

UNCLASSIFIED

BMDO RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	DATE June 2001
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BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604865C PAC3 - EMD	PROJECT 2257
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COST <i>(In Thousands)</i>	FY2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY2005 Estimate	FY2006 Estimate	FY2007 Estimate	Cost to Complete	Total Cost
2257 Patriot	220674	79851								

A. Mission Description and Budget Item Justification

PATRIOT is a long range, mobile, field Army and Corps air defense system, using guided missiles to simultaneously engage and destroy multiple targets 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 provides for a new missile design that provides 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 (TBM's), cruise missiles (CM's), unmanned aerial vehicles (UAVs) and other air breathing threats as part of the Theater Missile Defense (TMD) family of systems, a multilayered Theater Air and Missile Defense Architecture. 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 PATRIOT Program (PE 0604865C) to include Programmatic and funding is being transferred to the Army beginning in FY02.

FY 2000 Accomplishments:

- 202924 Continued PAC-3 missile Engineering and Manufacturing Development (EMD) program.
- 9712 Continued PAC-3 Target and Test Support.
- 8038 Continued operational test and evaluation efforts.

Total 220674

FY 2001 Planned Program:

- 65218 Continue PAC-3 missile Engineering and Manufacturing Development (EMD) program.
- 9333 Continue PAC-3 Target and Test Support.
- 5300 Continue Operational Test Support.

Total 79851

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B. Program Change Summary	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
Previous President's Budget (<u>FY 2001 PB</u>)	179139	81016		
Appropriated Value		81016		
a. Congressional Reductions (FFRDC, Inflation, etc)		-1165		
b. OSD Reductions				
c. Congressional Reprogramming				
d. FY 00 Emergency Supplemental	40000			
e. Below Threshold Reprogramming	1535			
Adjustments to Budget Years Since <u>FY 2001 PB</u>				
President's Budget (<u>FY 2002 PB</u>)	220674	79851		

Change Summary Explanation:

Funding: FY 2000 (+41535):	Project increased (+2535) to meet program funding requirements. Project decremented (-1000) for common PATRIOT requirements. Congressional adjustment of (+40000) allocated from FY00 Emergency Supplemental.
FY 2001 (-1165)	Congressional general reductions (-1165).

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C. <u>Other Program Funding Summary</u>	<u>FY 2000</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>	To <u>Compl</u>	Total <u>Cost</u>
2257, PAC3 Procurement, PE 0208865C	375331	362101								

D. Acquisition Strategy: The design objective of the PATRIOT system is to provide a 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. Configuration groupings are a convenience for managing block changes and are not a performance related grouping. 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. The missile performance is demonstrated through a series of flight tests and modeling and simulation activities. A PAC-3 Follow-on Test Program will supplement EMD by demonstrating system and missile improvements and capabilities not verified during EMD flight tests. Evolutionary development efforts will further improve system capabilities against emerging and reactive threats.

E. <u>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>
Configuration 3 Initial Operational Test & Evaluation (IOT&E)		1-4Q					
PAC-3 FUE	4Q						
Milestone III		4Q					
IOC							

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BMDO RDT&E COST ANALYSIS (R-3)										DATE June 2001		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604865C PAC3 - EMD						PROJECT 2257		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	<u>FY 2001</u> Cost	<u>FY 2001</u> Award Date	<u>FY 2002</u> Cost	<u>FY 2002</u> Award Date	<u>FY 2003</u> Cost	<u>FY 2003</u> Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. PAC-3 Missile EMD	SS-CPIF	LMMFC/TX	941818	17700	Oct 00							
b. PAC-3 Missile Integration	SS-CPIF	Raytheon/MA	166433	8500	Nov 00							
c. RDEC	MIPR	MRDEC/AL	67603	1396	Nov 00							
d. PAC-3 Missile FOT	SS-CPIF	LMMFC/TX										
e. RSC Integration	SS-CPIF	Raytheon/MA										
f. PAC-3 Evolutionary Development			9500									
Subtotal Product Development:			1185354	27596								
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	<u>FY 2001</u> Cost	<u>FY 2001</u> Award Date	<u>FY 2002</u> Cost	<u>FY 2002</u> Award Date	<u>FY 2003</u> Cost	<u>FY 2003</u> Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. SETA	C-CPAF	CAS/AL	43340	5343	Oct 00							
a. OGA/In-House	PO		70772	8273	Nov 00							
b. Engineering Support	SS-CPIF	Raytheon/MA	74090	7485								
Subtotal Support Costs:			188202	21101								
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	<u>FY 2001</u> Cost	<u>FY 2001</u> Award Date	<u>FY 2002</u> Cost	<u>FY 2002</u> Award Date	<u>FY 2003</u> Cost	<u>FY 2003</u> Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. White Sands Missile Range	MIPR	WSMR/NM	87377	12154	Oct 00							
b. ADSAM			4668									
c. Impact				3467								
d. Operational Test Support	MIPR		29989	6200	Nov 00							
e. Targets	MIPR	SMDC/AL	92668	9333	Nov 00							
f. Lethality	MIPR	SMDC/AL	37628									
Subtotal Test and Evaluation:			252330	31154								

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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
a.												
b.												
c.												
d.												
e.												
f.												
Subtotal Management Services:												

Remark:

Project Total Cost:			1625886	79851								
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