehicles

Exhibit P-40a

Budget Item Justification for Aggregated Items

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5006				P-1 Line Item Nomenclature Commercial Cargo Vehicles	Weapon System Type:			Date:  February 2010		
Weapon System Cost Elements		ID CD	Prior Yrs	FY2009			FY2010			FY2011		
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<div><div>Baseline</div><div>COMMERCIAL CARGO VEHICLES</div><div>Low density procurements of multiple configurations of utility vehicles, cargo trucks, 8-passenger vans, pickups, stake trucks, wreckers, dump trucks, etc).</div></div>		A	26808	17600	VAR	VAR	10440	VAR	VAR	9499	VAR	VAR
TOTAL			26808	17600			10440			9499		
ACTIVE			26808	17600			10440			9499		
RESERVE				0			0			0		

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5045							P-1 Item Nomenclature: 5/4T TRUCK HMMWV					
Program Elements: 0206315M Force Service Support Group				Code: A		Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty	4141	591	213	17	77	94	0	3	118	236		
Gross Cost	438.7	131.0	37.6	4.8	13.0	17.8	0.7	2.5	21.8	48.1	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	438.7	131.0	37.6	4.8	13.0	17.8	0.7	2.5	21.8	48.1	Cont	Cont
Initial Spares												
Total Proc Cost	438.7	131.0	37.6	4.8	13.0	17.8	0.7	2.5	21.8	48.1	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**  
**Expandable Capacity Vehicles (ECV):** The ECV is an improved version of the standard Highly Mobile Multipurpose Wheeled Vehicle (HMMWV) based on the M1114 with a heavier chassis and improved engine. The concept and design of the add on armor kits provide greater tactical flexibility for deploying units or training.  
ECV variants include:  
**ECV M1152/M1165:** Troop and Shelter Carrier, and Troop/MRC/Command Variants.  
**ECV M1152A1/M1165A1:** Troop and Shelter Carrier, and Troop/MRC/Command Variants. The A1 depicts these vehicles have Integrated Armor Package with underbody armor.  
**ECV M1151A1 wB1 Armor Kit:** Armament Carrier  
**ECV M1152A1 w/B2 Armor Kit:** Troop and Shelter Carrier  
**ECV M1165A1 w/B3 Armor Kit:** Troop/MRC/Command Variant  
**ECV M1167A1 w/B Armor Kit:** TOW Missile ECV Variant  
**Marine Corps Transparent Gun Shield / Battery Powered Motorized Traversing Unit (MCTAGS / BPMTU)** is the Marine Corps protection for the M1151A1B1 Armament Carrier Gunner.

The current HMMWV ECV procurement strategy is based on the Marine Requirements Oversight Committee (MROC) guidance that every vehicle will have basic armor protection with the capability of taking on full armor protection. The MROC guidance requires 60% of the HMMWV fleet will be fully armored and 40% of the fleet will have the basic Integrated Armor Package (IAP). All ECV with basic IAP are able to be upgraded with additional armor kits.

**FY11 Overseas Contingency Operations Request (OCO):** \$12.994M

The FY11 OCO funding will procure ECV Variants to replace 52 OIF/OEF combat losses and for some limited long term Reconstitution.

EXHIBIT P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No:		P-1 Line Item Nomenclature:		Weapon System		Date:			
		Procurement, Marine Corps (1109) / 05 Support Vehicles / 5045		5/4T Truck HMMWV				February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	Total Cost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
HMMWV M1151/1152		431354									
HMMWV M1151A1B1			79026	453	174448						
HMMWV M1165A1B3			5,902	37	159,492	34,246	213	160,775	2,757	17	162,156
HMMWV M1167-Tow Missile Carrier w/Armor			23230	101	230000						
HMMWV ILS/ENG/ECPs		7,378	4,173			3,356			2,092		
MCTAGS			7976	327	24390						
MCTAGS BPMTU/MTU Only			1858	205	9061						
MCTAGS Turret Assembly			8813	1259	7000						
Subtotal		438,732	130,978			37,602			4,849		
<u>FY11 OCO</u>											
HMMWV M1165A1B3									12,486	77	162,156
HMMWV ILS/ENG/ECPs									508		
Subtotal		0	0			0			12,994		
TOTAL		438,732	130,978			37,602			17,843		
ACTIVE		438,732	130,978			37,602			17,843		
RESERVE			0			0			0		

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5045		Weapon System Type:			P-1 Line Item Nomenclature: 5/4T TRUCK HMMWV					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>FY09</b>										
HMMWV M1151A1B1	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	May-09	Sep-09	102	174,448	Yes	N/A	N/A
HMMWV M1165A1B3	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	May-09	Sep-09	37	159,492	Yes	N/A	N/A
HMMWV M1151A1B1	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Nov-09	Mar-10	351	174,448	Yes	N/A	N/A
HMMWV M1167-Tow Missile Carrier w/Armor	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Nov-09	Mar-10	101	230,000	Yes	N/A	N/A
MCTAGS	BAE, Santa Clara, CA	FFPO	MCSC, Quantico	Nov-09	Mar-10	327	24,390	Yes	N/A	N/A
MCTAGS BPMTU/MTU Only	BAE, Santa Clara, CA	FFPO	MCSC, Quantico	Nov-09	Mar-10	205	9,061	Yes	N/A	N/A
MCTAGS Turret Assembly	BAE, Santa Clara, CA	FFPO	MCSC, Quantico	Nov-09	Mar-10	1259	7,000	Yes	N/A	N/A
<b>FY10</b>										
HMMWV M1165A1B3	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Jan-10	May-10	213	160,775	Yes	N/A	N/A
<b>FY11</b>										
HMMWV M1165A1B3	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Nov-10	Mar-11	17	162,156	Yes	N/A	N/A
<b>FY11 OCO</b>										
HMMWV M1165A1B3	AM General Corp, South Bend, IN	FFPO	TACOM, Warren, MI.	Nov-10	Mar-11	77	162,156	Yes	N/A	N/A
REMARKS:										

Exhibit P-21, Production Schedule	Date: 10/1/2015
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Date: \_\_\_\_\_

February 2010

Appropriation Code/CC/BA/BSA/Item Control No.

Weapon System
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P-1 Item Nomenclature:	
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Procurement, Marine Corps (1109) / 05 Support Vehicles / 5045

5/4 Truck HMMWV

[illegible][illegible]

									Fiscal Year 10									Fiscal Year 11									BALANCE		
									Calendar Year 10									Calendar Year 11											
ITEM	F Y	S V C	Q T Y	D E L	B A L	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
HMMWV ECVs (M1151, M1152, M1165, M1167's) with armor	FY09	MC	452	0	452		A				92	92	92	92	84														0
MCTAGS	FY09	MC	327	0	327		A				28	28	28	28	28	28	28	28	28	28	28	19							0
BPMTU	FY09	MC	205	0	205		A				17	17	17	17	17	18	17	17	17	17	17	17							0
MCTAGS Turret Assembly	FY09	MC	1259	0	1259		A				105	105	105	105	105	105	105	105	105	105	105	104							0
HMMWV ECVs (M1151, M1152, M1165, M1167's) with armor	FY10	MC	213	0	213				A				98	98	17														0
HMMWV ECVs (M1151, M1152, M1165, M1167's) with armor	FY11	MC	94	0	94														A			94							0

Remarks:
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Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5050						P-1 Item Nomenclature: Motor Transport Modifications						
Program Element: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total
Proc Qty												
Gross Cost	62.1	38.4	3.0	5.3	0.0	5.3	6.4	6.6	6.8	6.9	CONT	CONT
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	62.1	38.4	3.0	5.3	0.0	5.3	6.4	6.6	6.8	6.9	CONT	CONT
Initial Spares												
Total Proc Cost	62.1	38.4	3.0	5.3	0.0	5.3	6.4	6.6	6.8	6.9	CONT	CONT
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**

**Medium Tactical Vehicle Replacement (MTVR) Modification** - The MTVR modification program funds numerous and extremely important modifications and initiatives that are required to address operational priorities, engineering change proposals, safety concerns, support equipment inefficiencies, tool malfunctions, product quality deficiencies, beneficial suggestions and other issues that affect vehicle reliability, availability and readiness. A proactive and focused approach ensures proper vehicle sustainment and life-cycle management and it allows the program office to develop/implement improvements as needed to respond to the evolving needs of the Marine Corps.

**Lightweight Mine Roller** - can be attached to wheeled vehicles to counter pressure initiated Improvised Explosive Devices Threats. The rollers can be mounted to HMMWV, MTVR, LAV, and JERRV/Cougar vehicles to minimize damage to vehicles and, more importantly, prevent injury or loss of life to those Marine/Sailors/Soldiers in the vehicle crew compartment. Increased demand and use of rollers are decreasing current inventory levels at rapid rate.

[illegible][illegible]



<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109 ) / 05 Support Vehicles / 5088						P-1 Item Nomenclature: MEDIUM TACTICAL VEHICLE REPLACEMENT (MTVR)						
Program Elements for Code B Items: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty	7395	95	887	24	120	144	12	3	304	296		9136
Gross Cost	1773.2	30.8	141.8	11.7	80.6	92.3	11.8	1.7	137.3	137.4	0.0	2326.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1773.2	30.8	141.8	11.7	80.6	92.3	11.8	1.7	137.3	137.4	0.0	2326.3
Initial Spares	33.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.1
Total Proc Cost	1806.3	30.8	141.8	11.7	80.6	92.3	11.8	1.7	137.3	137.4	0.0	2359.4
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0

**Base Appropriation Request:**  
**Medium Tactical Vehicle Replacement (MTVR):** The MTVR is a U.S. Marine Corps program that replaced the existing medium tactical motor transport fleet of M809/M939 series trucks with cost-effective, state-of-the-art technologically improved trucks. The MTVR has 22 years of economic useful life and markedly improved performance plus Reliability, Availability, Maintainability and Durability (RAM-D). Major improvements include a new electronically controlled engine/transmission, independent suspension, central tire inflation, antilock brakes, traction control, corrosion control, and safety/ergonomic features.

**MTVR Armor System (MAS) Kits** - The MAS is designed for the 7-ton MTVR. Intended as a permanent modification to the vehicle. MAS provides complete 360-degree protection & overhead and underbody protection for the crew compartment.

- Utilizes Mil-A-46100 High Hard Steel and Metal Composite.
- Includes an upgraded front suspension & cab rebuild
- Removable personnel carrier (with ballistic glass)
- Air conditioning system
- Machine gun mount

**FY11 Overseas Contingency Operations Request (OCO):**  
Funding is required to procure Medium Tactical Vehicle Replacements (MTVRs) and improvements for use in OIF/OEF. Funding is required to replace combat losses, to address MEB-A Equipment Density List (EDL) shortfalls, and to make required modifications to equipment used in theater in direct support of combat operations. The EDL is the list of equipment the Marine Expeditionary Brigade (MEB) requires to accomplish its mission in Afghanistan.

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109 ) / 05 Support Vehicles / 5088				P-1 Line Item Nomenclature: Medium Tactical Vehicle Replacement		Weapon System Type:		Date: February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
<u>VEHICLES</u>											
Cargo			15582		62	251322	4000	10	400000		
Cargo , Armored			6460		17	380000	62800	157	400000	4944	12
Cargo XLWB Armored			1140		3	380000	22800	57	400000	2472	6
Dump Truck, Armored			1925		5	385000	7600	19	400000	824	2
Wrecker, Armored			2935		4	733786	4528	8	566000		
Tractor, Armored			1740		4	435000	7200	18	400000	1648	4
MCTAGS w/ BPMTU - MTVR							8750	250	35000		
Live Fire Improvements							13236	VAR			
Vehicle Intercom							5483	350	15666		
TOOL KIT, ORG, MTVR D							58	5	11600		
TOOL KIT, OM, F/MTVR DUMP & WRECKER, 7T							72	7	10350		
TOOL KIT, IM, F/MTVR DUMP & WRECKER, 7-TON							69	6	11500		
MTVR ECP's, Production Testing				1050			5,205			1833	
Subtotal Baseline			30832				141802			11721	
<u>FY 11 OCO</u>											
Armored Cargo AMK 23/25 (D0003)										49440	120
Live Fire Improvements										25160	VAR
MTVR ECP's, Production Testing										5959	
OCO TOTAL										80559	
TOTAL			30832				141802			92280	
Active			30832				141802			92280	
Reserve			0				0			0	
<u>Reserves</u>											
Subtotal Reserves			0				0			0	

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109 ) / 05 Support Vehicles / 5088				P-1 Line Item Nomenclature: Medium Tactical Vehicle Replacement			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY12			FY 13			FY 14			FY 15		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>VEHICLES, Armored</u>														
Cargo , Armored			5092	12	424360							81613	176	463710
Cargo XLWB Armored						874	2	437091	65280	145	450204	20867	45	463710
Dump Truck, Armored									12606	28	450204			
Wrecker, Armored									637	1	637038			
Tractor, Armored						437	1	437091	58526	130	450204	34778	75	463710
MTVR ECP's, Production Testing			6674			382			278			165		
Subtotal Baseline			11766			1693			137327			137423		

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109 ) / 05 Support Vehicles / 5088		Weapon System Type:			P-1 Line Item Nomenclature: MEDIUM TACTICAL VEHICLE REPLACEMENT (MTVR)					
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Fiscal Years										
<b>FY 09 MTVR</b>										
MTVR Cargo	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jul-09	Mar-10	62	251322	Yes	N/A	N/A
MTVR Cargo, Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-10	Sep-10	17	380000	Yes	N/A	N/A
MTVR Cargo XLWB Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-10	Sep-10	3	380000	Yes	N/A	N/A
MTVR Dump Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-10	Sep-10	5	385000	Yes	N/A	N/A
MTVR Wrecker Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-10	Sep-10	4	733786	Yes	N/A	N/A
MTVR Tractor Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-10	Sep-10	4	435000	Yes	N/A	N/A
<b>FY10 MTVR</b>										
MTVR Cargo	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Aug-10	Apr-11	10	400000	Yes	N/A	N/A
MTVR Cargo, Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Aug-10	Apr-11	157	400000	Yes	N/A	N/A
MTVR Cargo XLWB Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Aug-10	Apr-11	57	400000	Yes	N/A	N/A
MTVR Dump Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Aug-10	Apr-11	19	400000	Yes	N/A	N/A
MTVR Wrecker Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Aug-10	Apr-11	8	566000	Yes	N/A	N/A
MTVR Tractor Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Aug-10	Apr-11	18	400000	Yes	N/A	N/A
MCTAGS w/ BPMTU - MTVR	BAE	FFPO	MARCORSYSCOM	Jul-09	TBD	250	35000	Yes	N/A	N/A
Live Fire Improvements	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	TBD	TBD	VAR		Yes	N/A	N/A
Vehicle Intercom	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	TBD	TBD	350	15666	Yes	N/A	N/A
TOOL KIT, ORG, MTVR D	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	TBD	TBD	5	11600	Yes	N/A	N/A
TOOL KIT, OM, F/MTVR DUMP & WRECK	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	TBD	TBD	7	10350	Yes	N/A	N/A
TOOL KIT, IM, F/MTVR DUMP & WRECK	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	TBD	TBD	6	11500	Yes	N/A	N/A
<b>FY11 MTVR</b>										
MTVR Cargo, Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	Sep-11	12	412000	Yes	N/A	N/A
MTVR Cargo XLWB Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	Sep-11	6	412000	Yes	N/A	N/A
MTVR Dump Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	Sep-11	2	412000	Yes	N/A	N/A
MTVR Tractor Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	Sep-11	4	412000	Yes	N/A	N/A
<b>FY11 OCO</b>										
MTVR Cargo Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	Sep-11	120	412000	Yes	N/A	N/A
Live Fire Improvements	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	TBD	TBD	VAR		Yes	N/A	N/A
<b>FY12 MTVR</b>										
MTVR Cargo, Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-11	Jul-12	12	424360	Yes	N/A	N/A
<b>FY13 MTVR</b>										
MTVR Cargo XLWB Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	May-13	2	437091	Yes	N/A	N/A
MTVR Tractor Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-12	Jul-13	1	437091	Yes	N/A	N/A
<b>FY14 MTVR</b>										
MTVR Cargo XLWB Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Jan-11	Jul-14	145	450204	Yes	N/A	N/A
MTVR Dump Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-13	Jul-14	28	450204	Yes	N/A	N/A
MTVR Wrecker Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-13	Jul-14	1	637038	Yes	N/A	N/A
MTVR Tractor Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-13	Jul-14	130	450204	Yes	N/A	N/A
<b>FY15 MTVR</b>										
MTVR Cargo, Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-14	Jul-15	176	463710			
MTVR Cargo XLWB Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-14	Jul-15	45	463710	Yes	N/A	N/A
MTVR Tractor Armored	Oshkosh Truck Corp. Oshkosh, WI	FFPO	MARCORSYSCOM	Nov-14	Jul-15	75	463710	Yes	N/A	N/A
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE															Date:		February 2010														
Appropriation Code/CC/BA/BSA/Item Control No.										Weapon System					P-1 Item Nomenclature:																
Procurement, Marine Corps (1109 ) / 05 Support Vehicles / 5088															MEDIUM TACTICAL VEHICLE REPLACEMENT (MTVR) (5088)																
										PRODUCTION RATE					PROCUREMENT LEADTIMES																
ITEM		Manufacturer's NAME / LOCATION								MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		TOTAL		Unit of Measure								
MTVRs (Wrecker/Cargo)		OSHKOSH, Oshkosh, WI								10/mo.	30/mo.	35/mo.			6		8				10		E								
MTVR MAS		OSHKOSH, Oshkosh, WI								10/mo.	30/mo.	35/mo.			1		8				10		E								
										Fiscal Year 08					Fiscal Year 09										BALANCE						
										Calendar Year 08										Calendar Year 09											
ITEM		FY	SV	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR		APR	MAY	JUN	JUL	AUG	SEP
MTVR Cargo Truck,		MCTAGS w/	FY 09	MC	62		62																								62
MTVR Cargo Truck, Armored		MCTAGS w/	FY 09	MC	17		17																								17
MTVR XLWB Cargo, Truck Armored		MTVR Drivers	FY 09	MC	3		3																								3
MTVR Dump Truck, Armored			FY 09	MC	5		5																								5
MTVR Wrecker, Armored			FY 09	MC	4		4																								4
MTVR Tractor, Armored			FY 09	MC	4		4																								
										Fiscal Year 10					Fiscal Year 11										BALANCE						
										Calendar Year 10										Calendar Year 11											
ITEM		FY	SV	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR		APR	MAY	JUN	JUL	AUG	SEP
MTVR Cargo Truck,			FY 09	MC	62		62					30	32																		0
MTVR Cargo Truck, Armored			FY 09	MC	17		17			A								17													0
MTVR XLWB Cargo, Truck Armored			FY 09	MC	3		3			A								3													0
MTVR Dump Truck, Armored			FY 09	MC	5		5			A								5													0
MTVR Wrecker, Armored			FY 09	MC	4		4			A								4													0
MTVR Tractor, Armored			FY 09	MC	4		4			A								4													0
MTVR Cargo Truck,			FY 10	MC	10		10										A								2	2	2	2	2	2	0
MTVR Cargo Truck, Armored			FY 10	MC	157		157										A							20	20	25	20	20	20	32	
MTVR XLWB Cargo, Truck Armored			FY 10	MC	57		57										A							10	10	10	10	10	7	0	
MTVR Dump Truck, Armored			FY 10	MC	19		19										A							3	3	3	3	3	4	0	
MTVR Wrecker, Armored			FY 10	MC	8		8										A							2	2	2	2			0	
MTVR Tractor, Armored			FY 10	MC	18		18										A							5	5	5	3			0	
MTVR Cargo Truck, Armored			FY11	MC	12		12															A							12	0	
MTVR XLWB Cargo, Truck Armored			FY11	MC	6		6															A						6	0		
MTVR Dump Truck, Armored			FY11	MC	2		2															A						2	0		
MTVR Tractor, Armored			FY 11	MC	4		4															A						4	0		
MTVR Cargo Truck, Armored (OCO)			FY11	MC	120		120															A						25	95		
MTVR XLWB Cargo, Truck Armored			FY13	MC	2		2															A							2		
MTVR XLWB Cargo, Truck Armored			FY14	MC	145		145															A							145		

EXHIBIT P-21, PRODUCTION SCHEDULE																				Date:										
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109 ) / 05 Support Vehicles / 5088										Weapon System					P-1 Item Nomenclature: MEDIUM TACTICAL VEHICLE REPLACEMENT (MTVR) (5088)							February 2010								
										PRODUCTION RATE					PROCUREMENT LEADTIMES															
ITEM	Manufacturer's NAME / LOCATION									MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		TOTAL		Unit of Measure							
MTVRs (Wrecker/Cargo)	OSHKOSH, Oshkosh, WI									10/mo.	30/mo.	35/mo.			6		8				10		E							
MTVR MAS	OSHKOSH, Oshkosh, WI									10/mo.	30/mo.	35/mo.			1		8				10		E							
										Fiscal Year 12										Fiscal Year 13										BALANCE
										Calendar Year 12										Calendar Year 13										
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MTVR Cargo Truck, Armored	FY 10	MC	157	125	32	10	11	11																						0
MTVR Cargo Truck, Armored	FY11	MC	120	25	95	20	20	20	20	15																				0
MTVR Cargo Truck, Armored	FY12	MC	12		12			A							12															0
MTVR XLWB Cargo, Truck Armored	FY13	MC	2		2																				2					0
MTVR Wrecker, Armored	FY13	MC	1		1													A									1			0
										Fiscal Year 14										Fiscal Year 15										BALANCE
										Calendar Year 14										Calendar Year 15										
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MTVR XLWB Cargo, Truck Armored	FY14	MC	145		145										20	12	12	12	12	12	12	12	12	12	12	12	5			0
MTVR Dump Truck, Armored	FY14	MC	28		28			A							12	12	4													0
MTVR Wrecker, Armored	FY14	MC	1		1			A							1															0
MTVR Tractor, Armored	FY14	MC	130		130			A							12	13	15	15	15	15	15	15	15	15						0
MTVR Cargo Truck, Armored	FY15	MC	176		176														A								20	20	20	116
MTVR XLWB Cargo, Truck Armored	FY15	MC	45		45														A								10	10	10	15
MTVR Tractor, Armored	FY15	MC	75		75														A								10	10	10	45

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2010

Appropriation / Budget Activity/Serial No:

Procurement, Marine Corps (1109) / 05 Support Vehicles / 5093

P-1 Item Nomenclature:

LOGISTICS VEHICLE SYSTEM REPLACEMENT (LVSR)

Program Elements for Code B Items:

0206315M Force Service Support Group

Code:

A

Other Related Program Elements:

	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Program
Proc Qty	145	518	574	240	230	470	0.0	0.0	0.0	0.0		1707
Gross Cost	246.3	255.1	275.9	133.8	109.1	242.9	2.5	2.6	2.6	2.7		1031
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	246.3	255.1	275.9	133.8	109.1	242.9	2.5	2.6	2.6	2.7		1031
Initial Spares	0.0	0.4	11.1	9.4	0.0	9.4	0.0	0.0	0.0	0.0		21.0
Total Proc Cost	246.3	255.6	287.1	143.2	109.1	252.3	2.5	2.6	2.6	2.7		1051.8
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Base Appropriation Request:**

**Logistical Vehicle System Replacement (LVSR):** The LVSR will replace the LVS legacy fleet as the Marine Corps' heavy tactical logistics vehicle. The fleet will be composed of three variants to replace the 5 LVS variants. Cargo, Tractor and Wrecker Variants will be procured. The LVSR will conduct the same missions as the current LVS fleet with the exception that the Cargo vehicle will be capable of handling payloads of 16.5 tons off road as opposed to 12.5 tons and will be more mobile in terms of speed and off-road ride quality.

