

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2004

Appropriation / Budget Activity/Serial No:

Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4)

P-1 Item Nomenclature:

AIR OPERATIONS C2 SYSTEMS

Program Elements:

0206118M Tactical Air Control Systems (Marine Corps)

Code:

A

Other Related Program Elements:

0206313M Tactical Air Control Sysytems

	Prior Years			FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	46.0			6.5	10.7	10.3	38.0	40.3	49.7	89.3	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	46.0			6.5	10.7	10.3	38.0	40.3	49.7	89.3	Cont	Cont
Initial Spares	3.6			0.3	1.2	1.1	4.7	4.7	5.9	5.0	Cont	Cont
Total Proc Cost	49.6			6.8	11.9	11.4	42.7	45.1	55.6	94.2	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												

Short/Medium Range Air Defense Radar - The AN/TPS-63 is the Marine Corps two dimensional, medium range, tactical radar assigned to the Marine Air Control Squadron (MACS) as a gap-filler or early warning system for early deployment into the warfighting area. The AN/MPQ-62 Continuous Wave Acquisition Radar provides a lightweight, mobile, flexible target acquisition, and target cueing system to the MACS and Short Range Air Defense (SHORAD) Platforms. The Continuous Wave Acquisition Radar (CWAR) maintains a simultaneous 360 degree low altitude area air surveillance on both fixed and rotary wing air breathing targets, unmanned air vehicles, and high-speed cruise missiles. Short/Medium Range Air Defense Radar mods provides the necessary follow-on support and enhancements to ensure USMC viability and relevance in the warfighting area. Funding was transitioned to BLI 464200 for FY04 and beyond.

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 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).

Theater Battle Management Core Systems (TBMCS) Contingency Theater Automated Planning System (CTAPS) - TBMCS is a Chairman, Joint Chiefs of Staff mandated air war planning tool for the generation, dissemination and execution of the Air Tasking Order (ATO). It is the follow-on system to the CTAPS. 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 scaleable, allowing for joint, coalition and service specific operations. It is an evolutionary acquisition program, with TBMCS V1.0.1 being the core that will be built upon.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2004

Appropriation / Budget Activity/Serial No:

Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4)

P-1 Item Nomenclature:

AIR OPERATIONS C2 SYSTEMS

Composite Tracking Network (CTN) - Formerly known as Cooperative Engagement Capabilities (CEC) supports adaptation of the U.S. Navy's Cooperative Engagement Transmission Processing System (CTEPS) to meet USMC's need by providing a sensor networking capability to allow USMC participation in a cooperative engagement environment. CTN will provide the capability to receive, generate, and distribute composite tracking data to C2 and weapon platforms, and to provide information derived from organic sensors and other forces' sensors to improve real-time Situational Awareness.

Air Defense Communications Platform (ADCP) - Lightweight, mobile, joint tactical digital information distribution system hub for the Marine Air Control Squadron (MACS). Provides dissemination of ballistic missile tracking information and anti-air missile cueing.

Mounted Cooperative Target ID Systems (MCTIDS) - The Mounted Target Identification System (MCTIS) will be a cooperative battlefield target identification device that employs encrypted, Ka band, millimeter wave, question and answer technology. It will consist of interrogator and transponder antennae, transceiver, and communications/electrical interface unit. It will be fielded as two variants: interrogator/transponder system for AAVs, LAVs, and M1A1s and targets as friendly or unknown, at ranges to 6km, before engaging them. They, and all other designated vehicles, will also possess the capability to rapidly identify themselves as friendly to weapon systems equipped with comparable systems prior to being engaged. As a result, incidents of fratricide and collateral damage will decline, while the range at which targets may be engaged without fear of misidentification will increase dramatically. The system will be interoperable with Joint, Allied, and coalition forces' cooperative target identification systems.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4) P-1 Item Nomenclature: THEATER BATTLE MANAGEMENT CORE SYSTEM

Program Elements: 0206118M Tactical Air Control Systems (Marine Corps) Code: A Other Related Program Elements:

	Prior Years		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty											
Gross Cost	2.8		1.7	6.4	3.5	3.6	3.6	3.7	3.8	Cont	Cont
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc (P-1)	2.8		1.7	6.4	3.5	3.6	3.6	3.7	3.8	Cont	Cont
Initial Spares	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cont	Cont
Total Proc Cost	2.8		1.7	6.4	3.5	3.6	3.6	3.7	3.8	Cont	Cont
Flyaway U/C											
Wpn Sys Proc U/C											

TBMCS (CTAPS) - Theater Battle Management Core System (formerly CTAPS) - An evolutionary acquisition, allowing for the rapid development/fielding of hardware and software to meet today's rapidly advancing technology. 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 scaleable, allowing for joint, coalition and service specific operations. It is an evolutionary acquisition program, with TBMCS V1.0.1 being the core that will be built upon.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4)			P-1 Line Item Nomenclature: THEATER BATTLE MANAGEMENT CORE SYSTEM			Weapon System Type:			Date: February 2004		
Weapon System Cost Elements		ID	FY 03			FY 04			FY 05				
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost		
			\$000	Each	\$	\$000	Each	\$	\$000	Each	\$		
THEATER BATTLE MANAGEMENT CORE SYSTEM													
Software COTS Procurement			750	8	93750	3230	8	403750	2584	8	323000		
New Equipment/Installation Support			915			800			890				
Hardware Technology Refresher						2413	8	307750					
TOTAL			1665			6443			3474				
Active			1665			5023			2940				
Reserve						1420			534				

Exhibit P-40, Budget Item Justification Sheet

Date: February 2004

Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4) P-1 Item Nomenclature: MACCS SUSTAINMENT

Program Elements: 0206118M Tactical Air Control Systems (Marine Corps) Code: A Other Related Program Elements:

	Prior Years		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty											
Gross Cost	0.0		4.2	4.0	6.6	11.9	1.9	1.4	1.3	Cont	Cont
Less PY Adv Proc											
Plus CY Adv Proc											
Net Proc (P-1)	0.0		4.2	4.0	6.6	11.9	1.9	1.4	1.3	Cont	Cont
Initial Spares	0.0		0.3	1.2	1.1	1.2	1.3	1.4	1.4	Cont	Cont
Total Proc Cost	0.0		4.4	5.2	7.7	13.1	3.1	2.8	2.7	Cont	Cont
Flyaway U/C											
Wpn Sys Proc U/C											

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 MAGTF operations. The Marine Air Command and Control Sustainment (MACCS) 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).

MACCS Sustainment Program provides life cycle support of legacy air command and control systems pending the fielding of CAC2S. The five systems that comprise the program are:

- Tactical Air Command Center (TACC), the senior MACCS agency from which air operations and air defense warning functions are directed, and which serves as both the operational command post of the Marine Aircraft Wing's Commanding General and as the Marine Corps' theater Operational Facility (OPFAC);
- Tactical Air Operations Center (TAOC), the principle air control agency responsible for airspace control and management;
- Direct Air Support Center (DASC), the principle air control agency responsible for the direction and control of air operations directly supporting the ground combat element;
- Direct Air Support Center (Airborne) (DASC(A)), an airborne aircraft equipped to perform limited functions of a DASC.
- Air Defense Communications Platform (ADCP), a shelterized, HMMWV-based system that contains the necessary computerized workstation and communications equipment to conduct air defense communications operations.

Exhibit P-5, Weapon WPN SYST Cost Analysis		Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / Communications and Electronics Equipment (4)			P-1 Line Item Nomenclature: MACCS SUSTAINMENT			Weapon System Type:			Date: February 2004			
Weapon Svstem Cost Elements		ID	FY 03			FY 04			FY 05					
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$	\$000	Each	\$	\$000	Each	\$	\$000	Each	\$
MACCS SUSTAINMENT														
Engineering Change Orders														
Fiber Cable Replacement						515			504			529		
Hardware Refresh														
TACC TADL J Hardware						860								
Communications Distribution System						1678								
DASC(A)						538			1325	2	662500	3300	5	660000
TAOM Cots Refresh						353			2164			2812		
TACC Antenna														
Modification Kits														
TAOM Interface Units						215								
TOTAL						4159			3993			6641		
Active Reserve						4159			3993			6641		