

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

February 2002

BUDGET ACTIVITY 5 - Engineering and manufacturing development		PE NUMBER AND TITLE 0604865A - Patriot PAC-3 Theater Missile Defense Acq - EMD						PROJECT 01C		
COST (In Thousands)		FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
01C	PATRIOT ADVANCED CAPABILITY (PAC) - 3	0	0	150819	177404	79774	22045	16295	0	446337

A. Mission Description and Budget Item Justification: PATRIOT is a mobile, field Army and Corps air defense system, using guided missiles to simultaneously engage and destroy multiple target types at varying ranges. The PATRIOT Advanced Capability 3 (PAC-3) Upgrade Program is the latest evolution of the phased materiel change improvement program to PATRIOT. The materiel changes will provide improved performance across the spectrum for system and threat intercept performance. In addition to modernization of the ground support equipment, funding resources a new missile design providing a high velocity, hit to kill, surface to air missile with the range, accuracy, and lethality necessary to effectively intercept and destroy tactical missiles with Nuclear Biological Chemical/High Explosive (NBC/HE) warheads and air breathing threats. The full capability will provide defense against short to medium range theater ballistic missiles (TBMs), cruise missiles (CMs), unmanned aerial vehicles (UAVs) and other air breathing threats as part of the Ballistic Missile Defense (BMD) systems, a multi-layered Theater Air and Missile Defense Architecture. Funds will ensure PAC-3 will remain interoperable in the BMDS. PATRIOT is pursuing integration of PATRIOT Battle Management Command, Control, Communications and Intelligence (BMC3I) with the Project Manager, Air Defense Command and Control Systems to take advantage of previous U.S. Army developments that can be incorporated into the PATRIOT program. The Army requirement for PAC-3 supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

FY 2003 Planned Program

- 60500 Continue follow-on Block test program with LMMFC and Raytheon.
- 2000 Continue Operational Test & Evaluation.
- 88319 Evolutionary Development.

Total 150819

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<u>B. Program Change Summary</u>	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY 2002 PB)	0	107100	77200
Congressional Adjustments	0	-107100	0
Appropriated Value	0	0	0
a. Congressional Reductions (FFRDC, Inflation, etc.)	0	0	0
b. OSD Reductions	0	0	0
c. Congressional Reprogramming	0	0	0
d. Emergency Supplemental	0	0	0
e. Below Threshold Reprogramming	0	0	0
Adjustments to Budget Years Since FY 2002 PB	0	0	73619
Current Budget Submit (FY 2003 PB)	0	0	150819

Funding:
 In FY02, the Patriot Advanced Capability (PAC)-3 program (-107.1 million) transferred from Army to the Ballistic Missile Defense Organization (BMDO), now the Missile Defense Agency.
 FY 03 funding increase of (+73.6 million) for Evolutionary Development.

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<u>C. Other Program Funding Summary</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Compl</u>	<u>Total Cost</u>
PAC-3, SSNC49200	0	0	471670	450514	501107	502977	501977	0	2428245
PATRIOT MODS, SSN C50700	22718	24942	151307	234600	90198	79431	81634	340100	1024930
Initial Spares, CA0267	2625	726	40655	32692	15206	15622	9811	23337	140674

D. Acquisition Strategy: The design objective of the PATRIOT system is to provide an element of an integrated Ballistic Missile Defense system capable of being modified to cope with the evolving threat. This strategy minimizes technological risks and provides a means of enhancing system capability through planned upgrades of deployed systems. The PATRIOT program consists of two interrelated acquisition programs - the PATRIOT PAC-3 Growth Program and the PAC-3 Missile Program. Growth Program modifications are grouped into configurations which are scheduled to be fielded in the same time frame. However, incremental increases in performance are determined for each configuration in order to provide benchmarks for configuration testing and for the development of user doctrine and tactics. The PAC-3 Missile Program focuses on developing, fabricating and testing the high velocity, hit to kill, surface to air missile and associated ground support equipment to provide essential increases in battle space, accuracy, lethality and firepower to counter and destroy evolving air defense threats. Funds will ensure PAC-3 will remain interoperable in the BMDS. The missile performance is demonstrated through a series of flight tests and modeling and simulation activities. PAC-3 Block Evolutionary development efforts will further improve system interoperability, commonality, and capabilities against emerging and reactive threats.

<u>E. Schedule Profile</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
PAC-3 Missile FUE	4Q						
Configuration 3 Initial Operational Test & Evaluation (IOT&E)		1-4Q					
PAC-3 Missile MS III		4Q					
PAC-3 Missile FOT			1-4Q	1-4Q			
PAC-3 Missile FRP			1Q				
PAC-3 Missile IOC					4Q		
Initiate PAC-3 Evolutionary Block Upgrades		1Q					
Evolutionary Block Upgrades earliest Transition to Production					2Q		

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E. Schedule Profile (continued)

FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . PAC-3 Missile EMD	SS-CPIF	LMMFC, TX	0	0		0		0		0	0	0
b . PAC-3 Missile Integration	SS-CPIF	Raytheon, MA	0	0		0		0		0	0	0
c . RDEC	MIPR	MRDEC, AL	0	0		0		2298	1Q	0	2298	0
d . PAC-3 Missile FOT	SS-CPIF	LMMFC, TX	0	0		0		18000	1Q	0	18000	0
e . RSC Integration	SS-CPIF	Raytheon, MA	0	0		0		11000	1Q	0	11000	0
f . PAC-3 Evolutionary Development	CPIF		0	0		0		70319	1Q	0	70319	0
Subtotal:			0	0		0		101617		0	101617	0

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II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . SETA	C-CPAF	CAS, AL	0	0		0		4100	1Q	0	4100	0
b . OGA/In-House	PO		0	0		0		22902	1Q	0	22902	0
c . Engineering Support	SS-CPIF	Raytheon, MA	0	0		0		2300	2Q	0	2300	0
Subtotal:			0	0		0		29302		0	29302	0

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . White Sands Missile Range	MIPR	WSMR, NM	0	0		0		12900	1Q	0	12900	0
b . Operational Test Support	MIPR		0	0		0		2000	1Q	0	2000	0
c . Targets	MIPR	SMDC/AL	0	0		0		5000	1Q	0	5000	0
Subtotal:			0	0		0		19900		0	19900	0

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
Project Total Cost:			0	0		0		150819		0	150819	0