**FY11 Overseas Contingency Operations Request (OCO): \$109.1M**

The LVSR is the replacement for the aging LVS system and provides greater lift capability to the operating forces. Sustained pre-deployment optempo has stressed the LVS equipment pools thereby degrading the quality of training to forces. These LVSR systems will help alleviate the stress and increase training readiness.

**Flatrack Refueling Capability (FRC):** The Flatrack Refueling Capability (FRC) will consist of a 2500 gal (threshold) - 3000 (objective) gal tank, an onboard pump, filter assembly, and required hoses and equipment. The FRC will be able to provide refueling support to Marine Corps forces in unimproved locations. The FRC is a LVSR-compatible system designed to provide overwing and underwing refueling and defueling for aircraft, and to provide refueling capability for the Force Service Support Group (FSSG) to meet its cross country requirements. FRC funding moved to LI 5097 beginning in FY 2010.

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / Support Vehicles (5) / 5093		P-1 Line Item Nomenclature: LOGISTICS VEHICLE SYSTEM REPLACEMENT (LVSR)		Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b><u>LVSR</u></b>											
LVSR Cargo Variants		53659	188471	490	384634	218474	559	390830	20110	50	402207
LVSR Wrecker Variants			6568	11	597119				27597	45	613271
LVSR Tractor Variants			6233	17	366619	5477	15	365158	53760	145	370761
Modification Kits (ie. Tow Bar, Armor, MCTAGS)		5598	20045			5544			8855		
Integrated Logistics Support		14848	3109			381			677		
Factory Training		5964	2099			1085			1895		
Special Purpose Tools & Test Equipment		1758	1501			577			2537		
Engineering (includes NRE)		2683	1048			556			1083		
Engineering Change Proposals		3879	13040			12269			12804		
Product Verification Test		3200	2201			6743			4508		
Transportation		77	0								
Initial Spares		12	3363								
MCTAGS						16835					
PLS Trailers		2200				8000					
Subtotal		91678	247677			275941			133827		
<b><u>LVSR FY11 OCO</u></b>											
LVSR Cargo Variants									92508	230	402207
Modification Kits (ie. Tow Bar, Armor, MCTAGS)									6510		
Engineering Change Proposals									6671		
Special Purpose Tools & Test Equipment									1566		
Integrated Logistics Support									1845		
Subtotal									109100		
<b><u>Flatrack Refueling Capability (FRC)</u></b>											
		8971									
Defueling Kits		50									
Engineering Change Proposals		241									
First Article Test		432									
Tool Kits		266									
Integrated Logistics Support		1282									
Technical Publications		1423									
Training		67									
Program Management and Support		2033	7467								
Subtotal		14765	7467								
TOTAL		106443	255144			275941			242927		
Active		106443	255144			275941			242927		
Reserve		0	0			0			0		



Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Support Vehicles (5) / 5093			Weapon System Type:			P-1 Line Item Nomenclature: LOGISTICS VEHICLE SYSTEM REPLACEMENT (LVSr)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>LVSr</b>										
<b>FY09</b>										
FY09 Cargo Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	Dec-08	Jun-09	490	384634	Yes	N/A	N/A
FY09 Wrecker Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	Dec-08	Sep-09	11	597119	Yes	N/A	N/A
FY09 Tractor Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	Dec-08	Jul-09	17	366619	Yes	N/A	N/A
<b>FY10</b>										
FY10 Cargo Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	Dec-09	Jun-10	559	390830	Yes	N/A	N/A
FY10 Tractor Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	Dec-09	Jun-10	15	365158	Yes	N/A	N/A
<b>FY11</b>										
FY11 Cargo Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	Dec-10	Jun-11	280	402207	Yes	N/A	N/A
FY11 Wrecker Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	May-11	Mar-12	45	613271	Yes	N/A	N/A
FY11 Tractor Variant	Oshkosh Corporation, Oshkosh, WI	FFP	PEO, LS, Quantico, VA	May-11	Mar-12	145	370761	Yes	N/A	N/A
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE																			Date:		February 2010										
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 05 Support Vehicles / 5093									Weapon System					P-1 Item Nomenclature: LOGISTICS VEHICLE SYSTEM REPLACEMENT (LVSR)																	
									PRODUCTION RATE				PROCUREMENT LEADTIMES																		
ITEM		Manufacturer's NAME / LOCATION							MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		TOTAL			Unit of Measure								
Cargo		Oshkosh Corporation, Oshkosh, WI							15	30	180			2		9		6		11			E								
Wrecker		Oshkosh Corporation, Oshkosh, WI							8	13	30			2		9		6		11			E								
Tractor		Oshkosh Corporation, Oshkosh, WI							20	30	65			2		7		6		9			E								
									Fiscal Year 08										Fiscal Year 09										BALANCE		
									Calendar Year 08										Calendar Year 09												
ITEM		FY	SV	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		AUG	SEP
LVSR Cargo Variant		FY09	MC	490	0	490															A						21	14	17	30	408
LVSR Wrecker Variant		FY09	MC	11	0	11															A									2	9
LVSR Tractor Variant		FY09	MC	17	0	17															A							1	1	1	14
									Fiscal Year 10										Fiscal Year 11										BALANCE		
									Calendar Year 10										Calendar Year 11												
ITEM		FY	SV	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		AUG	SEP
LVSR Cargo Variant		FY09	MC	490	82	408	42	35	35	54	71	66	53	52																	0
LVSR Wrecker Variant		FY09	MC	11	2	9	4	4	1																						0
LVSR Tractor Variant		FY09	MC	17	3	14	1	1	1	1	2	2	2	2	2																0
LVSR Cargo Variant		FY10	MC	559	0	559			A						62	62	62	62	40	40	40	40	40	40	40	31				0	
LVSR Tractor Variant		FY10	MC	15	0	15			A						1	1	1	1	1	1	1	1	1	2	2	2				0	
LVSR Cargo Variant		FY11	MC	280	0	280															A						60	75	65	55	25
LVSR Wrecker Variant		FY11	MC	45	0	45																			A					45	
LVSR Tractor Variant		FY11	MC	145	0	145																			A					145	

Date: February 2010

Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 05 Support Vehicles / 5093	Weapon System	P-1 Item Nomenclature: LOGISTICS VEHICLE SYSTEM REPLACEMENT (LVSR)
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[illegible][illegible][illegible]

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5097						P-1 Item Nomenclature: FAMILY OF TACTICAL TRAILERS						
Program Elements: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty		0	0	0	0	0	0	0	0	0		
Gross Cost	213.1	33.0	34.8	19.2	22.1	41.3	22.0	44.6	58.4	57.4	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	213.1	33.0	34.8	19.2	22.1	41.3	22.0	44.6	58.4	57.4	Cont.	Cont.
Initial Spares	0.0	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Proc Cost	213.1	33.8	35.4	19.2	22.1	41.3	22.0	44.6	58.4	57.4	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**  
**Family of Tactical Trailers:** Funding will provide for the procurement and sustainment of the Marine Corps Family of Tactical Trailers. Additionally, it will sustain the existing legacy tactical trailer fleet including the M101/M101A3 trailers designed for the High Mobility Multipurpose Wheeled Vehicle (HMMWV) and the M870A2E1 trailer designed for the Logistics Vehicle System (LVS)/Logistical Vehicle System Replacement (LVSr).

**Medium Tactical Vehicle Replacement (MTVR) Trailers:** The MTVR Trailer Program is a USMC initiative to replace the current M105 Cargo Trailer, M149 Water Trailer, and the M353 General Purpose trailer with trailers capable of augmenting the MTVR's increased mobility without degrading its operational capabilities. This program will develop and field trailers which will have greater mobility characteristics while maximizing the commonality of parts across the three trailer platforms.

**Flatrack Refueling Capability (FRC):** The Flatrack Refueling Capability (FRC) will consist of a 2500 gal (threshold) - 3000 (objective) gal tank, an onboard pump, filter assembly, and required hoses and equipment. The FRC will be able to provide refueling support to Marine Corps forces in unimproved locations. The FRC is a LVSR-compatible system designed to provide over wing and under wing refueling and defueling for aircraft, and to provide refueling capability for the Force Service Support Group (FSSG) to meet its cross country requirements.

**FY2011 Overseas Contingency Operations Request (OCO):** \$22.1  
 OCO funding is required to address MEB-A Equipment Density List (EDL) shortfalls in MTVR Trailers (Water). The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: February 2010			
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 05 Support Vehicles / 5097					P-1 Item Nomenclature: FAMILY OF TACTICAL TRAILERS					
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011		
Light Tactical Trailers Heavy Chassis	A	D	9.121		1.941	0.344		0.344		
		Q	375		233	38		38		
Chassis Trailer- 3/4 Ton	A	D		0.048	1.954					
		Q		5.0	260					
Integrated Logistics Support/PM Support	A	D	5.429	1.300	1.522	1.5		1.5		
		Q								
LVSr Trailer	A	D		3.138						
		Q		15						
Medium/Heavy Trailers	A	D		0.073						
		Q		3.0						
MTVR Trailers (Water)	A	D		0.801	1.279					
		Q		9	14					
SEMI-TRLR, REFUELER, 5,000 GAL	A	D			1.113					
		Q			4					
TRAILER, LOW BED, 40 TON, M-870A2	A	D			2.326					
		Q			27					
FLATRACK PLS MK-18 LVS	A	D			0.169					
		Q			16					
TRAILER, LOW BED, 50 TON, M-870AE	A	D			4.606					
		Q			50					
Flatrack Refueling Capability (FRC)					2.320					
Program Mmanagement Support										
Totals			14.550	5.360	17.230	1.892	0.000	1.892		
Active			14.550	5.360	17.230	1.892	0.000	1.892		
Reserve			0.000	0.000	0.000	0.000	0.000	0.000		

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5097				P-1 Line Item Nomenclature: FAMILY OF TACTICAL TRAILERS			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements		ID CD	Prior Yrs			FY 09			FY 10			FY 11		
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each
<u>Baseline</u>														
MTVR Trailers:														
MTVR Trailers (Cargo)			6596											
MTVR Trailers (Water)			12957			22268	275	80976	12248	129	94943	15279	157	97317
MTVR Trailers (General Purpose)			2375											
LRIP/First Article Testing, Test Support			5546			1972	Var	Var	3348	Var	Var			
Training						490								
TDP/Engineering Drawings						989								
Program Management and Support						1904			1966			1985		
Subtotal Baseline			27474			27623			17562			17264		
<u>FY11 OCO</u>														
MTVR Trailers (water)												22091	227	97317
Program Management and Support												39		
Subtotal FY11 OCO												22130		
TOTAL			27474			27623			17562			39394		
ACTIVE			27474			27623			17562			39394		
RESERVE			0			0			0			0		

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5097		Weapon System Type:			P-1 Line Item Nomenclature: Family of Tactical Trailers					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
MTVR Trailer FY09 MTVR Trailers (Water)	CMDC, McAlester, OK	FFPO	MCSC, Quantico, VA	Mar-09	Sep-10	275	80976	YES	N/A	N/A
FY10 MTVR Trailers (Water)	CMDC, McAlester, OK	FFPO	MCSC, Quantico, VA	Mar-11	Dec-11	129	94943	YES	N/A	N/A
FY11 MTVR Trailers (Water)	CMDC, McAlester, OK	FFPO	MCSC, Quantico, VA	Mar-11	Mar-12	157	97317	YES	N/A	N/A
FY11 OCO MTVR Trailers (Water)	CMDC, McAlester, OK	FFPO	MCSC, Quantico, VA	Mar-11	Mar-12	227	97317	YES	N/A	N/A

EXHIBIT P-21, PRODUCTION SCHEDULE															Date: February 2010															
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 05 Support Vehicles / 5097										Weapon System					P-1 Item Nomenclature: FAMILY OF TACTICAL TRAILERS															
										PRODUCTION RATE					PROCUREMENT LEADTIMES															
ITEM	Manufacturer's NAME / LOCATION									MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure												
MTVR Trailers(Water/Cargo/General)	CMDIC, McAlester, OK									1	36	75		1	10	9	11	E												
MK970 Semi Trailers	Heil Trailers, Athens, GA									4	8	12		10		22	32	E												
										Fiscal Year 08										Fiscal Year 09										BALANCE
										Calendar Year 08										Calendar Year 09										
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MTVR Trailers(Water/Cargo/General)	FY08	MC	295	0	295																		A							295
MTVR Trailers (Water)	FY09	MC	275	0	275																	A								275
MK970 Semi Trailers	FY07	MC	73	0	73																	12	12	12	12	7	6	6	6	0
MK970 Semi Trailers	FY07	MC	85	0	85																					5	6	6	6	62
										Fiscal Year 10										Fiscal Year 11										BALANCE
										Calendar Year 10										Calendar Year 11										
ITEM	FY	SV	QTY	DEL	BAL	OC	NO	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MTVR Trailers(Water/Cargo/General)	FY08	MC	295	0	295			36	36	36	36	36	36	36	36	7														0
MTVR Trailers (Water)	FY09	MC	275	0	275												29	36	36	36	36	36	36	30						0
MTVR Trailers (Water)	FY10	MC	129	0	129																	A								129
MTVR Trailer ( Water)	FY11	MC	384	0	384																	A								384
MK970 Semi Trailers	FY07	MC	85	23	62	12	12	12	12	12	2																			0
FY11 MTVR Trailers baseline and OCO award on the same contract.																														



[illegible]

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5132				P-1 Item Nomenclature: TRAILERS, ALL TYPES									
Program Elements: 0206315M Force Service Support Group		Code: A	Other Related Program Elements:										
	Prior Years			FY 2009	FY 2010	FY 2011	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Total Prog
Proc Qty													
Gross Cost	123.1			8.4	18.1	8.1	0.0	8.1	0.0	0.0	0.0	0.0	Cont
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc (P-1)	123.1			8.4	18.1	8.1	0.0	8.1	0.0	0.0	0.0	0.0	Cont
Initial Spares				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont
Total Proc Cost	123.1			8.4	18.1	8.1	0.0	8.1	0.0	0.0	0.0	0.0	Cont
Flyaway U/C													
Wpn Sys Proc U/C													

**TRAILERS, ALL TYPES**

The trailers line is made up of temporary facilities that will be purchased to accommodate the Marine Corps' Active Duty End Strength growth from the programmed 175,000 to 202,000. These consist of trailers, expeditionary shelters, & pre-fab structures along with pre-engineered buildings, strung structures, offices, storage containers, armories and sun shades. These shelters will be located throughout the Marine Corps at the following locations: Camp Lejeune, Camp Pendleton, Marine Corps Base Hawaii, Marine Corps Air Stations at Yuma, Miramar and Cherry Point, and the Marine Corps Air Ground Combat Center.

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5132		P-1 Line Item Nomenclature: TRAILERS, ALL TYPES		Weapon System Type:						Date: February 2010			
Weapon System  Elements	Cost	ID CD	PRIOR YRS	FY 09		FY 10			FY 11			FY 12			
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
Family of Relocatable Trailers			123052	8399	VAR	VAR	18066	VAR	VAR	8075	VAR	VAR			

Exhibit P-40, Budget Item Justification Sheet									Date: February 2010			
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 05 Support Vehicles / 5230							P-1 Item Nomenclature: ITEMS LESS THAN \$5M					
Program Elements: 0206315M Force Service Support Group				Code: B	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	102.7	5.4	5.9	6.0	0.0	6.0	6.1	6.2	6.4	6.5	Cont.	Cont.
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	102.7	5.4	5.9	6.0	0.0	6.0	6.1	6.2	6.4	6.5	Cont.	Cont.
Initial Spares												
Total Proc Cost	102.7	5.4	5.9	6.0	0.0	6.0	6.1	6.2	6.4	6.5	Cont.	Cont.
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<p><b><u>Baseline Appropriation Request:</u></b>            This is a roll-up line containing many different support vehicle related items of equipment less than \$5 million each. The funds included in this budget line allow procurement of the following items:  <b>Motor Transport Modifications</b> - Funds Marine Corps unique improvements to fielded Ground Transportation Systems, to include any required government or contractor configuration management for technology improvement insertions to increase Reliability Availability Maintainability-Durability (RAM-D), for total ownership life-cycle cost reductions, and to resolve unexpected vehicle safety concerns.  <b>Marine Security Guards (Vehicles)</b> - Provides various types of vehicles for the Marine Security Guard depending on the requirement of the command/country. The variety includes heavy duty vans, club wagons, caravans, land cruisers and mini-buses.</p>												



<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6054						P-1 Item Nomenclature: Environmental Control Equipment, Assorted						
Program Elements: 0206315M Force Service Support Group					Code: A	Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	31.9	10.5	10.2	5.1	17.8	22.9	5.1	5.2	5.3	5.5	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	31.9	10.5	10.2	5.1	17.8	22.9	5.1	5.2	5.3	5.5	Cont	Cont
Initial Spares												
Total Proc Cost	31.9	10.5	10.2	5.1	17.8	22.9	5.1	5.2	5.3	5.5	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		4.4	4.3	4.3	0.0	4.3	0.8	0.8	0.8	0.8		

**Base Appropriation Request:**  
The Environmental Control Equipment program procures refrigeration units and commercial air conditioners for cooling, dehumidifying, heating, filtering, and circulating air within electronic maintenance shops, radar systems, communications centers, and data computer systems.

**FY2011 Overseas Contingency Operations Request (OCO):** \$17.8  
The OCO funding will procure the replacement of Combat Losses in OEF/OIF and address MEB-A Equipment Density List (EDL) shortfalls of Environmental Control Units (ECU). The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.

Exhibit P-40a, Budget Item Justification for Aggregated Items					Date: February 2010								
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6054				P-1 Item Nomenclature: Environmental Control Equipment, Assorted									
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011					
<u>Baseline</u>													
Environmental Control Equipment (ECU) Integrated	A	D	25.8	1.203	4.355	1.100		1.100					
		Q	VAR	VAR	VAR	VAR		VAR					
.75 Ton (9,000 British Thermal Units ((BTU)) ECU	A	D	1.3	0.457	0.445	0.818		0.818					
		Q	167	60	50	90		90					
1.5 Ton (18,000 BTU) ECU	A	D	4.5	0.191	0.372	0.237		0.237					
		Q	590	24	43	30		30					
3 Ton (36,000 BTU) ECU	A	D	1.0	2.175	0.350	0.663		0.663					
		Q	74	166	35	65		65					
5 Ton (60,000 BTU) ECU	A	D	4.1	3.141	0.310	0.260		0.260					
		Q	133	165	17	14		14					
10 Ton (120,000 BTU) ECU	A	D	1.8	0.595	0.225	0.229		0.229					
		Q	67	20	30	30		30					
Small Field Refrigeration System (SFRS)	A	D	2.5		1.457	1.189		1.189					
		Q	119		50	40		40					
Large Field Refrigeration System (LFRS)	A	D		1.667	1.634								
		Q		50	70								
Tool Kit Refrigeration	A	D	2.6	0.361									
		Q	272	51									
Warranties, Integrated Logistics Support (ILS) and Contractor Logistics Support (CLS)	A	D	2.0	0.745	1.077	0.614	0.447	1.061					
		Q											
Subtotal Baseline			31.9	10.535	10.225	5.110	0.447	5.557					
Totals			31.9	10.535	10.225	5.110	0.447	5.557					
Active				6.174	5.885	0.766	0.447	1.213					
Reserve				4.361	4.340	4.344	0.000	4.344					

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010								
Appropriation / Budget Activity				P-1 Item Nomenclature:										
Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6054				Environmental Control Equipment, Assorted										
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011						
Reserves														
Environmental Control Equipment (ECU) Integrated - Reserves	A	D		0.816	1.985	0.967		0.967						
		Q		VAR	VAR	VAR		VAR						
.75 Ton (9,000 British Thermal Units ((BTU)) ECU - Reserves	A	D				0.409		0.409						
		Q				46		90						
1.5 Ton (18,000 BTU) ECU - Reserves	A	D		0.096		0.237		0.237						
		Q		12		30		30						
3 Ton (36,000 BTU) ECU - Reserves	A	D		1.162		0.663		0.663						
		Q		83		65		65						
5 Ton (60,000 BTU) ECU - Reserves	A	D		2.016	0.310	0.260		0.260						
		Q		112	17	14		14						
10 Ton (120,000 BTU) ECU - Reserves	A	D		0.090				0.000						
		Q		3				30						
Small Field Refrigeration System (SFRS) - Reserves	A	D			0.728	1.164		1.164						
		Q			25	40		40						
Large Field Refrigeration System (LFRS) - Reserves	A	D			0.817									
		Q			35									
Tool Kit Refrigeration - Reserves	A	D		0.181										
		Q		25										
Warranties, Integrated Logistics Support (ILS) and Contractor	A	D			0.500	0.644	0.000	0.644						
Logistics Support (CLS) - Reserves		Q												
Subtotal Reserves				4.361	4.340	4.344	0.000	4.344						



Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6054				P-1 Line Item Nomenclature: Environmental Control Equipment, Assorted			Weapon System Type:			Date:  February 2010			
Weapon System Cost Elements		ID CD	Prior Yrs	FY 09		FY 10			FY 11						
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>FY11 OCO</u>  ENVIRONMENTAL CONTROL EQUIPMENT ASSORTED															

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6274							P-1 Item Nomenclature: Bulk Liquid Equipment					
Program Elements: 0206315M Force Service Support Group					Code: A	Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	TOTAL
Proc Qty												
Gross Cost	139.0	13.7	20.6	10.7	1.6	12.4	1.3	0.9	0.9	0.9	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	139.0	13.7	20.6	10.7	1.6	12.4	1.3	0.9	0.9	0.9	Cont	Cont
Initial Spares												
Total Proc Cost	139.0	13.7	20.6	10.7	1.6	12.4	1.3	0.9	0.9	0.9	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		1.2	1.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont

**Base Appropriation Request:**  
**BULK LIQUID EQUIPMENT** This line is a roll up line that contains the Lightweight Water Purification System (LWPS) , the Tactical Water Purification System (TWPS), formerly the Enhanced Reverse Osmosis Water Purification Unit), and the Family of Water Supply Support Equipment. 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. TWPS provides the Marine Air Ground Task Force with an enhanced capability to produce potable water from salt, brackish, fresh, and nuclear, biological and chemical contaminated water sources at a rate of 1,500 GPH in expeditionary environments. The Family of Water Supply Support Equipment is comprised of 24 different items procured on a continuous buy. It includes all water assets associated with the storage, distribution and analysis of potable water, such as tanks, pumps, showers, water heaters, water test sets, containerized batch laundry units and the expeditionary water packaging system which places the purified water from the LWPS and TWPS into bags ranging from 1 to 3 liters. Funds combat operations, force protection, and replacement of equipment items; funds extended company operations; funds restoration of Marine Corps unit capability to pre-war level; and funds equipment for pre-deployment training.

**FY11 Overseas Contingency Operations Request (OCO): \$1.6M**

Procures replacement for Tactical Water Purification System (TWPS), Lightweight Water Purification System (LWPS) and Field Laundry Unit Combat Battle losses in OEF/OIF.

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6274					P-1 Line Item Nomenclature: Bulk Liquid Equipment			Weapon System Type:		Date: February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11			
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	
<u>Baseline</u>												
Bulk Liquid Equipment Water Purification Systems and various associated extended capability modules for cleaning/waste, Nuclear, Biological and Chemical Treatment/Survivability, ocean intake and cold weather operations)			8312	VAR	VAR	14322	VAR	VAR	8605	VAR	VAR	VAR
Family of Water Supply Support Equipment Various Tanks, Pumps, Pump Modules, Nozzles, Field Laundry Units, Interconnection Sets, Water Packaging, Shower Units			4183	VAR	VAR	4550	VAR	VAR	844	VAR	VAR	VAR
Subtotal Baseline			12495			18872			9449			
<u>FY11 OCO</u>												
Bulk Liquid Equipment Water Purification Systems and various associated extended capability modules for cleaning/waste, Nuclear, Biological and Chemical Treatment/Survivability, ocean intake and cold weather operations)									167	VAR	VAR	VAR
Family of Water Supply Support Equipment Various Tanks, Pumps, Pump Modules, Nozzles, Field Laundry Units, Interconnection Sets, Water Packaging, Shower Units									1461	VAR	VAR	VAR
Subtotal FY11 OCO									1628			
TOTAL			13744			20635			12371			
ACTIVE			12495			18872			11077			
RESERVE			1249			1763			1294			
<u>Reserves</u>												
Bulk Liquid Equipment Water Purification Systems and various associated extended capability modules for cleaning/waste, Nuclear, Biological and Chemical Treatment/Survivability, ocean intake and cold weather operations)			1249	VAR	VAR	1763	VAR	VAR	1294	VAR	VAR	VAR
Subtotal Reserves			1249			1763			1294			

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6277						P-1 Item Nomenclature: Tactical Fuel Systems						
Program Elements: 0206315M Force Service Support Group			Code: A	Other Related Program Elements:								
	Prior Years	FY 2009	FY2010	FY2011 Base	FY2011 OCO	FY2011 Total	FY2012	FY2013	FY2014	FY2015	To Complete	TOTAL
Proc Qty												
Gross Cost	37.1	30.2	68.4	29.3	83.7	113.0	7.2	7.3	20.2	7.7	CONT	CONT
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	37.1	30.2	68.4	29.3	83.7	113.0	7.2	7.3	20.2	7.7	CONT	CONT
Initial Spares												
Total Proc Cost	37.1	30.2	68.4	29.3	83.7	113.0	7.2	7.3	20.2	7.7	CONT	CONT
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		2.9	5.2	4.8	0.0	4.8	0.0	0.0	0.0	0.0	CONT	CONT

**Base Appropriation Request:**  
Tactical Fuel Systems is a rolled line that contains highly versatile fuel systems designed to receive, store, transfer and dispense fuel in support of Marine Air Ground Tactical Force (MAGTF) operations ashore. This program provides over 108 various upgraded elastomeric components to Tactical Fuel Systems, Amphibious Assault Fuel System, Helicopter Expedient Refueling System, Expedient Refueling System, 500-Gallon Collapsible Fabric Drum, Tactical Airfield Fuel Dispensing System, 600 GPM Pump, Hose Reel System, Fire Suppression System and Tactical Petroleum Laboratory Medium, which have met or exceeded the shelf life time limit.

**The Expeditionary Fuel System (EFS)** is comprised of three primary components: a fuel storage and distribution capability (Ground Expedient Refueling Systems, GERS); a fuel analyzer to exploit captured fuels; and an integrated fuel quality and quantity reporting system (FAQQS) that interfaces with common logistics support systems. The Expeditionary fuel System will be fielded to all Operational forces, Reserve Forces and Maritime Prepositioned Ships (MPS).

**Ground Expeditionary Refueling System (GRS)** is a collection of small collapsible tanks, hoses, connectors and pumps used to distribute fuel to Marine Corps ground equipment. Transportable by any vehicle (HMMWV or larger), it requires only incidental operators and is easily set-up and operated. The GERS design has the capability to be tailored to use various logistics and weapons platforms as a fuel distribution vehicle, or as a range-extension capability for units possessing GERS. GERS is being produced in two configurations. Six 28-gallon collapsible bladders and associated dispensing equipment are grouped in small systems, and four 155-gallon bladders and equipment grouped similarly in medium systems. These provide a highly flexible and tailorable distribution capability that matches the requirements for sea-based warfighting, distributed operations, and special operations.

**The Expeditionary Fuel System (EFS) Portable Fuel Analyzer (PFA)** will enhance the current capability of the Tactical Fuel System (TFS) by providing the capability to identify and capitalize captured and indigenous fuel on the battlefield for real-time fuel management. The Portable Fuel Analyzer (PFA) is Man portable, hardened case, battery operated and Compatible with 24 volt

Exhibit P-40, Budget Item Justification Sheet		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6277		P-1 Item Nomenclature: Tactical Fuel Systems
<p>military vehicle. The portable fuel analyzer is designed to identify acceptable fuels through field fuel analysis within 5 minutes. The PFA further meets the demand for reducing fuel logistics in the above warfighting scenarios. It identifies the acceptable type and quality of captured fuel stocks for Marine Air Gound Task Force (MAGTF) exploitation. Fuel used in this manner lessens the logistics burden of supplying fuel from a sea-base or elsewhere.</p> <p><b>The Expeditionary Fuel System Integrated Fuel Quality and Quantity Report System</b> is the final capability that will provide real-time fuel consumption, level and quality information for more efficient and timely logistics responsiveness. All three elements of the EFS work in concert with each other to provide an expeditionary capability unattainable with current equipment because of its bulk and weight.</p> <p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$83.7M</u></b></p> <p>Funds the procurement of Tactical Fuel System Principle End Item (PEI) rotational assets in support of Operation Enduring Freedom (OEF) due to shortages created by the OEF Equipment Deficiency List (EDL), end of shelf life and Combat Losses. Items represented include: 50K Tank (172), 20K Tank (110), 3K Tank (40), Pump module (300), Hose Reel System (13), Storage Module (300), 600 Gallon per Minute (GPM) fuel Pump and SIXCON Fuel Storage Tank Modules (5).</p>		

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6277				P-1 Line Item Nomenclature: Tactical Fuel Systems			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements		ID CD	Prior Yrs TotalCost \$000	FY 09 TotalCost \$000		FY 10 TotalCost \$000		FY 11 TotalCost \$000		FY 11 Qty Each		FY 11 UnitCost \$		
<b>Baseline</b>														
Tactical Fuel System Components (Various Collapsible Fabric Tanks, 50K, 20K, 3K capacity) (Fuel Bladders, 500 gal) (Various Petroleum Test Kits, Fire Suppression Systems) (Various Pumps and Dispensers)			37100	25740	VAR	VAR	46832	VAR	VAR	6158	VAR	VAR		
Expeditionary Fuel System				4490	VAR	VAR	21540	VAR	VAR	23172	VAR	VAR		
<b>Subtotal Baseline</b>			<b>37100</b>	<b>30230</b>			<b>68372</b>			<b>29330</b>				
<b>FY11 OCO</b>														
Tactical Fuel System Components (Various Collapsible Fabric Tanks, 50K, 20K, 3K capacity) (Fuel Bladders, 500 gal) (Various Petroleum Test Kits, Fire Suppression Systems) (Various Pumps and Dispensers)										83698	VAR	VAR		
<b>Subtotal FY11 OCO</b>										<b>83698</b>				
<b>Total Active Reserve</b>			<b>37100</b>	<b>30230</b>			<b>68372</b>			<b>113028</b>				
			<b>37100</b>	<b>27370</b>			<b>63130</b>			<b>108181</b>				
				<b>2860</b>			<b>5242</b>			<b>4847</b>				
<b>Reserves</b>														
Tactical Fuel System Components (Various Collapsible Fabric Tanks, 50K, 20K, 3K capacity) (Fuel Bladders, 500 gal) (Various Petroleum Test Kits, fire Suppression Systems) (Various Pumps and Dispensers)				2860	VAR	VAR	5242	VAR	VAR	4847	VAR	VAR		
<b>Subtotal Reserves</b>				<b>2860</b>			<b>5242</b>			<b>4847</b>				

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6366					P-1 Item Nomenclature: Power Equipment Assorted								
Program Elements: 0206315M FORCE SERVICE SUPPORT GROUP				Code: A	Other Related Program Elements:								
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total	
Proc Qty													
Gross Cost	96.3	52.1	54.8	19.4	41.5	61.0	22.8	23.3	25.2	26.1	Cont	Cont	
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc (P-1)	96.3	52.1	54.8	19.4	41.5	61.0	22.8	23.3	25.2	26.1	Cont	Cont	
Initial Spares													
Total Proc Cost	96.3	52.1	54.8	19.4	41.5	61.0	22.8	23.3	25.2	26.1	Cont	Cont	
Flyaway U/C													
Wpn Sys Proc U/C													
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

**Base Appropriation Request:**  
**Family of Power Equipment**- This joint DoD program includes mobile electric power equipment used throughout the Fleet Marine Forces and Reserves. These are centrally managed items. Sizes and types of Generators and Mobile Electric Power Distribution Systems range from 2 kW to 100 kW in both 60HZ and 400HZ. All generators are selected from the standard family of DoD Mobile Electric Power (MEP) sources. Current generators are from the "Tactical Quiet Generator" (TQG) family. The generators are operationally linked with Command, Control, Communications, Computers and Intelligence (C4I), weapons systems, and all systems requiring electrical power. C4I systems are increasing in power demand, which continues to drive the demand for generators and power distribution sets. C4I and supported weapons systems readiness is directly affected as power equipment readiness decreases. Current average age of generators is greater than 20 years. This program is based on the continuous replacement of generators that have exceeded their life-cycles with ones that incorporate environmental, safety, and performance enhancements.

**Advanced Medium Mobile Power Sources (AMMPS)** With increasing Environmental Protection Agency (EPA) emission standards, the DoD is developing and will be fielding the AMMPS family towards the end of the decade. As the 10-year TQG contracts close-out, they will not be renewed and AMMPS will be the next generation of DoD standard generators.

**Mobile Electric Power Distribution Systems (MEPDIS)** provide a modernized standard family of Mobile Electric Power Distribution Systems to meet Marine Corps power requirements to support a variety of C4I systems and expeditionary forces. MEPDIS is a centrally managed, continuous fielding/replacement effort as systems are damaged, destroyed, or consumed during normal operations. MEPDIS consists of 20 separate components that are configured into capability sets.

**Alternative Power Sources for Communication Equipment (APSCE)** consists of a suite of devices used to provide power to operate communications equipment, computers and peripheral equipment in place of primary batteries (disposable, one time use, lithium batteries) and for scenarios where fuel powered generators are too large, too heavy or unsuitable for use. The purpose of the program is to reduce the use of limited availability batteries, especially hazardous material producing ones, to those applications where they are the only appropriate tactical choice.

**On-Board Vehicle Power (OBVP)** will field upgraded alternators and wiring harnesses to HMMWVs and MTVRs in theater to provide increased electrical capacity necessary to power improved Counter-improvised explosive device (IED) jammers and other on-board power accessories.

**FY11 Overseas Contingency Operations Request (OCO):** \$41.5M

Funding is required to replace combat losses in OEF/OIF and to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan.

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date:		February 2010			
Appropriation / Budget Activity					P-1 Item Nomenclature:						
Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6366					Power Equipment Assorted						
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011			
Alternative Power Sources for Communications /Electronic Equipment	A	D	9.281	1.061	2.597	1.000	1.000	2.000			
		Q	VAR	VAR	VAR	VAR	VAR	VAR			
2KW MEP 531	A	D	4.255	1.186	0.522	0.265		0.265			
(MEP=Mobile Electric Power)		Q	487	229	100	50		50			
3KW MEP 831	A	D	2.484	3.533	1.063	1.128		1.128			
		Q	254	300	100	100		100			
5KW MEP 802	A	D			0.129						
		Q			8						
10KW MEP 813	A	D	2.294	0.089	0.462	0.237		0.237			
		Q	36	4	20	10		10			
10 KW MEP 803	A	D	1.826	0.091	2.752	2.807		2.807			
		Q	104	5	150	150		150			
30KW MEP 805	A	D	2.520		1.616	4.088		4.088			
		Q	91		51	125		125			
30KW MEP 815	A	D	0.352		0.366	0.373		0.373			
		Q	10		10	10		10			
60KW MEP 806	A	D	3.678		1.950	3.158		3.158			
		Q	VAR		52	80		80			
60KW MEP 816	A	D	0.844		0.219	0.223		0.223			
		Q	20		5	5		5			
100KW MEP 807	A	D			2.661						
		Q			40						
MEPDIS-R	A	D	3.731			2.892		2.892			
(MEPDIS= Mobile Electric Power Dist Sys)		Q	VAR			VAR		VAR			
Floodlights	A	D			0.275		0.360	0.010			
		Q			VAR		VAR	VAR			
Power Converters/Supplies/Chargers	A	D	6.044	1.867	4.731	1.240	1.436	2.676			
		Q	VAR	VAR	VAR	VAR	VAR	VAR			
Analyzer Charger Batteries	A	D	6.248	1.438	2.214	1.000	1.438	2.438			
		Q	VAR	VAR	VAR	VAR	VAR	VAR			
Power Equipment Logistics Support Items	A	D	5.184	0.284	1.069	1.008	1.3	2.320			
		Q	VAR	VAR	VAR	VAR	VAR	VAR			
Integrated ECU Trailer-Generator (ITEG)	A	D	4.600								
(ECU=Enviornmental Control Unit)		Q	VAR								
OBVP-MTVR Vehicles	A	D		1.295							
(OBVP=On Board Vehicle Power)		Q		5							
Renewable Energy	A	D		2.000							
		Q		VAR							
Totals			53.341	12.844	22.626	19.419	5.546	24.965			
Active			#VALUE!	12.844	22.626	19.419	5.546	24.965			
Reserve				0.000	0.000	0.000	0.000	0.000			



Exhibit P-5 Cost Analysis			Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6366				P-1 Line Item Nomenclature: Power Equipment Assorted			Weapon System Type:		Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11 OCO					
		TotalCost \$000	TotalCost \$000	Qty	UnitCost \$	TotalCost \$000	Qty	UnitCost \$	TotalCost \$000	Qty	UnitCost \$			
<u>Baseline</u>														
On-Board Vehicle Power (MTVR Kits & Installation)		17235	1500	5	300000									
Power Equipment Assorted (Various Generators, 2KW, 3KW, 10KW 20KW, 30KW, 60KW, 100KW)			22357	VAR	VAR	14933	VAR	VAR						
Mobile Electric Power Distrib Sys Replace (MEPDIS-R)		8100	8185	VAR	VAR	7499	VAR	VAR						
Alternate Power Sources for Communications /Electronic						9742	VAR	VAR						
Integrated Logistics Support (OBVP)		8451	7205											
Baseline Subtotal		33786	39247			32174								
<u>FY11 OCO</u>														
Power Equipment Assorted (Various Generators, 2KW, 3KW, 10KW 20KW, 30KW, 60KW, 100KW)									21793	VAR	VAR			
Mobile Electric Power Distrib Sys Replace (MEPDIS-R)									5000	VAR	VAR			
Alternate Power Sources for Communications /Electronic Equipment (APSCE)									9197	VAR	VAR			
FY11 OCO Subtotal									35990					
TOTAL		33786	39247			32174			35990					
ACTIVE		33786	39247			32174			35990					
RESERVE														

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6366		Weapon System Type:			P-1 Line Item Nomenclature: Power Equipment Assorted					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>FY09</b>										
On-Board Vehicle Power (MTVR Kits & Installation)	OshKosh Truck Co., Oshkosh, WI	FFPO	Contracts, Quantico, VA	Apr-10	Jan-11	5	300000	Y	N/A	N/A
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE														Date:		September 2009																
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6366										Weapon System					P-1 Item Nomenclature: Power Equipment Assorted																	
										PRODUCTION RATE					PROCUREMENT LEADTIMES																	
ITEM		Manufacturer's NAME / LOCATION								MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT	Reorder Mfg PLT	TOTAL				Unit of Measure									
ON-BOARD VEHICLE POWER (400AMP ALTERNATOR)		C.E. NIEHOFF & AMP CO., Evanston, IL								125	125	250			6		2		8				E									
ON-BOARD VEHICLE POWER (HMMWV VEHICLES)		AM GENERAL, South Bend, IN								2	2	4			1		3		4				E									
ON-BOARD VEHICLE POWER (HMMWV KITS)		OSHKOSH TRUCK CO. OSHKOSH, WI								2	2	4			1		8		9				E									
OBVP INTEGRATION INSTALLATION/DEPOT		ALBANY MAINTENANCE CENTER, ALBANY GA										500	500				1		1				E									
ON-BOARD VEHICLE POWER (MTVR KITS&INSTALL)		OSHKOSH TRUCK CO. OSHKOSH, WI								1		1	1		11		9		20				E									
										Fiscal Year 08										Fiscal Year 09										B A L A N C E		
										Calendar Year 08										Calendar Year 09												
ITEM		F Y	S V C	Q T Y	D E L	B A L	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		
FY08																																
ON-BOARD VEHICLE POWER (400AMP ALTERNATOR)		08	MC	6000	0	6000							A		125	125	125	125	125	125	125	125	125	125	125	250	250	250	250	250	3250	
ON-BOARD VEHICLE POWER (HMMWV VEHICLES)		08	MC	15	0	15																				A			2	2	11	
ON-BOARD VEHICLE POWER (HMMWV KITS)		08	MC	20	0	20																					A				20	
OBVP INTEGRATION KIT INSTALLATION/DEPOT		08	MC	6000	0	6000												A	500	500	500	500	500	500	500	500	500	500	500	500	0	
FY09																																
ON-BOARD VEHICLE POWER (MTVR KITS & INSTALLATION)		09	MC	5	0	5																								A	5	
										Fiscal Year 10										Fiscal Year 11										B A L A N C E		
										Calendar Year 10										Calendar Year 11												
ITEM		F Y	S V C	Q T Y	D E L	B A L	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		
FY08																																
ON-BOARD VEHICLE POWER (400AMP ALTERNATOR)		08	MC	6000	2750	3250	250	250	250	250	250	250	250	250	250	250	250	250	250													0
ON-BOARD VEHICLE POWER (HMMWV VEHICLES)		08	MC	15	4	11	2	2	2	2	2	2	1																			0
ON-BOARD VEHICLE POWER (HMMWV KITS)		08	MC	20	0	20					2	2	2	2	2	2	2	2	2	2	2											0
FY09																																
ON-BOARD VEHICLE POWER (MTVR KITS & INSTALLATION)		09	MC	5	0	5									1	1	1	1	1													0
REMARKS:																																

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6518						P-1 Item Nomenclature: Amphibious Support Equipment						
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	84.4	24.7	28.8	11.7	0.0	11.7	5.5	10.9	6.3	5.2	CONT	CONT
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	84.4	24.7	28.8	11.7	0.0	11.7	5.5	10.9	6.3	5.2	CONT	CONT
Initial Spares	2.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Proc Cost	86.7	24.7	29.1	11.7	0.0	11.7	5.5	10.9	6.3	5.2	CONT	CONT
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	4.5	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONT	CONT

**Base Appropriation Request:**  
**Combat Rubber Reconnaissance Craft (CRRC)**- Small, lightweight, inflatable rubber boat utilized as forward-deployed raid platform for small team insertion and extraction. In FY10, CRRC is realigned to the Underwater Reconnaissance Capability (URC).

**Family of Raid/Recon Equipment (FRRE)**- Roll-up line with multiple specialized raid projects encompassing the close quarter battle ensemble used in various Marine units and parachuting equipment used for reconnaissance in support of landing force operations. Includes component sets and ancillary equipment which will provide integration to warfighting concepts of the 21st century. Program will enhance the means to systemize equipment and increase combat multipliers, survivability, durability and functionality over that of the current inventory items.

**Joint Precision Air Drop System (JPADS)**- Parachute delivery system consists 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 zone. Capability provides increased air carrier survivability; ground accuracy standoff delivery; and improved effectiveness and assessment feedback for airdrop missions. JPADS family consists of end items to include Mission Planner (laptop with airdrop mission planning software) and several variants based on gross rigged weight to include Ultra-Lightweight System, 2K pound (lb) System, and 10K pound (lb) System.

**Underwater Breathing Apparatus (UBA)**- Basic life support system required to perform closed-circuit (no bubbles) diving operations. In FY10, UBA is realigned to Underwater Reconnaissance Capability (URC).

**Underwater Reconnaissance Capability (URC)**- Overarching Family of Systems which sustains/enhances capabilities of current and future combatant diving systems to include CRRC, UBA, Combatant Diver Full Face Mask, Waterproof Bag System, Expeditionary Hyperbaric Chamber System, and the Multi-fuel Engine. FY10 efforts include procurement of Tactical Hydrographic Survey Equipment (THSE) which provides electronic subsurface hydrographic charting of landing beach approach lanes. PR11 funds the remaining THSE in FY13/14.

**Bridge Components** - The Bridge Boat line is a roll up line that provides wet gap capabilities with a system comprised of Improved Ribbon Bridge, Bridge and Raft Sets, Bridge Erection Boats, trailers, cradles and pallets allowing transport and passage of 80 ton tracked or 100 ton wheeled vehicles. The components are configured in Bridge Sets or Raft Sets to create an Improved Ribbon Bridge system. A Bridge Set consists of 12 interior and 5 ramp bays. A Raft Set consists of 5 interior and 2 ramp bays. The distance of the wet gap to be spanned and the water current velocity determines the use of the Bridge Set or the Raft Set and the number of Bridge Erection Boats needed to emplace the Bridge System. This effort fulfills the operational requirements to support bridging and amphibious operations for three active Bridge Companies, two reserve Bridge Companies, and three prepositioning squadrons. Beginning in FY11 all Improved Ribbon Bridge Components funding is in BLI 6548 Bridge Boats.

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Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6518				P-1 Line Item Nomenclature: Amphibious Support Equipment			Weapon System Type		Date: February 2010	
Weapon System Cost Elements		ID CD	Prior Yrs TotalCost \$000	FY09 TotalCost \$000	Qty Each	UnitCost \$	FY10 TotalCost \$000	Qty Each	UnitCost \$	FY11 TotalCost \$000	Qty Each	UnitCost \$
<b>Baseline</b>												
FAMILY OF RAID/RECON EQUIPMENT Parachute Systems, Special Purpose Equip and Support			18552	6888	VAR	VAR	3203	VAR	VAR	3221	VAR	VAR
JOINT PRECISION AIR DROP SYSTEM (JPADS) Family of JPADS Systems and Support			6594	815	VAR	VAR	5583	VAR	VAR	5914	VAR	VAR
UNDERWATER RECON CAPABILITY Dive and Boat Systems and Support			4535	4524	VAR	VAR	8468	VAR	VAR	2583	VAR	VAR
BRIDGE COMPONENTS Includes various quantities of Interior Bays, Ramp Bays, Bridge Erection Boats, Boat Trailers, Cradles and Pallets			0	11000	VAR	VAR	11533	VAR	VAR			
<b>Subtotal Baseline</b>			<b>29681</b>	<b>23227</b>			<b>28787</b>			<b>11718</b>		
<b>TOTAL</b>			<b>29681</b>	<b>23227</b>			<b>28787</b>			<b>11718</b>		
<b>ACTIVE</b>			<b>25229</b>	<b>23227</b>			<b>22825</b>			<b>11718</b>		
<b>RESERVE</b>			<b>4452</b>	<b>0</b>			<b>5962</b>			<b>0</b>		
<b>Reserves</b>												
BRIDGE COMPONENTS Bridge Erection Boats, Boat Trailers and Boat Cradles				0			5962	VAR	VAR	0		
<b>Subtotal Reserves</b>				<b>0</b>			<b>5962</b>			<b>0</b>		

Exhibit P-5a, Budget Procurement History and Planning										Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6518				Weapon System Type:			P-1 Line Item Nomenclature: Amphibious Support Equipment				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date	
<b>FY07</b> Multi-Fuel Engine	Bombardier RP US, Inc., Sturtevant WI	GSA	MARCORSYSCOM	Jul-09	Dec-09	588	15000	Yes	N/A	N/A	
REMARKS:											

[illegible]



Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6520								P-1 Item Nomenclature: EOD Systems				
Program Elements: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	4849.0	1342.2	140.7	64.1	214.0	278.1	54.4	160.6	186.6	197.0	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4849.0	1342.2	140.7	64.1	214.0	278.1	54.4	160.6	186.6	197.0	Cont	Cont
Initial Spares												
Total Proc Cost	4849.0	1342.2	140.7	64.1	214.0	278.1	54.4	160.6	186.6	197.0	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Baseline Appropriation Request:**

**ADVANCED MINEFIELD DETECTOR (AMD)** will be employed by the Combat Engineers in the Combat Engineer Battalions, Engineer Support Battalions and the Marine Wing Support Squadrons to fulfill operational mine detection requirements. The system will detect mines in designated areas throughout the theater to expand breach lanes and to assist in countermine clearance efforts. AMD is a man-portable system capable of detecting both metallic and low metallic buried mines regardless of fuse types. Metal detectors will be used to detect caches. Demolition sets provide all of the tools required to build, prime and initiate explosive charges electrically, non-electrically and remote control. The minefield marking set is used to mark cleared lanes through a minefield or hazard area. These items included demolition sets, explosive initiating demolition sets, line charge kits and minefield marking sets. The Advanced Mine Detector uses ground penetrating radar and traditional metal detection to detect landmines.

**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 Mk 155 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.

**COUNTER RCIED ELECTRONIC WARFARE (USMC CREW) SYSTEMS:** USMC CREW systems are vehicle mounted or man portable 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 Radio-Controlled IED threat. The systems protect Convoy elements against the threat of Radio controlled improvised explosive devices (RCIEDs). CREW Increment 2.0 systems (Chameleon and Hunter) consist of a Ground Electronic Countermeasure (G-ECM) system and a vehicle installation kit (VIK). CREW Increment 2.1 (Jan 2009) consists of the CREW Vehicle Receiver Jammer (CVRJ) which is designed to meet the additional capability requirements established in the SON dated 5 Aug 08. Increment JCREW 3.3 is a system of systems scheduled for FY13 which will replace the 2.1 mounted and 3.1 man portable systems and provide Marines on foot, in vehicle convoys and at fixed locations with the necessary protection from the continued and evolving threat of these deadly RCIEDs in all current and future operations.

**MINE RESISTANT AMBUSH PROTECTED (MRAP) VEHICLES:** The MRAP Family of Vehicles (FoV) provides Warfighters multimission 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). Four vehicle categories (CATs) are being 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 GFE/subsystems. MRAP AAO=2225; M-ATV AAO=1,420; TAMCN=Various.

**M9 ARMORED COMBAT EARTHMOVER (ACE) MODERNIZATION:** The M9 ACE is a force multiplier for the combat engineer, performing mobility, counter mobility and survivability missions. The M9 is a highly mobile, fully tracked, armored earthmover capable of supporting forces in both offensive and defensive operations, performing critical combat engineer tasks, such as preparing hull defilade fighting positions for guns and tanks and preparing protected positions for other critical battlefield systems to increase their survivability. Marine Corps Modernization Kit (includes System Improvement Package (SIP) 4 configuration changes to Steel Flanges, Power Pack Removal, Crew Cooling System, One Inch Aluminum Bottom, Steel Apron and Blade, Integrated Vision System, Hydraulic System and Stowage Rack

**FAMILY OF EOD EQUIPMENT:** To support 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 materiel. 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 tools which include Modernized Demolition Initiator, Hook and Line Kit, Non-Invasive Fille Identification Tool, EOD Man Portable Robotics, Tele-Present Remote Aiming Platform, Self Contained Breathing Apparatus (SCBA), EOD Chemical Biological Nuclear Radiological Equipment (CBRNE), and Advanced Ordnance Locators.

**FAMILY OF EOD EQUIPMENT for VEHICLE INTERCOMS (TOCNET):** TOCNET is a robust and full featured digital intercommunications system. TOCNET can be found at a variety of USMC units, and recently was selected to be the intercommunication system for all DoD Mine Resistant Ambush Protected (MRAP) vehicles.

**Z Backscatter Van (ZBV Ruggedization Upgrade):** Removes the ZBV scanning equipment from the current COTS configured chassis and mounts it onto a military trailer that is more appropriate for use in theater operations. The ZBV is a low-cost, extremely maneuverable "drive-by" screening system that allows one or two operators to conduct X-ray imaging of suspect vehicles and objects.

**Rapiscan Secure 1000:** The system produces high resolution images that enable the operator to easily identify concealed threat and contraband items. The Rapiscan Secure 1000 is ideal for high security environments because both organic (e.g. explosives, narcotics, ceramic weapons) and inorganic (e.g. metal) materials are apparent in the image.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date:	February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6520		P-1 Item Nomenclature: EOD Systems	
<p><b><u>Baseline Appropriation Request:</u></b></p> <p><b>JOINT ASSAULT BRIDGE (JAB)</b> is an armored vehicle used for rapidly employing, short-gap, assault crossing system, capable of spanning natural and manmade obstacles up to 60 feet (18.29) while under fire for up to Military Load Class (MLC) 70-ton vehicles. The JAB consists of a rebuilt and upgraded M1A1 Tank chassis with existing MLC70 scissors bridge and a commercial launcher. The JAB will provide the MAGTF with the capability to conduct assault and tactical wet and dry gap crossings in all types of climate and terrain, including slopes, trenches and vertical steps. The M1A1 based launcher will provide the survivability, maintainability and maneuverability required to keep pace with the maneuver force.</p> <p><b>LIGHTWEIGHT MINE ROLLERS</b> - can be attached to wheeled vehicles to counter pressure initiated Improvised Explosive Devices threats. The rollers can be mounted to HMMWV, MTRV, LAV, and JERRV/Cougar vehicles to minimize damage to vehicles and, more importantly, prevent injury or loss of life to those Marine/Sailors/Soldiers in the vehicle crew compartment. Increased demand and use of rollers are decreasing current inventory levels at rapid rate.</p> <p><b>ROUTE CLEARANCE FAMILY OF SYSTEMS (RC FOS):</b> Provides capabilities not found in the current Joint land force structure to defeat explosive hazards and protect Marines and equipment while conducting route and area clearance operations. The FoS for Route Clearance will enable Commanders to deliberately operate in explosive hazards environments by detecting and marking explosive hazards, enabling the Commanders to make timely and informed decisions to avoid the explosive hazards, or, if necessary, neutralize explosive hazards that impede their missions. Multiple detection and marking capabilities will detect a broader spectrum of explosive hazards and achieve higher overall effectiveness rates. Standoff and remote-controlled detection and marking capabilities will remove Joint forces from direct contact with explosive hazards and enhance force protection and the vehicles' system survivability. Operational speeds and rates will increase and better support the operational tempo (OPTEMPO) of the current and future force.</p> <p><b>SPIDER SMART MINE SYSTEMS:</b> Ground emplaced networked munitions system that will replace persistent anti-personnel landmines. The Spider munitions system supports the Joint Operation Concepts of Major Combat Operations, Stability Operations and the Joint Functional Concepts of Protection, Force Application and Focused Logistics to support Marine Expeditionary Forces.</p> <p><b><u>FY11 Overseas Contingency Operations Request (OCO): \$213.9M</u></b></p> <p><b>COUNTER RCIED ELECTRONIC WARFARE (USMC CREW) SYSTEMS:</b> USMC CREW 2.1 CREW Vehicle Receiver Jammer (CVRJ) System Band C Upgrade. CREW systems are designed to jam threats within the frequency spectrum that have been identified by theater commanders. Current systems jam the Band A and Band B range (actual freq spectrum classified). Threats in the higher Band C ranges have been identified by JIEDDO and the Joint Threat Working Group as near term and must be addressed. This upgrade will not replace existing systems. It will be an adjunct device to be installed alongside existing jammers to increase the spectrum coverage.</p> <p><b>ROUTE CLEARANCE FAMILY OF SYSTEMS (RC FOS):</b> Provides R2C equipment to accomplish HST prior to OEF deployment. Accelerates procurement of items needed to field 8 sets of R2C requested by MARFORCOM to provide HST capability ISO OEF PTP. This request will fund procurement of ancillary equipment (rollers, robots, detection systems, etc.) to complement available MRAP vehicles. Based on operational lessons learned MARCENT has requested that MEB Route Clearance capability be doubled to address IED threat. Three sets of R2C are currently programmed for each MEB. Accelerates procurement of items needed to field additional 3 sets of R2C per MEB and 6 sets for an in-theater Operational Readiness Float (ORF). This request will fund procurement of ancillary equipment (rollers, robots, detection systems, etc.) to complement available MRAP vehicles and contractor support needed to manage the complicated logistics associated with this program.</p>			

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Exhibit P-5 Cost Analysis			Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6520				P-1 Line Item Nomenclature: EOD Systems		Weapon System Type:		Date:  February 2010	
Weapon System  Elements	Cost	ID CD	Prior Yrs	FY 09		FY 10			FY 11			
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b>Baseline</b>												
Assault Breacher Vehicle			82178	20010	6	3335000	18266	6	3044333	18267	6	3044415
Ancillary Equipment (Plows, Blades, Rapid Ordnance)				4990	VAR	VAR	2425	VAR	VAR	2928	VAR	VAR
				25000			20691			21195		
Armored Combat Earthmover (ACE) SIP 4							19008	VAR	VAR			
Counter RCIED Electronic Warfare (USMC CREW)												
Increment 2.1 - CREW Vehicle Receiver Jammer (CVRJ)			149141	175860	2723	65000						
Increment 2.1 Band C Upgrades				12753	425	30000	5096	170	30000	12199	406	30000
Increment JCREW 3.3												
Support Equipment			9248	5300	VAR	VAR						
Initial Spares			18093	11932	VAR	VAR						
Initial Support			6077	8000	VAR	VAR						
Program Support/Engineering Change Proposals (ECP)			802		VAR	VAR	6085	VAR	VAR			
			183360	213845			11181			12199		
EOD												
EOD specialized Equipment and Tool Kits			6766	49655			17478	VAR	VAR	10852	VAR	VAR
Engineer Range Remote Firing Devices			1932	6388	VAR	VAR	3743					
				56043			21221			10852		
Joint Assault Bridge												
Bridge Launcher				3800	2	1900000	12000	8	1500000			
Dozer Blade				420	2	210000	1600	8	200000			
Vehicle Integration				4200			10035					
Program Support & Rebuild				1713			4000					
				10133			27635					
Lightweight Mine Rollers							7650	VAR	VAR			
Mine Resistant Ambush Protected Vehicles												
Vehicles			1912581	429538	991	433439						
GFE			775311	410458	VAR	VAR						
Logistics			564600	131992	VAR	VAR						
Upgrades			475269	50763	VAR	VAR						
Automotive Testing			123538	249	VAR	VAR						
Facilities/Other			18824		VAR	VAR						
			3870123	1023000								
Route Reconnaissance and Clearance Family of							21758	VAR	VAR	19847	VAR	VAR
Various core platforms (Cougar, Buffalo, Husky vehicles) with Lightweight Mine Rollers, Robots, Vehicle Mounted Mine Detectors, Ground Penetrating Radar, Lightweight												
Spider Smart Mine Systems							8710	VAR	VAR			
Z-Backscatter Ruggedized Trailer				12411	8	1551375						
Subtotal Baseline				1340462			137854			64093		

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6520				P-1 Line Item Nomenclature: EOD Systems	Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09				FY 10			FY 11	
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<b><u>FY11 OCO</u></b>											
<b>Counter RCIED Electronic Warfare (USMC CREW)</b>											
CREW Vehicle Receiver Jammer (CVRJ) Band C									172590	5753	30000
Support Equipment											
Initial Spares											
Initial Support									660	VAR	VAR
Program Support/Engineering Change Proposals (ECP)									<b>173250</b>		
<b>EOD</b>											
EOD specialized Equipment and Tool Kits									<b>11013</b>	VAR	VAR
<b>Route Reconnaissance and Clearance Family of</b>											
Various core platforms (Cougar, Buffalo, Husky vehicles)											
with Lightweight Mine Rollers, Robots, Vehicle Mounted											
Mine Detectors, Ground Penetrating Radar, Lightweight											
Route Clearance Blades									<b>29722</b>	VAR	VAR
<b>Subtotal FY11 OCO</b>									<b>213985</b>		
<b>Subtotal Baseline</b>			<b>1340462</b>			<b>137854</b>			<b>64093</b>		
<b>Total</b>			<b>1340462</b>			<b>137854</b>			<b>278078</b>		
<b>Active</b>			<b>1340462</b>			<b>137854</b>			<b>278078</b>		
<b>Reserves</b>			<b>0</b>			<b>0</b>			<b>0</b>		

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6520				Weapon System Type:		P-1 Line Item Nomenclature: EOD Systems				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
ABV										
FY09	Anniston Army Depot, AL	MIPR	TACOM, Warren, MI	Feb-09	Jan-10	6	3335000	Yes	No	N/A
FY10	Anniston Army Depot, AL	MIPR	TACOM, Warren, MI	Jan-10	Nov-10	6	3044333	Yes	No	N/A
FY11	Anniston Army Depot, AL	MIPR	TACOM, Warren, MI	Nov-10	Nov-11	6	3044415	Yes	No	N/A
Counter RCIED Electronic Warfare (USMC CREW)										
FY08 CREW Vehicle Receiver Jammer (CVRJ)	ITT, 1000 Oaks, CA	FFP	NAVSEA, Washington D.C	Mar-09	Jun-09	2277	65499	N/A	N/A	N/A
FY09 CREW Vehicle Receiver Jammer (CVRJ)	ITT, 1000 Oaks, CA	FFP	NAVSEA, Washington D.C	Mar-09	Aug-09	2723	65000	N/A	N/A	N/A
FY09 CREW CVRJ Band C Upgrade	ITT, 1000 Oaks, CA	FFP	NAVSEA, Washington D.C	Sep-10	Apr-11	425	30000			
FY10 CREW CVRJ Band C Upgrade	ITT, 1000 Oaks, CA	FFP	NAVSEA, Washington D.C	Sep-10	Apr-11	170	30000	N/A	N/A	N/A
FY11 CREW CVRJ Band C Upgrade	ITT, 1000 Oaks, CA	FFP	NAVSEA, Washington D.C	Sep-10	Apr-11	406	30000			
<b>FY11 OCO</b>										
FY11 CREW Vehicle Receiver Jammer (CVRJ) Band C upgrade	ITT, 1000 Oaks, CA	FFP	NAVSEA, Washington D.C	Apr-10	Jun-11	5753	30000	N/A	N/A	N/A
Joint Assault Bridge										
FY09 - Bridge Launcher	BAE Land Systems, UK	FFP	MCSC, Quantico, VA	May-10	Apr-11	2	1900000	Yes	N/A	N/A
FY09 - Dozer Blade	Pearson LTD, UK	FFP	MCSC, Quantico, VA	May-10	Apr-11	2	210000	Yes	N/A	N/A
FY10 - Bridge Launcher	BAE Land Systems, UK	FFP	MCSC, Quantico, VA	May-10	May-11	8	1500000	Yes	N/A	N/A
FY10 - Dozer Blade	Pearson LTD, UK	FFP	MCSC, Quantico, VA	May-10	May-11	8	200000	Yes	N/A	N/A
FY10 - Bridge Launcher	BAE Land Systems, UK	FFP	MCSC, Quantico, VA	Dec-10	Oct-11	8	1551375	Yes	N/A	N/A
Remarks:										

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Engineer and Other Equipment (6)		Weapon System Type:			P-1 Line Item Nomenclature: EOD SYSTEMS					
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Fiscal Years										
Mine Resistant Ambush Protected Vehicles										
FY07 Category II JERRV- Sole Source	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Nov-06	Feb-07	101	633,000	Yes	N/A	N/A
FY07 Category III Buffalo- Sole Source	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Nov-06	Mar-07	44	699,000	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	May-07	65	510,540	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	GDLS	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	Aug-07	10	529,509	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	Oshkosh	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	Jul-07	100	306,199	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	PVI	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	Jun-07	60	624,074	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	BAE	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	Apr-07	69	629,800	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	Apr-07	60	570,364	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	GDLS	FFP/IDIQ	MCSC, Quantico, VA	Feb-07	Aug-07	10	571,920	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Apr-07	Aug-07	772	444,311	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Apr-07	Aug-07	228	530,122	Yes	N/A	N/A
FY07 Category III Buffalo- Sole Source	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	May-07	Feb-08	14	699,000	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	IMG	FFP/IDIQ	MCSC, Quantico, VA	Jun-07	Sep-07	450	548,172	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Jun-07	Jan-08	30	474,598	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	BAE (Ambulances)	FFP/IDIQ	MCSC, Quantico, VA	Jun-07	Sep-07	5	776,800	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Jun-07	Jan-08	14	570,364	Yes	N/A	N/A
FY07 Category I Vehicles- Competitive	Armor Holdings	FFP/IDIQ	MCSC, Quantico, VA	Jul-07	Dec-07	1020	443,000	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	Armor Holdings	FFP/IDIQ	MCSC, Quantico, VA	Jul-07	Dec-07	10	457,599	Yes	N/A	N/A
FY07 Category II Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Dec-07	Apr-08	17	457,599	Yes	N/A	N/A
FY08 Category I Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Oct-07	Mar-08	480	445,000	Yes	N/A	N/A
FY08 Category II Vehicles- Competitive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Oct-07	Mar-08	81	570,000	Yes	N/A	N/A
FY09 Category I Vehicles - Competetive	Force Protection Inc	FFP/IDIQ	MCSC, Quantico, VA	Jan-09	Jul-09	2	526,692	Yes	N/A	N/A
FY09 M-ATV - Competitive	Oshkosh Truck Corp	FFP/IDIQ	Warren, MI	Jun-09	Jul-09	942	434,445	Yes	N/A	N/A
FY10 M-ATV - Competitive	Oshkosh Truck Corp	FFP/IDIQ	Warren, MI	Nov-09	Jan-10	478	430,408	Yes	N/A	N/A
Remarks:										

EXHIBIT P-21, PRODUCTION SCHEDULE																	Date: February 2010																
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6520					Weapon System				P-1 Item Nomenclature: EOD Systems																								
					PRODUCTION RATE				PROCUREMENT LEADTIMES																								
ITEM	Manufacturer's NAME / LOCATION				MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial PLT	Mfg	Reorder	Mfg PLT	TOTAL	Unit of Measure																
CREW Vehicle Receiver Jammer (CVR)	ITT, 1000 Oaks, CA				500	1000	3000			5		3		5		8	E																
CREW Vehicle Receiver Jammer (CVR)	TBD				TBD	TBD	TBD																										
Assault Breacher Vehicle (ABV)	Anniston Army Depot/BAE Land Systems				1	2	3			4		11		11		15	E																
Joint Assault Bridge (JAB)	BAE United Kingdom/Anniston Army Depot				1	2	3			0		11		12		11	E																
					Fiscal Year 08				Fiscal Year 09								B A L A N C E																
									Calendar Year 08								Calendar Year 09																
ITEM	F Y	S V C	Q T Y	D E L	B A L	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	B A L A N C E			
Assault Breacher Vehicle (ABV)	FY09	MC	6	0	6																	A									6		
Assault Breacher Vehicle (ABV)	FY09	A	9	0	9																	A									9		
CREW Vehicle Receiver Jammer (CVRJ)	FY08	N	2277	0	2277																		A			445	1000	832			0		
CREW Vehicle Receiver Jammer (CVRJ)	FY09	N	2723	0	2723																		A					168	1000	1555			
	FY08	MC	265	0	265											A	22	22	22	22	22	22	22	22	22	22	22	22	23	0			
	FY08	MC	452	0	452																		A							38	414		
	FY08	MC	58	0	58																		A	3	5	8	10	10	10	12			
	FY09	MC	8	0	8														A												8		
					Fiscal Year 10				Fiscal Year 11								B A L A N C E																
									Calendar Year 10								Calendar Year 11																
ITEM	F Y	S V C	Q T Y	D E L	B A L	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	B A L A N C E			
Assault Breacher Vehicle (ABV)	FY09	MC	6	0	6				2	1	1	1	1	1	1	1	1	1													0		
Assault Breacher Vehicle (ABV)	FY09	A	9	0	9					1	1	1	1	1	1	1	1	1													0		
Assault Breacher Vehicle (ABV)	FY10	MC	6	0	6				A									2	2	2											0		
Assault Breacher Vehicle (ABV)	FY11	MC	6	0	6																										6		
CREW Vehicle Receiver Jammer (CVRJ)	FY09	N	2723	1168	1555	1000	555																								0		
CREW Vehicle Receiver Jammer (CVRJ) Band C Upgra	FY09	N	425	0	425							A														425							
CREW Vehicle Receiver Jammer (CVRJ) Band C Upgra	FY10	N	170	0	170							A														170							
CREW Vehicle Receiver Jammer (CVRJ) Band C	FY11	N	406	0	406							A														406					0		
FY11 OCO																																	
CREW Vehicle Receiver Jammer (CVRJ) Band C	FY11	N	5753	0	5753							A															1000	1000	1000	1000	1753		
Joint Assault Bridge (JAB) - Bridge Launcher	FY09	MC	2	0	2								A												2						0		
Joint Assault Bridge (JAB) - Bridge Launcher	FY10	MC	8	0	8								A													2	2	2			2		
REMARKS: Production will include manufacture of Army and Marine Corps assets																																	







<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6438						P-1 Item Nomenclature: Physical Security Equipment						
Program Elements: 0206315M Force Service Support Group (Marine Corps)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	303.8	86.2	15.8	16.4	5.2	21.6	33.7	54.1	49.8	44.1	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	303.8	86.2	15.8	16.4	5.2	21.6	33.7	54.1	49.8	44.1	Cont	Cont
Initial Spares												
Total Proc Cost	303.8	86.2	15.8	16.4	5.2	21.6	33.7	54.1	49.8	44.1	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves												

**Base Appropriation Request:**  
**PHYSICAL SECURITY** - Physical security systems are used at base flight lines and Arms, Ammunition and Explosive (AA&E) sites), in expeditionary environments, Other Critical Assets (OCA), Mission Essential Vulnerable Areas, support the Marine Corps Critical Infrastructure Protection (CIP) Program and include capital plant equipment specifically designed for physical security in military construction (MILCON) projects. This budget line provides funding to procure investment items, devices and systems necessary for United States Marine Corps installations and facility infrastructure to comply with Congressional, White House Military Office, Department of Defense, Department of Navy, Marine Corps Physical Security and Antiterrorism Directives pertaining to security equipment and electronic security systems (ESS) as technological solutions to manpower intensive security requirements; and to provide a systematic, uniform capability throughout Marine Corps installations to deter, delay, and defeat espionage, sabotage, damage, theft, and terrorist acts against Marine Corps personnel, resources, installations and facilities. These systems upgrade and replace antiquated systems that are costly to maintain and upgrade security in neglected areas. The Marine Corps Electronic Security System (MCESS) Program provides Intrusion Detection, Access Control to include automated entry control systems, Mass Notification, Closed-Circuit Television (CCTV) and other surveillance equipment support by Visual Assessment Capabilities with digital recording. Mass Notification Systems provide warning capability to personnel in event of emergencies or changes in Force Protection Conditions. These systems increase efficiency/effectiveness of available security manpower and improve safety and security at access points. The systems reduce vulnerabilities and maintain mission readiness and enhance mission capabilities in support of Flight Line Security. Support to the War Fighter with technology and equipment; increases assessment capability outside the established perimeter at Forward Operating/Enduring Bases. Ground based radars support Expeditionary Missions (improved assessment at long distances) allowing for greater defensive posture and response capabilities.

**GROUND-BASED OPERATIONAL SURVEILLANCE SYSTEM (GBOSS)** – This program provides persistent (24/7) tracking of objects of interest through the use of a unique, 360-degree, high resolution, day/night surveillance capability for enhanced target recognition and situational awareness, which enables timely and appropriate response options (direct air attack, indirect fire, and ground patrol/attack). Each system can operate independently and consists of five main components: elevated platform, multi-spectral sensor suite, radar sensor systems suite, as well as a ground control system (GCS) and a remote ground station (RGS). The elevated platform is a 106-foot tower. The optical sensor consists of an Electro-Optic color daytime camera, an Infrared black and white day or night camera, spotter scope, a laser range finder (LRF) and a laser pointer (LP). The radar sensor systems are modular and composed of tailorable sensor groups using multiple ground-sensing technologies (Doppler, thermal, seismic, acoustic, audio) consisting of multimode sensors for detection, location and classification to perform mission tasks such as perimeter defense, surveillance and situational awareness. The Remote Ground Station allows the user to operate from a significant distance away from the system.

**FY11 Overseas Contingency Operations Request (OCO): \$5.2M**

The OCO funds will procure Joint Expeditionary Forensic Facilities (JEFF) labs. The Marine Corps has had tremendous success with the JEFF labs in Operation Iraqi Freedom (OIF). The capabilities provided by the JEFF labs include ballistic matching of weapons to specific incidents and the capturing of latent prints and DNA from weapons, safe houses, and other sensitive sites or materials. The information received from the JEFFs have lead to the identification and dismantling of terrorist and insurgent cells and IED-networks, the successful prosecution of terrorists and insurgents in the Central Criminal Courts of Iraq (CCCI), the generation and quick turn of actionable intelligence for targeting purposes, and the population of terrorist and insurgent biometrics into biometrically-enabled terrorist watch lists (both National and DoD watch lists). The JEFF labs will be provide Marines in Operation Enduring Freedom (OEF) with the same capabilities that generate actionable intelligence and link individuals and events.

Exhibit P-5 Cost Analysis			Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6438				P-1 Line Item Nomenclature:  Physical Security Equipment			Weapon System		Date:  February 2010			
Weapon System Cost Elements			ID CD	Prior Yrs	FY 09		FY 10			FY 11					
				TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$		
<u>Baseline</u>															
INSTALLATIONS PHYSICAL SECURITY			A	82500	28268	VAR	VAR	6383	VAR	VAR	5530	VAR	VAR		
COLLATERAL EQUIPMENT PHYSICAL SECURITY			A	6962	7107	VAR	VAR	6745	VAR	VAR	10889	VAR	VAR		
GROUND BASED OPERATIONAL SURVEILLANCE (G-BOSS)					50854	VAR	VAR	2720	VAR	VAR					
Subtotal Baseline				89462	86229			15848			16419				
<u>FY11 OCO</u>															
INSTALLATIONS PHYSICAL SECURITY			A								5200	VAR	VAR		
Subtotal FY11 OCO											5200				
TOTAL				89462	86229			15848			21619				
ACTIVE				89462	86229			15848			21619				
RESERVE					0			0			0				

Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6441						P-1 Item Nomenclature: Garrison Mobile Engineer Equipment (GMEE)						
Program Elements: 0206496M Base Operations, Forces (Marine Corps)				Code: A		Other Related Program Elements:						
	Prior Years	FY2009	FY2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total
Proc Qty												
Gross Cost	78.2	9.4	11.8	11.0	0.0	11.0	12.3	12.5	12.8	13.1	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	78.2	9.4	11.8	11.0	0.0	11.0	12.3	12.5	12.8	13.1	Cont	Cont
Initial Spares		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont
Total Proc Cost	78.2	9.4	11.8	11.0	0.0	11.0	12.3	12.5	12.8	13.1	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**

**Command Support Equipment** - Funds in this line provide for the procurement/replacement of 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.

**Garrison Mobile Engineer Equipment (GMEE)** - Funds in this line provide for the procurement of centrally managed GMEE for United States Marine Corps Bases and Stations. The replacement has been developed on an as-required basis because most commercial engineer construction equipment exceeds life expectancy. The procurement source is Defense Supply Center Philadelphia (DSCP).

**Material Handling Equipment (MHE) (Bases and Stations)** - Funds in this line provide for the replacement of centrally managed forklifts, warehouse cranes, and platform trucks. The replacement program has been developed on an as-required basis because most commercial Material Handling Equipment exceeds life expectancies developed and promulgated by Department of Defense (DoD) directives.

**Warehouse Modernization** - Funds in this line provide for more efficient use of limited warehouse space. This program enables procurement of equipment essential to the efficiency and economy of storage/packaging operations, maximizes and improves the utilization of manpower, cubic storage space, and provides timely support for deployment actions.

[illegible]

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6441					P-1 Line Item Nomenclature: Garrison Mobile Engineer Equipment (GMEE)			Weapon System Type:			Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY2009			FY2010			FY2011					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
GARRISON MOBILE ENGINEERING EQUIPMENT	A	43814	4679	VAR	VAR	5490	VAR	VAR	5046	VAR	VAR			
Low density procurements of multiple configurations of light, medium and heavy duty Garrison Mobile Engineering Equipment (mowers, ditching machines, sweepers, tractors, bulldozers, cranes, etc) for all USMC Base and Stations.														
TOTAL ACTIVE RESERVE			4679 4679 0			5490 5490 0			5046 5046 0					

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6462							P-1 Item Nomenclature: FAMILY OF MATERIAL HANDLING EQUIPMENT					
Program Elements: 0206315M Force Service Support Group		Code: A		Other Related Program Elements:								
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	176.6	88.8	98.2	24.4	58.3	82.6	21.2	19.9	17.6	18.3	CONT	CONT
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	176.6	88.8	98.2	24.4	58.3	82.6	21.2	19.9	17.6	18.3	CONT	CONT
Initial Spares												
Total Proc Cost	176.6	88.8	98.2	24.4	58.3	82.6	21.2	19.9	17.6	18.3	CONT	CONT
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		6.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONT	CONT

**Tractor Multipurpose (TRAM) Base Appropriation Request:**  
FAMILY OF MATERIAL HANDLING EQUIPMENT  
The Material Handling Equipment (MHE) line is a roll-up line that funds for the replacement and service life extension of Material Handling Equipment which includes forklifts, cranes, and container handlers. The replacement/service life extension program has been developed on an 'as required' basis. History has confirmed that many items of MHE have been maintained beyond the life expectancies developed and promulgated by Department of Defense (DoD) directives. This roll-up line includes funding for the Extended Boom Forklift; Light Rough Terrain Forklift, Tractor, Rubber Tired, Articulated Steering, Multi-Purpose (TRAM) with buckets and fork attachments, Kalmar Rough Terrain Container Handler, All Terrain Crane (MAC-50), and the Light Capability Rough Terrain Crane (7.5 ton).

**FY11 Overseas Contingency Operations Request (OCO): \$58.3M**  
Procures for combat losses and is required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan. The funding will procure the Light Rough Terrain Forklift, Extended Boom Forklift, Rough Terrain Container Handler and Tractor, Rubber Tired, Articulated Steering, Multi-Purpose (TRAM).



Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6462					P-1 Line Item Nomenclature: FAMILY OF MATERIAL HANDLING EQUIPMENT			Weapon System Type:		Date: February 2010			
Weapon System Cost Elements		ID CD	Prior Yrs TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	Unit Cost \$			
<u>Baseline</u>															
Family of Material Handling Equipment															
All Terrain Crane (50 Ton)			73650	18124	27	671263	7384	11	671263						
Engineering Equipment Armoring				15981	VAR	VAR									
Extended Boom Forklift							19224	142	135382	11643	86	135382			
Rough Terrain Container Handler (RTCH)			18517	11398	15	759898	22797	30	759898						
Tractor Multipurpose (TRAM)			75124	41360	215	192372	35765	138	259168						
Truck Forklift Light (LRTF)			9274				10889	94	115837	11815	102	115837			
Integrated Logistics Support				1949			2118			918					
Subtotal Baseline			176565	88813			98177			24376					
<u>FY11 OCO</u>															
Family of Material Handling Equipment															
Extended Boom Forklift										10966	81	135382			
Rough Terrain Container Handler (RTCH)										9886	13	760436			
Tractor Multipurpose (TRAM)										26176	101	259168			
Truck Forklift Light (LRTF)										11236	97	115837			
Subtotal FY11 OCO										58264					
TOTAL			176565	88813			98177			82640					
ACTIVE			176565	82662			90894			82640					
RESERVE				6151			7283								
<u>Reserves</u>															
Family of Material Handling Equipment															
Tractor Multipurpose (TRAM)				6151	32	192372	7283	28	259168						
Subtotal Reserves				6151			7283								

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6462			Weapon System Type:			P-1 Line Item Nomenclature: FAMILY OF MATERIAL HANDLING EQUIPMENT				
WBS Cost Elements:	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
All Terrain Crane										
FY09	Terex, Westport, CT	FFP	MCSC Quantico, VA	Apr-09	Apr-10	27	671263	Yes	No	N/A
FY10	Terex, Westport, CT	FFP	MCSC Quantico, VA	Apr-10	Nov-10	11	671263	Yes	No	N/A
Extended Boom Forklift										
FY10	TBD	TBD	TBD	TBD	TBD	142	135382	Yes	No	N/A
FY11	TBD	TBD	TBD	TBD	TBD	86	135382	Yes	No	N/A
FY11 OCO	TBD	TBD	TBD	TBD	TBD	81	135382	Yes	No	N/A
Rough Terrain Cont Handler										
FY09	Kalmar, Cibolo, TX	MIPR	TACOM, Warren, MI	Aug-09	Jun-10	15	759898	Yes	No	N/A
FY10	Kalmar, Cibolo, TX	MIPR	TACOM, Warren, MI	Jan-10	Nov-10	30	759898	Yes	No	N/A
FY11 OCO	Kalmar, Cibolo, TX	MIPR	TACOM, Warren, MI	Jan-11	Nov-11	13	760436	Yes	No	N/A
Tractor Multi-Purpose (TRAM)										
FY09 - Active	John Deere, Moline, IL	FFP	MCSC Quantico, VA	Oct-09	Sep-10	215	192372	Yes	No	N/A
FY09 - Reserve	John Deere, Moline, IL	FFP	MCSC Quantico, VA	Oct-09	Sep-10	32	192372	Yes	No	N/A
FY10 - Active	John Deere, Moline, IL	FFP	MCSC Quantico, VA	Jan-10	Dec-10	138	259168	Yes	No	N/A
FY10 - Reserve	John Deere, Moline, IL	FFP	MCSC Quantico, VA	Jan-10	Dec-10	28	259168	Yes	No	N/A
FY11 OCO	John Deere, Moline, IL	FFP	MCSC Quantico, VA	Jan-11	Dec-11	101	259158	Yes	No	N/A
Truck Forklift Light (LRTF)										
FY10	TBD	TBD	TBD	TBD	TBD	94	115837	Yes	No	N/A
FY11	TBD	TBD	TBD	TBD	TBD	102	115837	Yes	No	N/A
FY11 OCO	TBD	TBD	TBD	TBD	TBD	97	115837	Yes	No	N/A
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE																	Date:																				
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6462																	Weapon System			P-1 Item Nomenclature: FAMILY OF MATERIAL HANDLING EQUIPMENT																	
																	PRODUCTION RATE			PROCUREMENT LEADTIMES																	
ITEM	Manufacturer's NAME / LOCATION																MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure												
All Terrain Crane (50 Ton)	Terex, Westport, CT																17	4	12		6	12	7	18	E												
Rough Terrain Container Handler (RTCH)	Kalmar, Cibolo, TX																1	3	6		11	10	10	21	E												
Tractor Multi-Purpose (TRAM)	John Deere, Moline, IL																68	25	40		12	11	11	23	E												
Extended Boom Forklift	TBD																TBD	TBD	TBD																		
Truck Forklift Light (LRTF)	TBD																41	TBD	TBD																		
																	Fiscal Year 08										Fiscal Year 09										B A L A N C E
																	Calendar Year 08										Calendar Year 09										
ITEM	F Y	S V C	Q T Y	D E L	B A L	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	B A L A N C E							
All Terrain Crane (50 Ton)	FY09	MC	27	0	27																				A							27					
Rough Terrain Container Handler (RTCH)	FY09	MC	15	0	15																								A		15						
Tractor Multi-Purpose (TRAM) - Active	FY09	MC	215	0	215																										215						
Tractor Multi-Purpose (TRAM) - Reserve	FY09	MC	32	0	32																										32						
																	Fiscal Year 10										Fiscal Year 11										B A L A N C E
																	Calendar Year 10										Calendar Year 11										
ITEM	F Y	S V C	Q T Y	D E L	B A L	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	B A L A N C E							
All Terrain Crane (50 Ton)	FY09	MC	27	0	27							4	4	4	4	4	4	3														0					
All Terrain Crane (50 Ton)	FY10	MC	11	0	11							A							4	4	3										0						
Rough Terrain Container Handler (RTCH)	FY09	MC	15	0	15									3	3	3	3	3													0						
Rough Terrain Container Handler (RTCH)	FY10	MC	30	0	30				A										3	3	3	3	3	3	3	3	3	3	3		0						
Rough Terrain Container Handler (RTCH) FY11 OCO	FY11	MC	13	0	13																A										13						
Tractor Multi-Purpose (TRAM) - Active	FY09	MC	215	3	215	A											30	30	30	25	25	25	25	25							0						
Tractor Multi-Purpose (TRAM) - Reserve	FY09	MC	32	3	32	A											8	8	8	8											0						
Tractor Multi-Purpose (TRAM) - Active	FY10	MC	138	0	138				A										2	5	5	5	10	37	37	37					0						
Tractor Multi-Purpose (TRAM) - Reserve	FY10	MC	28	0	28				A											5	10	10	3								0						
Tractor Multi-Purpose (TRAM) - FY11 OCO	FY11	MC	101	0	101																A										101						

EXHIBIT P-21, PRODUCTION SCHEDULE																	Date: February 2010													
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / Engineer and Other Equipment (6)										Weapon System			P-1 Item Nomenclature: FAMILY OF MATERIAL HANDLING EQUIPMENT																	
										PRODUCTION RATE			PROCUREMENT LEADTIMES																	
ITEM	Manufacturer's NAME / LOCATION									MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure												
All Terrain Crane (50 Ton)	Terex, Westport, CT									17	4	12		6	12	7	18	E												
Rough Terrain Container Handler (RTCH)	Kalmar, Cibolo, TX									1	3	6		11	10	10	21	E												
Tractor Multi-Purpose (TRAM)	John Deere, Moline, IL									68	25	40		12	11	11	23	E												
Extended Boom Forklift	TBD									TBD	TBD	TBD																		
Truck Forklift Light (LRTF)	TBD									41	TBD	TBD																		
										Fiscal Year 12							Fiscal Year 13							BALANCE						
										Calendar Year 12							Calendar Year 13													
ITEM	FY	SVC	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Tractor Multi-Purpose (TRAM) - FY11 OCO	FY11	MC	101	0	101			40	40	21																				0
Rough Terrain Container Handler (RTCH) FY11 OCO	FY11	MC	13	0	13		13																							0
																														0
																														0
																														0
																														0
										Fiscal Year 14							Fiscal Year 15							BALANCE						
										Calendar Year 14							Calendar Year 15													
ITEM	FY	SVC	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
																														0
																														0
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																														0

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6468						P-1 Item Nomenclature: First Destination Transportation						
Program Elements: 0206315M Force Service Support Group				Code:		Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY2012	FY2013	FY2014	FY2015	To Complete	Total
Proc Qty												
Gross Cost	67.8	5.8	5.3	2.7	0.0	2.7	2.8	2.8	2.9	3.0	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	67.8	5.8	5.3	2.7	0.0	2.7	2.8	2.8	2.9	3.0	Cont	Cont
Initial Spares												
Total Proc Cost	67.8	5.8	5.3	2.7	0.0	2.7	2.8	2.8	2.9	3.0	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**  
 This program provides logistics support for planned quantities of materials and end items procured under the PMC appropriation to be shipped from manufacturers and/or suppliers to the Marine Corps users or facilities. All transportation included in this program is provided by commercial or industrially funded DoD transportation services.

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6468					P-1 Line Item Nomenclature:  First Destination Transportation					Date:  February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY09			FY10			FY11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>  First Destination Transportation		67836	5789	VAR	VAR	5285	VAR	VAR	2748	VAR	VAR			

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6522					P-1 Item Nomenclature: Field Medical Equipment							
Program Elements: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	133.7	31.1	6.8	6.7	0.0	6.7	8.0	5.9	6.0	6.2	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	133.7	31.1	6.8	6.7	0.0	6.7	8.0	5.9	6.0	6.2	Cont	Cont
Initial Spares	1.1	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.6	0.6	Cont	Cont
Total Proc Cost	134.7	31.6	7.3	7.2	0.0	7.2	8.5	6.4	6.6	6.7	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**  
**Family of Field Medical Equipment (FFME) is comprised of:**  
**Enroute Care System (ERCS)** provides equipment and supplies for the care of two critically injured/ill, but stabilized, casualties in theater operations for up to a two hour medical evacuation (MEDEVAC) flight. The ERCS is a modular system that includes medical equipment, medical treatment protocols, and consumable supplies.

**Medical X-Ray Equipment** program provides radiological capability to surgical trauma platoons to diagnose injuries and medical abnormalities. AMAL-627 contains equipment and consumables to support one x-ray machine and develop x-rays. The x-ray unit is a compact, mobile and lightweight system that enables all imaging functions to be performed at the point of patient care. The unit is comprised of a low capacity x-ray unit and a digital computed radiographic (CR) reader, which scans the x-ray plates and displays the images on a laptop computer. The unit can be broken down into components for transportation and storage. It is operable and maintainable under all conditions of altitude, climate, and terrain.

**Field Dental System** provides dental services to the Marine Expeditionary Force (MEF). In an operational environment, the Dental Battalion's primary mission is to provide dental health maintenance with a focus on emergency care. 662 ADALs contain the equipment and supplies required by dentists and their technicians to perform dental procedures on Marines in an expeditionary environment. It can be broken down into component sets or scaled down to fit the size and mission of the deploying unit. Primarily designed for stand alone dental treatment, but it can be used in conjunction with other AMALs.

**Mobile Oxygen Ventilation and External Suction Device (MOVES)** is a significant upgrade to the ERCS. It effectively eliminates oxygen bottles from the battlefield and improves pre-hospital life support throughout the entire patient stabilization and transportation process. This single, integrated device will effectively replace the existing ventilator with monitor, suction device, oxygen bottles, and the cumbersome Special Medical Emergency Evacuation Device (SMEED) bracket, which will significantly reduce cost, cube, and weight, while enhancing the quality of care and improving survivability for trauma patients.

**Forward Resuscitative Surgery System (FRSS)** provides Level I and II Health Service Support (HSS). The FRSS is a highly mobile, rapidly deployable, trauma surgical unit that provides emergency surgical interventions to stabilize casualties that might otherwise die or lose limbs before reaching treatment. The FRSS is the lightest and most mobile of the Marine Corps HSS elements capable of providing trauma surgical care. The FRSS is modular, rapidly transportable and deployable by air or surface means. Included in the FRSS are medical materials, a shelter, ancillary equipment, and mobile electric power.

**Vaccine and Reagent Refrigeration System (VARRS)** is designed to provide an effective means of storing vaccines and laboratory reagents blood which will be used to save lives of its warfighters in extreme weather environments such as the summer desert in the Middle East, or jungle environments in South East Asia. The current refrigeration system is inadequate and can not withstand these austere environments. VARRS will have increased operating and storage capabilities to meet the medical refrigeration requirements.

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6522		P-1 Item Nomenclature: Field Medical Equipment
<p><b>Family of Incident Response System (FIRS) is comprised of:</b></p> <ul style="list-style-type: none"> <li>a. FIRS is a roll up program consisting of over 70 Commercial Off-The-Shelf (COTS) technologies meeting mission requirements of the Chemical/Biological Incident Response Force (CBIRF) and the Marine Air-Ground Task Forces (MAGTF).</li> <li>b. CBIRF is a task organized unit that, when directed, will forward-deploy and/or respond to a credible threat of a chemical, biological, radiological, nuclear, or high yield explosive (CBRNE) incident to assist local, state, or federal agencies and designated Combatant Commanders in the conduct of consequence management operations by providing capabilities for agent detection and identification, casualty search, rescue, and personnel decontamination; and emergency medical care and stabilization of contaminated personnel.</li> <li>c. The Marine Air-Ground Task Force (MAGTF) Consequence Management (CM) Force Protection Sets are tailored sets of COTS consequence management equipment, modeled on CBIRF capabilities, that provide the MAGTF Commanders with an enhanced capability of force protection above that available from the normal NBC defensive equipment.</li> </ul> <p><b>Mobile Trauma Center:</b> The Mobile Trauma Center provides mobile resuscitative care in an armored trauma bay for multiple casualties in the theater of operations. The Center is fully equipped with required medical equipment and will transport the needed equipment and medical personnel needed to perform patient care in forward areas of operation.</p> <p><b>Marine Corps Expeditionary Shelter System:</b> EMI Maintenance Shelter is a part of the Marine Corps Field Logistics System (MCFLS). This system of support equipment provides for use of standardized shelters which are easily erected, relocated, compatible with current Marine Corps transportation modes, require minimum maintenance, and will protect equipment and functions needed to support Fleet Marine Force (FMF) operations. This shelter presents the unique variation of one 20-foot EMI/EMC shelter and three 10-foot Rigid/EMC shelters being used for special purposes. Each shelter is configured to support its mission. Many of the current communication systems being fielded today require a climate controlled environment in order to perform the required corrective maintenance. These old shelters must be replaced in order to ensure continued support current and future inventory of Electronic Communication Systems.</p>		



Exhibit P-40a, Budget Item Justification for Aggregated Items									Date: February 2010				
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6522						P-1 Item Nomenclature: Field Medical Equipment							
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011					
Family of Field Medical Equipment													
- 'Enroute Care System (ERCS)	A	D	14.596	4.717	2.781	0.000	0.000	0.000					
		Q	Var	Var									
- 'Medical X-Ray Equipment	A	D	1.250	2.345	0.000	0.000	0.000	0.000					
		Q	Var	Var									
- 'Field Dental System	A	D	1.000	2.771	0.603	1.619	0.000	1.619					
		Q	Var	Var	Var	Var		Var					
- 'Mobile Oxygen Ventilation External Suction (MOVES)	A	D	1.000	4.830	0.000	0.000	0.000	0.000					
		Q	Var	Var									
- 'Forward Resuscitative Surgery System (FRSS)	A	D	67.033	2.602	0.000	1.813	0.000	1.813					
		Q	Var	Var		Var		Var					
- "Vaccine and Reagent Refrigeration System (VARRS)	A	D	0.000	4.742	0.000	0.000	0.000	0.000					
		Q		Var									
Family of Incident Response Systems	A	D	1.601	3.216	3.406	3.290	0.000	3.290					
		Q		Var	Var	Var		Var					
Marine Corps Expeditionary Shelter System	A	D	0.000	0.614	0.000	0.000	0.000	0.000					
		Q		Var									

Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6522							P-1 Line Item Nomenclature: Field Medical Equipment			Weapon System Type:		Date:  February 2010	
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY11			FY11 OCO			
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	Unit Cost \$	
Mobile Trauma Bay ILS and other program support			5000 300		10	500000									
Total Active Reserve			5300 5300 0												

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6522				Weapon System Type:		P-1 Line Item Nomenclature: Field Medical Equipment				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
<b>FY09</b>  MOBILE TRAUMA CENTER	<b>FY09</b>  ALBANY MAINTENANCE CENTER,ALBANY GA	VAR	Albany, GA	Jun-09	Aug-09	10	500000	Y	TBD	TBD

EXHIBIT P-21, PRODUCTION SCHEDULE	Date:  February 2010
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February 2010

Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment/ (6522)	Weapon System	P-1 Item Nomenclature: FIELD MEDICAL EQUIPMENT
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P-1 Item Nomenclature:	
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	PRODUCTION RATE	PROCUREMENT LEADTIMES	
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[illegible][illegible]

										Fiscal Year 10								Fiscal Year 11								BALANCE				
										Calendar Year 10								Calendar Year 11												
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MOBILE TRAUMA CENTER	9	MC	10	8	2	2																								0

[illegible]

							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6532					P-1 Item Nomenclature: Training Devices							
Program Elements: 0206211M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	584.6	113.6	141.7	5.7	55.9	61.5	10.6	40.4	39.2	29.8	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	584.6	113.6	141.7	5.7	55.9	61.5	10.6	40.4	39.2	29.8	Cont	Cont
Initial Spares												
Total Proc Cost	584.6	113.6	141.7	5.7	55.9	61.5	10.6	40.4	39.2	29.8	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

**Base Appropriation Request:**

CENTER FOR ADVANCED OPERATIONAL CULTURE LEARNING (CAOCL) provides a turnkey solution to support the growing demand for technologically enhanced foreign language training. This solution should be in the form of self-sustaining Language Learning Resource Centers (LLRCs) as training units. The USMC requires up to 30 LLRC units deployed to multiple CONUS and OCONUS locations. The USMC LLRCs will comprise the following basic requirements: be mobile with support for 16 students in a variety of ways, contain high speed unrestricted internet access, satellite radio and television capability, web based with a web server, contain a database server and 16 complete workstations, contain integrated Heating/Ventilation Air Conditioning and Back-up Power generator. The USMC requirement is to implement a LLRC solution that has the ability to operate with minimum impact on resources from the hosting military installation.

COMBAT VEHICLE TRAINING SYSTEM (CVTS). The CVTS consists of the Advanced Gunnery Training System (AGTS)- M1A1, AGTS-Light Armored Vehicle (LAV) and the Amphibious Assault Vehicle (AAV) Turret Trainer (TT). The AGTS provides the ability to train M1A1 and LAV-25 crew members in combat skills and readiness. The AAV-TT is a stand-alone trainer using the surplus AAV turret and modified ISMT weapons to provide individual, crew and section gunnery training. The Operational Requirements Document (ORD) dated 22 January 02 established the requirement for an institutional and Deployable AGTS (DAGTS) system for the M1A1, LAV and AAV communities, requiring crew gunnery training to encompass the driver. This effort procures DAGTS for the AAV community and enhanced driver capability for LAV and AAV training units. This funding will also procure 3 additional follow on M1A1/LAV-25 trainers for the new units.

COMBINED ARMS COMMAND AND CONTROL TRAINER UPGRADE SYSTEM (CACCTUS) will upgrade the remaining three Combined Arms Staff Trainers (CAST) to provide a more realistic 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 grow to support Marine Expeditionary Battalion (MEB) level training and to effectively integrate current and emerging Communications Command and Control Computers and Intelligence (C4I) systems. Ultimately the upgrade will allow for the development of mission plans, rehearsal of developed plans, tools to support after-action and debrief; distributed training and will be interoperable with operational C4I tactical data systems.

COMMAND AND CONTROL TRAINING AND EDUCATION (C2 TECOE) will support all Command and Control sustainment training with training sites at each Marine Expeditionary Force (MEF), 29 Palms, and Headquarters at Quantico. As the sole organization for incidental user 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 relevant training to the Marines

DISTANCE LEARNING delivers effective training by using modern instructional technologies (interactive software/courseware). The DL Program provides access to Marines to training and education products to increase operational readiness levels. The DL Program delivers courseware for both garrison and deployed Marines. In garrison Marines use Learning Resource Centers (LRCs) that are NMCI seats, Deployed Marines access training through Deployable Learning Resource Centers (DLRCs) which are MCHS hardware. Both garrison and deployed access are supported by MCHS servers that provide student administration and deliver content over local and wide-area networks (LAN/WAN) to include the MCEN/NMCI. All DL PMC funds are for integration and installation and procurement of the hardware to support the current distance learning infrastructure which has a continuous expanding distance learning user population. Non-NMCI hardware is refreshed every 5 years. In FY 2009 27 Deployable Learning Resource Center (DLRC) suites will be refreshed.

EXERCISE EQUIPMENT ALLOWANCE POOL meet MAGTF's requirement to run effective Mountain Viper/Operation Enduring Freedom (OEF) Pre-Deployment Training Program (PTP). M Equipment Allowance Pool (EAP) and upgraded allowance for a pre-expended bin. Because training units are not fielded with the equipment in Continental United States (CONUS) that will be used in theater (Operation Iraqi Freedom (OIF)/OEF), is imperative that Tactics, Techniques, and Procedures (TTP) familiarization take place with the equipment before units deploy. Additionally, the heavy equipment assets will be utilized by MCMWTC permanent

		Date:	February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6532		P-1 Item Nomenclature: Training Devices	
Program Elements: 0206211M Divisions (Marine)	Code: A	Other Related Program Elements:	
<p>personnel to maintain installation requirements and fill gaps where Southwest Regional Fleet Transportation (SWRFT) cannot support.</p> <p>INFANTRY IMMERSIVE TRAINER (IIT) (I and II MEF Set Re-Design) - Current combat operations in Afghanistan (OEF) in support of the Overseas Contingency Operations (OCO) are being conducted in both urban and rural areas. 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 an adaptive, interactive, full immersive trainer focused on the infantryman and those who require honed rifleman skills. The desired end state of the immersive trainer is to provide warriors that are better trained to make moral, ethical, and legal decisions on the battlefield. The home station that will benefit from this project is Camp Pendleton, CA. These capabilities give deploying units the opportunity to better meet training requirements before exercising as a MAGTF at Mojave Viper and deploying to the combat theaters. Additionally lessons learned from OIF and OEF 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. The requested funds would enhance and refresh the training capabilities sponsored in the Range Modernization and Transformation (RM/T) program. This program seeks to modernize 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. Funding will be used to refit the I MEF immersive trainer from an Iraqi scenario to an Afghan scenario. The Afghan theater set will have a market area, Mosque, multi-story structures for sniper and oversight points, vehicle entry and exit lanes. Funding will be used to establish an immersive trainer for II MEF. The Afghan/Iraqi theater set will have a market area, Mosque, multi-story structures for sniper and oversight points, vehicle entry and exit lanes, as well as instrumentation, battlefield effects simulation, and virtual role player representation.</p> <p>INSTRUCTOR SUPPORT EQUIPMENT FOR MOUNTAIN WARRIOR supports the training unit's day and night training at Marine Corps Mountain Warfare Training Center (MCMWTC), CA, instructors need to be familiar with and employ the same equipment that the training units deploy with. This includes the latest issue in day optics, night vision equipment, and thermal imaging equipment, which MCMWTC does not have on its Table of Equipment (T/E). This will better allow the instructors to be conversant in the capabilities and limitations of such equipment in the mountainous, cold weather, and high altitude environment. Additionally, it will allow the instructors to be able to see the same things as the unit at night and assess them on their performance accordingly.</p> <p>MARINE CORPS UNDERWATER EGRESS TRAINING/AMPHIBIOUS EGRESS TRAINER (MAET) is an underwater escape trainer with a generic fuselage section with modules and exits reprinting specific aircraft, cockpit and cabins for select amphibious vehicle platforms. The Submerged Vehicle Egress Trainer (SVET), which was defined by a Statement of Need (SON) submitted by TECOM, is used to train egress from rollover/submerged ground vehicles, replicating the HMMWV, and other ground platforms. These training devices support the Underwater Egress Training Program conducted at Camp Hansen, Okinawa, Japan, MCB Kaneohe Bay, Hawaii, Camp Pendleton, CA and Camp Lejeune, NC. Procurement funding is required to acquire four (4) SVET (High Mobility Multipurpose Wheeled Vehicle (HMMWV)/Mine Resistant Ambush Protected (MRAP) modules at four training sites, Pendleton, LeJeune, Okinawa and Hawaii.</p> <p>MINOR TRAINING DEVICES/SIMULATORS (MTD) program encompasses the procurement of low density, minor (low cost) MAGTF ground training equipment, simulators and simulations. These devices such as Training-Improved Explosive Devices (IEDs), Recognition of Combat Vehicles (ROC-V), climbing walls, PITS, weapons models and mockups, enhance basic occupational and combat skills across the wide spectrum of tactics, techniques, procedures and firearms and weapon proficiency. MTDs are for the most part 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/OIF/EF training and participate as a full-fledged member of several Joint programs.</p> <p>MOBILE OPERATION IN URBAN TERRAIN (MOUT) Facilities - These funds will support the procurement of ISO containers to support MAGTFTC, Twentynine Palms, CA. The Containers will be used to construct a second MOUT facility to support Forward Air Controller Training and other ACE training during Mojave Viper exercises. This MOUT facility is required to support the second Bn that will be part of the expanded "Duel Mojave Viper" Training Program. The current range is not adequate to support all training requirements. The ISO buildings are as follows: (6) 3 story buildings at 190K, (24) 2 story buildings at 125K, (40) single story at 33K, (25) single story at 16K, (1) Mosque at 225K, (2) U shaped buildings at 100K, (5) 2 story 120' buildings at 175K, (5) 2 story L shaped buildings at 125K and (3) H shaped buildings at 225K. The ISO Containers would be a one time cost to create this unique training facility.</p> <p>MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM (MILES 2000) is a joint interest program between the U.S. Marine Corps and the U.S. Army. It is the Tactical Engagement Simulation System for the Marine Corps and provides a family of low power, eye safe lasers which simulates the direct fire characteristics of infantry small arms, assault, armor, anti-armor mechanized weapons system and provides the gunner with hit or miss determination. MILES 2000 is designed to be used by the MAGTF as a force-on-force engagement simulation training system. MILES 2000 is the major component that the United States Marine Corps is using for the Range Instrumentation System initiative and an integral component of Position Location Instrumentation.</p> <p>OEF COMMUNICATION EQUIPMENT - Communications equipment will be required to support dispersed operations and a unit/section's capability to operate at Marine Air Ground Task Force Training Command (MAGTFTC), Twentynine Palms, CA, Marine Corps Mountain Warfare Training Center (MCMWTC), CA, and Marine Corps Air Station, Yuma, AZ and its associated training areas in southern California. Equipment will include items such as an AN/MRC-145 (A1957-vehicular-mounted Single Channel Ground and Airborne Radio System(SINCGARS)), AN/PRC-117F Multi-Band Radio (MBR) (A2068), Command Post Of Future (CPOF) software, and other Command and Control (C2) systems. To support the communications equipment, a Marine Corps' Support Wide Area Network (SWAN) will be required to provide the warfighters a robust, beyond-line-of-sight communications.</p> <p>RADIO COUNTER IMPROVISED EXPLOSIVE DEVICE (RCIED) Electronic Warfare provides training devices replicating fielded Counter Radio Electronic Warfare (CREW) systems including the Chameleon, Duke, and Warlock Surrogate Family of Systems. PMC will allow for continued fulfillment of Marine Corps training requirements while refreshing existing Surrogate Systems.</p> <p>RANGE TRAINING AREA MANAGEMENT (RTAM) funding will modernize major USMC base and station live training ranges by providing enhanced after action review with ground truth feedback, realistic representation of opposing forces (OPFOR) and enhanced range and exercise 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 in Urban Terrain (MOUT) facilities, inter-active targetry, battlefield effects simulators, individual and vehicle tracking systems, aviation tracking systems, MILES, simulated munitions, integrated simulation, and range control and exercise control information processing and situational awareness displays.</p>			

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date:	February 2010
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6532		P-1 Item Nomenclature: Training Devices	
<p>RANGE MODERNIZATION/TRANSFORMATION (RM/T) - PRAETORIAN (VIDEO FLASHLIGHT) is Congressional funding to continue the Range Modernization and Transformation (RM/T) program which implements OSD directed Training Transformation (T2) including Joint National Training Capability (JNTC) and Distributed Operations. These PRAETORIAN capabilities at MCAGCC( Marine Corps Air Ground Combat Center), Twenty-nine Palms, CA provides Real-Time Visualization, Situation Awareness (SA), and AAR capabilities and will be deployed to support Military Operations in Urban Terrain (MOUT) training. The TVCS will support these capabilities by using a video process which combines raw/captured video from multiple cameras into a single wide-panoramic view. The panoramic view is used in real-time to observe Marine's Urban Warfare tactics and for later use during group and individual AAR evaluation sessions.</p> <p>RANGE MODERNIZATION/TRANSFORMATION (RM/T) 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 in Urban Terrain (MOUT) facilities, inter-active targetry, battlefield effects simulators, individual and vehicle tracking systems, Tactical Engagement Simulation Systems, simulated munitions, integrated simulation, and range control and exercise control information processing and situational awareness displays. Current combat Operations in Iraq (OIF) and Afghanistan (OEF) in support of OCO are being conducted in largely urban areas. 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 MAGTF at Mojave Viper and deploying to the combat theaters. Additionally lessons learned from 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. The requested funds would enhance the training capabilities sponsored in the Range Modernization and Transformation (RM/T) program. AAO=I MEF – MCB Camp Pendleton, CA; MCAS Yuma, AZ; II MEF – MCB Camp Lejeune, NC; III MEF – Kaneohe Bay, HI; Okinawa, Japan; Supporting Establishments – MCAGCC, 29 Palms, CA; MCB Quantico, VA; Mountain Warfare Training Center (MWTC) – Bridgeport, CA,</p> <p>SNIPER TRAINING SYSTEM (STS) is a Congressional add that supports annual marksmanship qualification and sustainment training. USMC Snipers must maintain a constant state of proficiency and readiness at the highest level whether shore-based or afloat. STS combines visible spectrum pulsed laser light with laser-sensitive targets to form an array of training system options for unique marksmanship training demands.</p> <p>SPECIAL EFFECT SMALL ARMS MARKING SYSTEM (SESAMS) is a user-installed weapons modification kit that allows the individual Marine to fire, at short range, a low velocity marking ammunition (paint ball) while precluding the weapon from firing live ammunition. SESAMS provides instantaneous feedback during force-on-force close quarter battle scenarios and MOUT exercises. This immediate visual and sensory feedback to the shooter and target without firing live ball ammunition reduces risk to participants and significantly reduces the maintenance costs to shooting houses. SESAMS has been integrated with MILES 2000 for electronic After Action Review (AAR) Enhancement.</p> <p>TACTICAL VIDEO CAPTURE SYSTEM (TVCS) is a Congressional add to continue the Range Modernization and Transformation (RM/T) program which implements OSD directed Training Transformation (T2) including Joint National Training Capability (JNTC) and Distributed Operations. These TVCS capabilities at MCAGCC, Twenty-nine Palms, CA provides Real-Time Visualization, Situation Awareness (SA), and AAR capabilities and will be deployed to support Military Operations in Urban Terrain (MOUT) training. The TVCS will support these capabilities by using a video process which combines raw/captured video from multiple cameras into a single wide-panoramic view. The panoramic view is used in real-time to observe Marine's Urban Warfare tactics and for later use during group and individual AAR evaluation sessions.</p> <p>TRAINING COMMAND (TCOM) MARINE CORPS COMBAT SERVICE SUPPORT SCHOOL (MCCSSS) LOGISTICS SUPPORT WIDE AREA NETWORK (LSWAN) SYSTEM. The Tactical Decision Center (TDC) will support the Pre-deployment Training Program (PTP) for all Logistics Command Elements (LCEs) deploying to Afghanistan (OEF). This will require a more robust organic C2 system than MCCSSS currently possesses. The Logistics Support Wide Area Network (LSWAN) enables the TDC to communicate using several methods or systems. For example: the LSWAN is frequently used to transmit a Battle Command Sustainment Support System (BCS3) Common Operating Picture (COP), audio, video, and e-mail, etc. to the MCCSSS Unit Operations Center (UOC) Cap IV system. This LSWAN system will be used to augment the two current MCCSSS systems. Current operations tend to leave one system constantly in a state of repair making it difficult to train forward/rear command post operations together, as has been experienced lately with the Logistics Operations School's (LOS), Logistics Officer Course Field Exercise (LOCFEX). A third system will enable MCCSSS to always have a back-up system on hand, thus ensuring training is uninterrupted. Additionally, training requirements with the operating forces in the future will likely require the TDC to communicate with students undergoing training during the LOCFEX, while simultaneously supporting a separate training event with the operating forces which would require another LSWAN due to scenario specific requirements.</p>			

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: <span style="float: right;">February 2010</span>
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6532	P-1 Item Nomenclature: <div style="text-align: right;">Training Devices</div>	
<p>TRAINING DEV FIR AND MANEUVER INTEGRATION AND DIVISION (FMID)/FOREIGN WEAPONS TRAINING KITS will support the addition of eight (8) kits and eight (8) armory containers with specified rack system to support the increased requirement for those that will complete the Train the Trainer to actually train their deploying units with. This is based on the CDIB directed and Marine Corps Requirements Oversight Council (MROC) approved Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) assessment . This funding will allow the completion of the Approved Acquisition Objective (AAO) of foreign weapons needed to allow hands-on, detailed, and realistic training to all Marines. Each kit contains eleven (11) variations of weapons and three (3) variations of ammunition.</p> <p>TRAINING SYSTEM AND TAILS - provides funding for training devices upgrades and refresh. FY12 for SAVT equipment refresh and High Mobility Multi-Purpose Wheeled Vehicle Egress Assistance Trainer (HEAT) equipment refresh. FY13/14 for SAVT equipment refresh. SAVT provides training to the Joint Terminal Attack Controllers (JTAC) and the Forward Observers (FOs) in tactical proficiency and operational readiness in a high fidelity dome environment. HEAT provides the training opportunity to experience vehicle roll-over conditions as well as rehearse and physically execute the steps necessary to survive a vehicle roll-over.</p> <p>UNITED STATES MARINE CORPS -OPERATOR DRIVING SIMULATOR (USMC-ODS) provides sustainment and refresher training to vehicle operators at Active and Reserve locations for the Medium Tactical Vehicle Replacement (MTVR), MTVR-Marine Armor System (MAS), High Mobility Multipurpose Wheeled Vehicle (HMMVV), Cougar and Buffalo vehicles. The trainer utilizes an interchangeable dash set, three degrees of freedom seat motion for the driver, and 180 degrees visual display. There are two types of configurations, fixed and mobile. The fixed configuration is located in an existing air conditioned facility and the mobile configuration is housed within a trailer that is fully self contained. The current graphics and textures of the existing USMC-ODS databases are beginning to look subpar as compared to current industry standards expanding, which are expanding rapidly. The Visual Database upgrade will help bring the graphics of the USMC-ODS up to industry standards. This is in answer to recent feedback received from Marines that say the ODS looks "cartoonish" and makes them motion sick. Also, the current driving scenarios are tailored to assist in the Incidental Tactical Vehicle Operators Licensing course. The development of the new roll-over prevention scenarios will better prepare our Marine to drive the Mine Resistant Ambush Protected (MRAP) vehicles in tactical situations, including crowded urban areas and debris-cluttered streets. Marine Corps Communication-Electronics School (MCCES) currently has a single ODS system. They need another ODS to reduce the bottleneck of their Incidental Motor vehicle operator licensing program.</p> <p><b>FY 10 ISR Task Force: \$4.627M</b>          Modular Amphibious Egress Trainer (MAET)</p> <p><b>FY11 Overseas Contingency Operations Request (OCO): \$55.864M</b></p> <p>COMBINED ARMS COMMAND AND CONTROL TRAINER UPGRADE SYSTEM (CACCTUS) vision is to provide a state-of-the-art target information and networking system to allow Marine Air Ground Task Force (MAGTF) units to receive realistic Combined Arms Fire Support pre-deployment training. When fully operational CACCTUS will serve two functions; improve a unit's ability to conduct training in combined arms employment, coordination, and integration and enable comprehensive training across the Live Virtual, Constructive Integration training realm through the incorporation of all appropriate Command and Control equipment. The system will provide for multi-echelon training up to a Marine Expeditionary Bridge (MEB) in a distributed fashion allowing for the increase of scope of training events. The requested PMC funding will be utilized the execute the ability to conduct distributed training capability between facilities. The funding will allow for the procurement of the necessary networking and integration hardware required to support distributed training. We will also upgrade hardware for Tactical Training Exercise Control Group (TTECG) at Twentynine Palms consistent with our four year system upgrade plan and will limit the systems' ability to process emergent operational/training capabilities. In addition, we plan on expanding the Command and Control (C2)/Command, Control, Communications, Computers and Intelligence (C4I) footprint and integration/interoperability capabilities to maintain currency with operational forces' systems. Marines will be able to train like they fight. Finally the funds will allow us the ability to increase our processing capability and our ability to leverage expanded OneSAF V3.0 capabilities and implementation of additional Marine doctrinal behaviors and tactical capabilities.</p> <p>INFORMATION MANAGEMENT identifies risks and implements corrective actions for various pre-deployment training systems.</p> <p>RANGE MODERNIZATION/TRANSFORMATION (RM/T) program modernizes major USMC base and station live pre-deployment 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 in Urban 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. Current combat Operations in Iraq (OIF) and Afghanistan (OEF) in support of OCO are being conducted in largely urban areas. 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 MAGTF at Mojave Viper and deploying to the combat theaters. Additionally lessons learned from 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. I MEF – MCB Camp Pendleton, CA; MCAS Yuma, AZ; II MEF – MCB Camp Lejeune, NC; III MEF – Kaneohe Bay, HI; Okinawa, Japan; Supporting Establishments – MCAGCC, 29 Palms, CA; MCB Quantico, VA; Mountain Warfare Training Center (MWTC) – Bridgeport, CA, The requested OCO funds would continue to enhance the training capabilities sponsored in the Range Modernization and Transformation (RM/T) program.</p> <p>SUPPORTING ARMS VIRTUAL TRAINER (SAVT) will advance the training capability, operational readiness, and tactical proficiency of Joint Terminal Attack Controllers (JTACs), Joint Forward Observers (JFOs), Forward Observers (FOs) and Forward Air Controllers (FACs) for pre-deployment training. The personnel shall use training scenarios that require the placement of tactical ordnance on selected targets using Joint Close Air Support (JCAS)</p>		



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Exhibit P-40  
Budget Item Justification Sheet

Exhibit P-5, Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6532				P-1 Line Item Nomenclature: Training Devices			Weapon System Type:			Date: February 2010			
Weapon System Elements	Cost	ID CD	PRIOR YRS	FY 09		FY 10			FY 11						
			TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u> <b>Range Modernization/Transformation (RM/T)</b> (Multiple Instrumentation, MOUT, Targetry, and Battlefield Effects Simulator training systems and configurations at at major USMC base and station live training ranges, as follows): MCB Camp Pendleton, CA; 'MCAS Yuma, AZ MCB Camp Lejuene, NC; Kaneohe Bay, HI Okinawa, Japan; MCAGCC, 29 Palms, CA Mountain Warfare Training Center (MWTC) – Bridgeport, CA; MCB Quantico, VA		A	63219	47076	VAR	VAR	99637	VAR	VAR	408	VAR	VAR			
<b>RANGE TRAINING AREA MANAGEMENT (RTAM)</b>		A		18136	VAR	VAR									
<b>OEF COMMUNICATIONS EQUIPMENT</b>		A		5000	VAR	VAR									
<b>EXERCISE EQUIP ALLOWANCE POOL</b>		A		8000	VAR	VAR									
<b>TRAINING Dev FMID/FOREIGN WEAPONS TRAINING</b> Weapon/Armory Kits Variation (Each Kit has variations of weapons and variations of ammunition)		A		5641	VAR	VAR									
<b>OEF INFANTRY IMMERSION TRAINER (IIT)</b> (I & II MEF Set Construction) (Multiple live and virtual training systems configured/integrated into a single Infantry Immersion Trainer)		A		9400	VAR	VAR									
<b>Combat Vehicle Training Sys (CVTS)</b> CVTS- AAV Driver Enhancements CVTS-LAV Driver Trainer Enhancements CVTS- M1A1/LAV Trainer Procurement CVTS-M1A1 DAGTS		A					11920 10169 4500 2981	16 20 3 6	745 508 1500 497						
<u>FY11 OCO</u> <b>Range Modernization/Transformation (RM/T)</b>		A								18826	VAR	VAR			
<b>Information Management</b>		A								30000	VAR	VAR			
<b>TOTAL</b>				93253			129207			49234					
<b>ACTIVE</b>				93253			129207			49234					
<b>RESERVE</b>				0			0			0					

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6532		Weapon System Type:			P-1 Line Item Nomenclature: Training Devices					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY10 Combat Vehicle Training Sys (CVTS) AAV-TT										
AAV Driver Enhancements	TBD	C/FFP	PM TRASYS ORLANDO, FL	Aug-10	Mar-11	16	745	Y	N/A	Feb-10
LAV Driver Training	TBD	C/FFP	PM TRASYS ORLANDO, FL	Aug-10	Jul-11	20	508	Y	N/A	Feb-10
Additional Trainers	TBD	C/FFP	PM TRASYS ORLANDO, FL	Aug-10	Apr-11	3	1500	Y	N/A	Feb-10
CVTS-M1A1 DAGTS	TBD	C/FFP	PM TRASYS ORLANDO, FL	Jul-10	Oct-10	6	497	Y	N/A	Mar-10
REMARKS: CVTS: Further refinements of fleet requirements presented a reduction in the AAV DAGTS and increase in M1A1 DAGTS. Additional requirement refinements to Driver Enhancements have pushed original award and deliveries to the right by 7 months.										

FY 07 BUDGET EXHIBIT P-21, PRODUCTION SCHEDULE																		Date: February 2010																		
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / Engineer and Other Equipment (6)						Weapon System			P-1 Item Nomenclature: TRAINING DEVICES																											
						PRODUCTION RATE			PROCUREMENT LEADTIMES																											
ITEM	Manufacturer's NAME / LOCATION					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure																						
CVTS-AAV-TT - Driver Enhancement	TBD					1	3	5	12	10	7	2	17	EACH																						
Driver Enhancements	TBD					1	2	4	7	10	11	2	21	EACH																						
Additional Trainers	TBD					1	1	1	2	10	8	3	18	EACH																						
M1A1 DAGTS	TBD					1	3	3	12	9	3	3	12	EACH																						
Fiscal Year 10																		Fiscal Year 11																		BALANCE
Calendar Year 10																		Calendar Year 11																		
ITEM	FY	SV	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
Combat Vehicle Training Sys (CVTS) AAV-TT																														0						
AAV Driver Enhancements	10	MC	16	0	16											A								5	3			3	3	2	0					
Driver Enhancements	10	MC	20	0	20											A											4		2	14						
Additonal Trainers	10	MC	3	0	3											A								1		1		1		0						
M1A1 DAGTS	10	MC	6	0	6										A			1			2		2		1					0						
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																														0						
																														0						
Fiscal Year 12																		Fiscal Year 13																		BALANCE
Calendar Year 12																		Calendar Year 13																		
ITEM	FY	SV	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
Combat Vehicle Training Sys (CVTS) AAV-TT																														0						
																														0						
Driver Enhancements	10	MC	14	0	14		2		2		2		2		2		2		2											0						
																														0						
																														0						
																														0						
																														0						
																														0						
REMARKS: Currently Leasing 1-SVET - Will purchase for 1st delivery.																																				

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6543						P-1 Item Nomenclature: CONTAINER FAMILY						
Program Elements: 0206315M Force Service Support Group				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	99.6	4.4	3.8	0.9	8.8	9.7	6.3	5.4	5.6	5.7	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	99.6	4.4	3.8	0.9	8.8	9.7	6.3	5.4	5.6	5.7	Cont	Cont
Initial Spares												
Total Proc Cost	99.6	4.4	3.8	0.9	8.8	9.7	6.3	5.4	5.6	5.7	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.6	0.6	0.1	8.8	9.0	0.9	0.8	0.8	0.9		

**Base Appropriation Request**  
The Container Family provides the Fleet Marine Force with a fully intermodal transport capability emphasizing dimensional standardization and International Organization for Standardization compatibility. Two types of containers are procured, Pallet and Quadruple. The containers are end items and assets owned by the unit, expeditionary in nature. Components for the containers such as racks, horizontal connectors and inserts are not end items and do not have Acquisition Objectives. Containers will replace locally assembled prefabricated wooden mount out boxes and flat and 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.

**FY11 Overseas Contingency Operations Request (OCO): \$8.8M**

Procures for Combat losses and is required to address MEB-A Equipment Density List (EDL) shortfalls. The EDL is the list of equipment the MEB requires to accomplish its missions in Afghanistan. Items include pallet containers and quadruple containers.

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010				
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6543				P-1 Item Nomenclature: CONTAINER FAMILY						
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011		
Pallet Container (PALCONS)	A	D	27.800	2.394	1.578	0.435	4.413	4.848		
		Q		VAR	VAR	VAR	VAR	VAR		
Quadruple Container (QUADCONS)	A	D	30.200	1.990	2.180	0.462	4.413	4.875		
		Q		VAR	VAR	VAR	VAR	VAR		

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6544							P-1 Item Nomenclature: Family of Construction Equipment					
Program Elements: 0206315M Force Service Support Group					Code: A	Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	145.1	162.2	73.4	18.3	0.0	18.3	12.3	12.8	15.5	13.3	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	145.1	162.2	73.4	18.3	0.0	18.3	12.3	12.8	15.5	13.3	Cont	Cont
Initial Spares												
Total Proc Cost	145.1	162.2	73.4	18.3	0.0	18.3	12.3	12.8	15.5	13.3	Cont	Cont
Wpn Sys Proc U/C												
Reserves		4.4	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont

**Baseline Request:**

**Family of Construction Equipment:** The Family of Construction Equipment (FCE) line is a roll-up line that provides for the replacement/service life extension program (SLEP) of all United States Marine Corps construction equipment. This line provides for the funding of the Heavy Scraper, Road Grader, Backhoe Loader (BHL), Dozer D7, Medium Crawler Tractor, (and its associated attachments, winches and rippers), Compressor 260 cubic feet per minute (CFM), Runway Sweeper, Dozer W/angle Blade 1150, Dozer W/Bucket 1155, M9 Ace Combat Excavator, Engineer Equipment Trailer (EET) and Rapid Runway Repair (AKA; Airfield Damage Repair Kit) , Dust Abatement System which is comprised of three (3) major components Water Distributor, Hydro-Seeder Trailer Mounted, and Hydro-Seeder Truck Mounted. Marine Corps Tactical Welding Shop (MCTWS), Vibratory Compactor, and the Multi-Terrain Loader with Work Tools and Carrier.

Exhibit P-40a, Budget Item Justification for Aggregated Items					Date: February 2010							
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6544			P-1 Item Nomenclature: Family of Construction Equipment									
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011				
Airfield Damage Repair Kit Technology Insertion	A	D	0	.387								
		Q		VAR								
Backhoe Loader Tool Carrier	A	D			2.303							
		Q			13							
Compressor with Pneumatic Tools	A	D	1.748		2.600							
					26.000							
Hydroseeder Trailer and Skid Mounted					2.000							
					50							
Matting					2.084							
					VAR							
Scraper, Tractor Wheeled	A	D			2.800							
Vehicle Automotive Diagnostic System (VADS)					3.102							
		Q			VAR							
Welding Shop	A	D	0.855		3.800							
		Q	10		33							
Soil Test Kit	A	D		1.203								
		Q		VAR								
Ultimate Building Machine					1.500							
					VAR							
TOTAL			2.604	1.590	20.189							
Active				1.590	20.189							
Reserves				0.000	0.000							



Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6544					P-1 Line Item Nomenclature: Family of Construction Equipment		Weapon System Type:		Date: February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11					
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$			
<u>Baseline</u>														
M9 ACE Combat Excavator			72000		VAR									
Marine Corps Modernization Kit (includes System Improvement Package (SIP) 4 configuration changes to Steel Flanges, Power Pack Removal, Crew Cooling System, One Inch Aluminum Bottom, Steel Apron and Blade, Integrate Vision System, Hydraulic System, Stowage Rack														
Engineer Equipment Armoring			35638		VAR									
Engineer Equipment Trailer						6200	100	62000						
Laser Leveler						12000	96	VAR						
Medium Crawler Tractor (MCT)		119294	10241	39	262588									
Multi Terrain Loader			3650	40	91250	6907	64	107922						
120M Road Grader		11409	32557	117	278268	14580	45	324000						
Runway Sweepers			3091	22	140495									
Scraper		14377				10361	18	575593	18261	32	570656			
Integrated Logistics Support			3397			3199								
Subtotal Baseline			145080	160574		53247			18261					
TOTAL			145080	160574		53247			18261					
ACTIVE			145080	156167		46229			18261					
RESERVE				4407		7018								
<u>Reserves</u>														
Multi Terrain Loader			1256	14	91250									
120M Road Grader						6804	21	324000						
Integrated Logistics Support						214								
Medium Crawler Tractor (MCT)			3151	12	262588									
Subtotal Reserves			0	4407		7018								

Exhibit P-5a, Budget Procurement History and Planning								Date: February 2010		
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6544		Weapon System Type:			P-1 Line Item Nomenclature: Family of Construction Equipment					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Engineer Equipment Trailer FY10	TBD		TBD	TBD	TBD	100	62000	Yes	N/A	N/A
Medium Crawler Tractor (MCT) FY09 - Active	John Deere, Moline, IL	FFP	MCSC, Quantico, VA	Apr-09	Feb-10	27	262588	Yes	N/A	N/A
FY09 - Reserve	John Deere, Moline, IL	FFP	MCSC, Quantico, VA	Apr-09	Feb-10	12	262588	Yes	N/A	N/A
Multi Terrain Loader FY09 - Active	Caterpillar, Peoria, IL	FFP	MCSC, Quantico, VA	Feb-10	May-10	26	91250	Yes	N/A	N/A
FY09 - Reserve	Caterpillar, Peoria, IL	FFP	MCSC, Quantico, VA	Feb-10	May-10	14	91250	Yes	N/A	N/A
FY10	Caterpillar, Peoria, IL	FFP	MCSC, Quantico, VA	Feb-10	May-10	64	107922	Yes	N/A	N/A
Runway Sweepers FY09*	TBD		TBD	TBD	TBD	22	140495	Yes	N/A	N/A
120 M Road Grader FY09	Caterpillar, Peoria, IL	FFP	TACOM, Warren, MI	Mar-09	Sep-10	117	278268	Yes	N/A	N/A
FY10 - Active	Caterpillar, Peoria, IL	FFP	TACOM, Warren, MI	May-10	Dec-10	24	324000	Yes	N/A	N/A
FY10 - Reserve	Caterpillar, Peoria, IL	FFP	TACOM, Warren, MI	May-10	Dec-10	21	324000	Yes	N/A	N/A
Scraper FY10*	TBD	FFP	MCSC, Quantico, VA	TBD	TBD	18	575593	Yes	N/A	N/A
FY11*	TBD	FFP	MCSC, Quantico, VA	TBD	TBD	32	570656	Yes	N/A	N/A
* Contract not yet awarded.										

EXHIBIT P-21, PRODUCTION SCHEDULE															Date: February 2010																
Appropriation Code/CC/BA/BSA/Item Control No. Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6544					Weapon System					P-1 Item Nomenclature: Family of Construction Equipment																					
					PRODUCTION RATE					PROCUREMENT LEADTIMES																					
ITEM					MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL					Unit of Measure														
Medium Crawler Tractor (MCT)					John Deere, Moline, IL	1	25	40										E													
Multi Terrain Loader					Caterpillar, Peoria, IL	1	30	40																							
120 M Road Grader					Caterpillar, Peoria, IL	1	30	40																							
Runway Sweepers					TBD	TBD	TBD																								
Scraper					TBD	TBD	TBD																								
										Fiscal Year 08										Fiscal Year 09										BALANCE	
										Calendar Year 08										Calendar Year 09											
ITEM	FY	SV	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
Medium Crawler Tractor Active	FY09	MC	39	0	39																			A							39
120 M Road Grader	FY09	MC	117	0	117																		A								
										Fiscal Year 10										Fiscal Year 11										BALANCE	
										Calendar Year 10										Calendar Year 11											
ITEM	FY	SV	QTY	DEL	BAL	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
Medium Crawler Tractor (MCT)	FY09	MC	39	0	39					34	5																				0
120 M Road Grader	FY09	MC	117	0	117												39	39	39												0
Multi Terrain Loader Active	FY09	MC	26	0	26					A			13	13																	0
Multi Terrain Loader Reserve	FY09	MC	14	0	14					A			14																		0
Multi Terrain Loader	FY10	MC	64	0	64					A			13	27	24																0
120 M Road Grader Active	FY10	MC	45	0	45								A					15	30												0



Exhibit P-5 Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement Marine Corps (1109) / 06 Engineer and Other Equipment / 6545		P-1 Line Item Nomenclature:  Family of Internally Transportable Vehicle		Weapon System Type:		Date:  February 2010			
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$	TotalCost \$000	Qty Each	UnitCost \$
<u>Baseline</u>											
Internally Transportable Vehicles		30233	13597	53	256547	9500	40	237500			
Production Support Costs		5116				400					
Vehicle Upgrades			2150								
Logistics		5241	1300			328					
Program Mgmt & Engineering		3328	723			100					
ITV refurbishment		1500	1600								
Blast armor seats		550	2304								
Special parts/various		500									
Fielding		1000	228								
Subtotal Baseline		47468	21902			10328					
<u>OCO</u>											
Internally Transportable Vehicles									19943	73	273188
Production Support Costs									458		
Logistics									5000		
Program Mgmt & Engineering									3000		
Subtotal OCO									28401		
Total		47468	21902			10328			28401		
Active		47468	21902			10328			28401		
Reserves		0	0			0			0		
Remarks: FY09 ITV quantity in PBIS is incorrect and will be updated for the NCB-12 submission.											

Exhibit P-5a, Budget Procurement History and Planning									Date: February 2010	
Appropriation / Budget Activity/Serial No: Procurement Marine Corps (1109) / 06 Engineer and Other Equipment / 6545		Weapon System Type:			P-1 Line Item Nomenclature: Family of Internally Transportable Vehicle					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method & Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
FY08 Internally Transportable Vehicle	General Dynamics, St. Petersburg,	FFP	MARCORSYSCOM	May-09	Dec-09	57	264766	YES	NO	Mar-04
FY09 Internally Transportable Vehicle	General Dynamics, St. Petersburg,	FFP	MARCORSYSCOM	May-09	Jun-10	53	256547	YES	NO	Mar-04
FY10 Internally Transportable Vehicle	General Dynamics, St. Petersburg,	FFP	MARCORSYSCOM	Feb-10	Oct-10	40	237500	YES	NO	Mar-04
FY11 (OCO) Internally Transportable Vehicle	General Dynamics, St. Petersburg,	FFP	MARCORSYSCOM	Feb-11	Oct-11	73	273188	YES	NO	Apr-10
REMARKS:										

EXHIBIT P-21, PRODUCTION SCHEDULE																	Date:														
Appropriation Code/CC/BA/BSA/Item Control No. Procurement Marine Corps (1109) / 06 Engineer and Other Equipment / 6545																	Weapon System		P-1 Item Nomenclature: Family of Internally Transportable Vehicle												
																	PRODUCTION RATE		PROCUREMENT LEADTIMES												
ITEM	Manufacturer's NAME / LOCATION						MSR	ECON	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	TOTAL	Unit of Measure																
Internally Transportable Vehicle	General Dynamics, St. Petersburg, FL						1	8	12	3	7	7	8	17	E																
																	Fiscal Year 08		Fiscal Year 09		BALANCE										
																	Calendar Year 08		Calendar Year 09												
ITEM	F Y	S V C	Q T Y	D E L	B A L	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		
Internally Transportable Vehicle	08	MC	57	0	57																								57		
Internally Transportable Vehicle	09	MC	53	0	53																								53		
																	Fiscal Year 10		Fiscal Year 11		BALANCE										
																	Calendar Year 10		Calendar Year 11												
ITEM	F Y	S V C	Q T Y	D E L	B A L	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		
Internally Transportable Vehicle	08	MC	57	0	57			7	10	10	10	10	10																0		
Internally Transportable Vehicle	09	MC	53	0	53									12	12	12	12	5											0		
Internally Transportable Vehicle	10	MC	40	0	40					A								7	12	12	9								0		
Internally Transportable Vehicle (OCO)	11	MC	73	0	73																	A							73		
Remarks:																															

<b>EXHIBIT P-21, PRODUCTION SCHEDULE</b>																				Date: February 2010														
Appropriation Code/CC/BA/BSA/Item Control No. Procurement Marine Corps (1109) / 06 Engineer and Other Equipment / 6545										Weapon System					P-1 Item Nomenclature: Family of Internally Transportable Vehicle																			
										PRODUCTION RATE			PROCUREMENT LEADTIMES																					
ITEM	Manufacturer's NAME / LOCATION									MSR	ECON	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		TOTAL	Unit of Measure												
Internally Transportable Vehicle	General Dynamics, St. Petersburg, FL									1	8	12	3		7		7		8		17	E												
										Fiscal Year 12								Fiscal Year 13								BALANCE								
										Calendar Year 12																	Calendar Year 13							
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP				
Internally Transportable Vehicle (OCO)	11	MC	73	0	73	10	10	10	10	10	10	10	3																		0			
										Fiscal Year 14								Fiscal Year 15								BALANCE								
										Calendar Year 14																	Calendar Year 15							
ITEM	FY	SVC	QTY	DEL	BAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP				
Remarks:																																		



Exhibit P-40, Budget Item Justification Sheet								Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6548						P-1 Item Nomenclature: Bridge Boats						
Program Elements: 0206211M Divisions Marines				Code: A	Other Related Program Elements:							
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	40.6	0.0	0.0	12.6	0.0	12.6	0.0	0.0	0.0	0.0	0.0	65.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	40.6	0.0	0.0	12.6	0.0	12.6	0.0	0.0	0.0	0.0	0.0	65.8
Initial Spares												
Total Proc Cost	40.6	0.0	0.0	12.6	0.0	12.6	0.0	0.0	0.0	0.0	0.0	65.8
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONT	CONT

**Base Appropriation Request:**

**Bridge Boats:**

The Bridge Boat line is a roll up line that provides wet gap capabilities with a system comprised of Improved Ribbon Bridge, Bridge and Raft Sets, Bridge Erection Boats, trailers, cradles and pallets allowing transport and passage of 80 ton tracked or 100 ton wheeled vehicles. The components are configured in Bridge Sets or Raft Sets to create an Improved Ribbon Bridge system. A Bridge Set consists of 12 interior and 5 ramp bays. A Raft Set consists of 5 interior and 2 ramp bays. The distance of the wet gap to be spanned and the water current velocity determines the use of the Bridge Set or the Raft Set and the number of Bridge Erection Boats needed to emplace the Bridge System. This effort fulfills the operational requirements to support bridging and amphibious operations for three active Bridge Companies, two reserve Bridge Companies, and three prepositioning squadrons.

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6548					P-1 Line Item Nomenclature: Bridge Boats		Weapon System Type:	Date: February 2010		
Weapon System Cost Elements	ID CD	Prior Yrs	FY 09			FY 10			FY 11		
		Total Cost \$000	Total Cost \$000	Qty Each	Unit Cost \$	Total Cost \$000	Qty Each	Unit Cost \$	Total Cost \$000	Qty Each	Unit Cost \$
<u>Baseline</u> Bridge Components Includes various quantities of Interior Bays, Ramp Bays, Bridge Erection Boats, Boat Trailers and Boat Cradles		40573							12567	VAR	VAR
TOTAL		40573	0			0			12567		
ACTIVE		40573	0			0			8255		
RESERVE			0			0			4312		

Exhibit P-40, Budget Item Justification Sheet							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6613							P-1 Item Nomenclature: Family of Combat Field Feeding System (Formerly Rapid Deployable Kitchen)					
Program Elements: 0206315M Force Service Support Group					Code: A	Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY 2011	OCO FY 2011	Total FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total Prog
Proc Qty												
Gross Cost	23.9	4.6	2.2	4.3	0.0	4.3	5.0	5.1	5.2	5.3	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	23.9	4.6	2.2	4.3	0.0	4.3	5.0	5.1	5.2	5.3	Cont	Cont
Initial Spares	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont
Total Proc Cost	23.9	5.0	2.2	4.3	0.0	4.3	5.0	5.1	5.2	5.3	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont

**Base Appropriation Request:**

**Family of Combat Field Feeding System:** Consists of those items used to store, prepare, transport, & serve combat rations in a non-garrison environment while maintaining force protection through distributed operations and sanitation capabilities:

**Tray Ration Heater System (TRHS) Product Improvement Program (PIP) 13y old Tanks** PIP for the 13 year old tanks of the TRHS are an update to the current tanks and will replace the tanks that have been in service and are at the end of their life cycle.

**E-TRHS PIP M59 Field Range:** PIP for the M59 Field Range is to update the ranges to current technology for the use of the airtronic burner. This will satisfy the Marine Corps' need for a burner service and a one fuel battlefield.

**Food & Beverage Containers:** Allows hot or cold meals to be transported from preparation sites and delivered to forward feeding areas. The life cycle replacement for Marine Corps unique food and beverage containers will be a standard system item in use by other services to facilitate logistics and interoperability.

**Expeditionary Field Kitchen (EFK):** Intended to provide a rapidly mobile feeding capability that has a minimal logistic load on the using command. Leverages existing Army and Marine Corps hardware to achieve the capability of supporting 500 personnel per meal with a trailer mounted 20ft ISO container that can be used on the trailer or ground mounted.

**Burner Modification (Airtronic):** Intended to replace the Airtronic Burner or update the Airtronic Burner.

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010		
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6613				P-1 Item Nomenclature: Family of Combat Field Feeding System (Formerly Rapid Deployable Kitchen)				
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011
TRHS PIP 13y old Tanks	A	D	1.789	0.000	0.882	0.000	0.000	0.000
		Q	28.0	0	45	0	0	0
E-TRHS PIP M59 Field Range	A	D	1.213	0.000	0.143	0.000	0.000	0.000
		Q	20.0	0	60	0	0	0
Food and Beverage Containers	A	D	1.842	0.000	0.000	0.244	0.000	0.244
		Q	5296.0	0	0	1254	0	1254
Expeditionary Field Kitchen (EFK)	A	D	18.587	3.962	1.182	4.039	0.000	4.039
		Q	76.0	9	3	8	0	8
Burner Modification (Airtronic)	A	D	0.425	0.663	0.000	0.000	0.000	0.000
		Q	0.0	192	0	0	0	0
Total			23.856	4.625	2.207	4.283	0.000	4.283
Active			23.856	4.625	2.207	4.283	0.000	4.283
Reserves			0.000	0.000	0.000	0.000	0.000	0.000

<b>Exhibit P-40, Budget Item Justification Sheet</b>							Date: February 2010					
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6670							P-1 Item Nomenclature: Items less than \$5 Million					
Program Elements: 0206315M Force Service Support Group					Code: A	Other Related Program Elements:						
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	271.6	16.6	47.8	7.6	0.0	7.6	5.7	5.8	4.5	4.5	CONT	CONT
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	271.6	16.6	47.8	7.6	0.0	7.6	5.7	5.8	4.5	4.5	CONT	CONT
Initial Spares												
Total Proc Cost	271.6	16.6	47.8	7.6	0.0	7.6	5.7	5.8	4.5	4.5	CONT	CONT
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CONT	CONT

**Base Appropriation Request:**  
This is a roll-up line of various engineering efforts, modifications and other related items less than \$5 Million each.

Corrosion Prevention and Control (Dehumidified Storage Buildings) - Corrosion Prevention and Control (CPAC) funds will be used to install controlled humidity protection shelters to reduce and/or eliminate the negative effect of wind, rain, salt, ultra violet rays, chemical, mildew, rust, mold, sand etc on Marine Corps assets. Corrosion control focus is on maintaining and preserving equipment in an operating state during each items' service life. CPAC will also procure Vapor Corrosion Inhibitor (VCI) covers for tactical vehicles.

Engineer Equipment Armoring - This program provides for significant improvements to a various pieces of engineering equipment by enhancing their capabilities and protection from direct fire, indirect fire and Improvised Explosive Devices.

Engineer Modification Kits - This program provides for significant improvements to a various pieces of engineering equipment by enhancing their capabilities and improving readiness.

Family of Tools, Kits and Chests provide 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. Construction Shop Kit; Pioneer Platoon Kit; Pioneer Squad Kit; Carpenter Kit; Mason Kit - funding fluctuation is due to program being accelerated.

Interim Passenger Helo Aircrew Breathing Device (IPHABD) - This system consists of a flotation collar, an air source (air bottle with regulator) with bottle holster, and a Location Marking Kit (LMK) consisting of a dye marker, strobe light, whistle, and "buddy line". This system is maintained by the Helicopter Squadrons and is given by the crew chief to each passenger boarding a USMC helicopter which flies over water. This increases the passenger's chance of surviving an over-water crash.

Stand Off Detection Robots - Central element in force protection. Supports procurement for Marine Corps Engineer School for Home Station Training for engineer units support to maneuver, safety, and force protection, particularly of convoys.

Exhibit P-40a, Budget Item Justification for Aggregated Items						Date: February 2010				
Appropriation / Budget Activity Procurement, Marine Corps (1109) / 06 Engineer and Other Equipment / 6670				P-1 Item Nomenclature: Items less than \$5 Million						
Procurement Items	Code	UOM	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011		
Corrosion Prevention and Control	A	D	6.800	3.497	0.490	0.485	0.000	0.485		
		Q	VAR		VAR	VAR		VAR		
Standoff Detection and Robot (PACKBOT)	A	D	0.000	0.000	4.095	0.000	0.000	0.000		
		Q			VAR					
Family of Engineer Tool Kits, Sets and Chests			9.187	2.168	2.132	2.159	0.000	2.159		
			VAR	VAR	VAR	VAR		VAR		

Exhibit P-5 Cost Analysis	Appropriation/ Budget Activity/Serial No: Procurement Marine Corps (1109)/ 06 Engineer and Other Equipment / 6670		P-1 Line Item Nomenclature:  Items less than \$5 Million			Weapon System Type:		Date:  February 2010				
	Weapon System Cost Elements	ID CD	Prior Yrs TotalCost \$000	FY 09 TotalCost \$000    Qty Each		FY 10 TotalCost \$000    Qty Each    UnitCost \$			FY 11 TotalCost \$000    Qty Each    UnitCost \$			
<u>Baseline</u> Engineer Mod Kits			13626	5661	VAR	VAR	4856	VAR	VAR	4928	VAR	VAR
Engineer Equipment Armoring							34960	VAR	VAR			
Interim Pass Helo Aircrew Breathing Device			8494	5243	VAR	VAR	1287	VAR	VAR			
Subtotal Baseline			22120	10904			41103			4928		

Exhibit P-40, Budget Item Justification Sheet										Date: February 2010		
Appropriation / Budget Activity/Serial No Procurement, Marine Corps (1109) / 07 Spares and Repair Parts / 7000								P-1 Item Nomenclature: SPARES AND REPAIR PARTS				
Program Elements: 0206315M Force Service Support Group							Code: A	Other Related Program Elements:				
	Prior Years	FY 2009	FY 2010	Base FY2011	OCO FY2011	Total FY2011	FY 2012	FY 2013	FY 2014	FY 2015	To Complete	Total
Proc Qty												
Gross Cost	428.6	16.7	41.4	13.5	0.0	13.5	27.4	42.3	35.7	36.2	0.0	641.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	428.6	16.7	41.4	13.5	0.0	13.5	27.4	42.3	35.7	36.2	0.0	641.9
Initial Spares												
Total Proc Cost	428.6	16.7	41.4	13.5	0.0	13.5	27.4	42.3	35.7	36.2	0.0	641.9
Flyaway U/C												
Wpn Sys Proc U/C												
Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<p><b>Base Appropriation Request:</b></p> <p>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 principal end item (PEI) delivery to the Fleet Marine Force.</p>												



Exhibit P-18, Initial and Replenishment Spare & Repair Parts Justification						Date: February 2010				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 07 Spares / 7000				Weapon System		P-1 Item Nomenclature: SPARES AND REPAIR PARTS				
P-1#	End Item P-1 Line	BLI	Prior Yrs	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
BA 2 WEAPONS AND TRACKED VEHICLES										
	EXPEDITIONARY FIGHTING VEHICLE	202200*	7,057	0	0	0	17,382	21,307	21,867	22,453
2	LAV PIP & LETHALITY	203800*	11,836	54	0	0	0	0	0	0
9	MODIFICATION KITS	206100*	4,484	0	0	0	0	0	0	0
4	EXPEDITIONARY FIRE SUPPORT SYS	206400*	1,096	0	0	0	0	0	0	0
3	M1A1 FIREPOWER ENHANCEMENTS	209500*	4,436	0	0	0	0	0	0	0
5	LT WT 155MM TOWED HOW (LW155)	218500	6,243	4,674	2,904	0	0	0	0	0
6	HIMARS	221200*	6,577	3,047	1,125	0	0	0	0	0
8	MODULAR WEAPON SYSTEM	233400*	642	0	0	0	0	0	0	0
	TOTAL BA 2		42,371	7,775	4,029	0	17,382	21,307	21,867	22,453
BA 3 GUIDED MISSILES AND EQUIPMENT										
11	GROUND BASED AIR DEFENSE	300600	0	176	1,832	0	0	0	0	0
13	FOLLOW ON TO SMAW	301600*	0	0	0	1,604	591	285	0	0
	TOTAL BA 3		0	176	1,832	1,604	591	285	0	0
BA 4 COMMUNICATIONS AND ELECTRONIC EQUIPMENT										
17	REPAIR AND TEST EQUIPMENT	418100	2,893	1,444	286	295	559	574	584	593
27	COMMON COMPUTER RESOURCES	463000	0	415	198	1,219	7,470	7,579	609	165
28	COMMAND POST SYSTEMS	463100*	2,433	0	15,432	0	0	0	0	0
29	RADIO SYSTEMS	463300	26,784	3,073	4,420	178	184	188	192	197
30	COMM SWITCHING & CONTROL SYS	463400	5,445	510	0	0	0	0	0	0
23	INTELLIGENCE SUPPORT EQUIPMENT	474700*	21,893	0	147	165	532	539	550	563
26	NIGHT VISION MOD	493000*	4,453	0	1,494	0	0	0	0	0
	TOTAL BA 4		63,901	5,442	21,977	1,857	8,745	8,880	1,935	1,518
BA 5 SUPPORT VEHICLES										
37	LOGISTICS VEHICLE SYSTEM REPL	509300	0	0	11,121	9,419	0	0	0	0
37	FLATRACK	509300	0	438	385	0	0	0	0	0
38	FAMILY OF TACTICAL TRAILERS	509700*	418	768	592	0	0	0	0	0
	TOTAL BA 5		418	1,206	12,098	9,419	0	0	0	0

<b>Exhibit P-18, Initial and Replenishment Spare &amp; Repair Parts Justification</b>					Date: February 2010						
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / 07 Spares / 7000					Weapon System		P-1 Item Nomenclature: SPARES AND REPAIR PARTS				
P-1#	End Item P-1 Line	BLI	Prior Yrs	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	
BA 6 ENGINEER AND OTHER EQUIPMENT											
49	MATERIAL HANDLING EQUIPMENT	646200*	74	100	99	97	97	97	99	102	
45	AMPHIBIOUS SUPPORT EQUIPMENT	651800*	1,478	0	254	0	0	0	0	0	
45	IMPROVED RIBBON BRIDGE (IRB)	651800*	0	0	45	0	0	0	0	0	
46	EOD SYSTEMS - ABV & CREW	652000*	5,470	559	0	0	0	11,176	11,224	11,530	
51	FAMILY OF FIELD MEDICAL EQUIPMENT	652200*	1,305	505	498	500	546	545	551	562	
52	TRAINING DEVICES	653200*	173	51	49	47	48	48	50	52	
55	FAMILY OF ITV	654500	264	468	538	0	0	0	0	0	
57	RAPID DEPLOYABLE KITCHEN	661300*	52	373	0	0	0	0	0	0	
TOTAL BA 6			8,816	2,056	1,483	644	691	11,866	11,924	12,246	
TOTAL SPARES			115,506	16,655	41,419	13,524	27,409	42,338	35,726	36,217	
<p>*Spares through prime vendor vice Navy Working Capital Fund (NWCF).</p>											