

UNCLASSIFIED

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

DATE

February 2003

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0305144F TITAN SPACE LAUNCH VEHICLES

PROJECT

4135

COST (\$ in Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
4135 Titan II/IV	16,947	0	0	0	0	0	0	0	0	3,006,164
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description**

National security requirements dictate a continuing, highly reliable means of placing critical satellites into required orbits. The Titan IV program provides the capability to launch the largest of these satellites into near-earth or geosynchronous orbits from either the East or West Coast launch facilities. Titan IV is used to launch Air Force, National Reconnaissance Office (NRO), and NASA payloads. This program provides several different configurations of the Titan IV including No Upper Stage (NUS), Inertial Upper Stage (IUS), and Centaur. In addition, the Titan IV program developed a new vehicle configuration, the Titan IVB, with solid rocket motor upgrade (SRMU), new avionics and ground support equipment to meet reliability and increased performance requirements. This program provides continuing integration support to the payload community as well as engineering support to maintain system characterization and reliability. The program also continuously evaluates and improves upper stage reliability, cost effectiveness, and responsiveness; supports redesign and disposition of aging spares and facilities which are no longer manufactured or available; investigates flight anomalies; and conducts small studies to assist in defining future upper stages.

Since FY94, this program element also included funding for sustaining engineering, payload integration, and government costs for the Titan II space launch vehicle. Since FY96, program office support efforts have been funded with procurement dollars.

Beginning in FY00, the remaining Inertial Upper Stage Program (PE 0305138F) funds transferred into the Titan program to provide consolidated acquisition of the IUS to support the launch of Defense Support Program (DSP) satellites. IUS is an upper stage on the Titan IV (can be modified for Shuttle) and delivers the DSP satellite to its required orbit.

NOTE: Titan IV / Milstar 6 and Titan II / Coriolis Space Test Program missions previously manifested in FY02 have moved into FY03 due to satellite delays and unavailability of launch ranges -- integration will be finished in FY03 with FY02 funding.

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07 - Operational System Development**0305144F TITAN SPACE LAUNCH VEHICLES****4135**(U) **A. Mission Description Continued**(U) FY 2002 (\$ in Thousands)

(U)	\$0	Accomplishments/Planned Program
(U)	\$15,154	Completed Milstar 5 integration, continued Milstar 6 integration
(U)	\$1,793	Continued Titan II / Coriolis Space Test Program mission integration
(U)	\$0	No Activity
(U)	\$16,947	Total

(U) FY 2003 (\$ in Thousands)

(U)	\$0	Accomplishments/Planned Program
(U)	\$0	No new activity planned (see FY02 description)
(U)	\$0	Total

(U) FY 2004 (\$ in Thousands)

(U)	\$0	Accomplishments/Planned Program
(U)	\$0	No Activity
(U)	\$0	Total

(U) **B. Budget Activity Justification**

This PE is in Budget Activity 7, Operational Systems Development, because Titan II, Titan IV and the Inertial Upper Stage are in production and are operational vehicles.

(U) **C. Program Change Summary (\$ in Thousands)**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
(U) Previous President's Budget	21,080			3,010,510
(U) Appropriated Value	21,293			
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions	-301			
b. Small Business Innovative Research	-1,277			
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram	-2,768			
e. Rescissions				

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BUDGET ACTIVITY

07 - Operational System Development

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4135**(U) C. Program Change Summary (\$ in Thousands) Continued**

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Total Cost</u>
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(U) Adjustments to Budget Years Since FY 2003 PBR

(U) Current Budget Submit/FY 2004 PBR

16,947

3,006,164

(U) Significant Program Changes:

Titan IV / Milstar 6 and Titan II / Coriolis Space Test Program missions previously manifested in FY02 have moved into FY03 due to satellite delays and unavailability of launch ranges -- integration finished in FY03 with FY02 funding.

(U) D. Other Program Funding Summary (\$ in Thousands)

	<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>FY 2008</u>	<u>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	

(U) MPAF, Space Programs, (BA 05, PE 0305144F, P-27)	253,240	288,687	91,499	74,697	71,361	30,980	0	0	0	810,464
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Note: during FY03 Congressional deliberations, appropriators rescinded full funding of the Titan contract closeout. This resulted in a reduction of \$93.6 million (FY01) and \$87.7 million (FY02) to the Titan program.

(U) E. Acquisition Strategy

The program has implemented a revised acquisition strategy for the 39-vehicle program. During FY1996, Titan IV transitioned from the old '85-C-0019' development/production and payload integration contract to new contracts designed to improve cost accountability, correct contract discrepancies, and establish an overall programmatic view for the effort to complete the program. The new contracts combined Titan II and Titan IV production, storage, pad maintenance and deactivation, launch operations, anomaly resolution, development and hardware requalification, payload integration, and program studies to provide the greatest potential for cost savings by maximizing use of resources and eliminating duplicative processes.

(U) F. Schedule Profile

	<u>FY 2002</u>				<u>FY 2003</u>				<u>FY 2004</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Milstar 5 and Milstar 6 launches		*				X						
(U) Titan II launch (STP/Coriolis, Jan 03 and DMSP F-16, May 03)						*	X					

*completed event X planned event

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2003		
BUDGET ACTIVITY					PE NUMBER AND TITLE				PROJECT	
07 - Operational System Development					0305144F TITAN SPACE LAUNCH VEHICLES				4135	
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
					FY 2002		FY 2003		FY 2004	
(U) Contract Costs Unified Payload Integration					16,947		0		0	
(U) Total					16,947		0		0	
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
<u>Contractor or</u>		<u>Contract</u>								
<u>Government</u>		<u>Method/Type</u>		<u>Award or</u>		<u>Performing</u>		<u>Project</u>		
<u>Performing</u>		<u>or Funding</u>		<u>Obligation</u>		<u>Activity</u>		<u>Office</u>		<u>Total Prior</u>
<u>Activity</u>		<u>Vehicle</u>		<u>Date</u>		<u>EAC</u>		<u>EAC</u>		<u>to FY 2002</u>
										<u>Budget</u>
										<u>FY 2002</u>
										<u>Budget</u>
										<u>FY 2003</u>
										<u>Budget</u>
										<u>FY 2004</u>
										<u>Budget to</u>
										<u>Complete</u>
										<u>Total</u>
										<u>Program</u>
<u>Product Development Organizations</u>										
LMC 85-C-0019*		SS/FPIF		1QFY85		11,203,100		11,203,100		2,042,016
LMC 85-C-0085**		SS/FPIF		1QFY85		678,715		678,715		72,504
LMC 92-C-0028**		SS/CPAF		3QFY92		515,251		515,251		93,428
LMC 96-C-0035		SS/CPAF		3QFY96		232,923		229,304		225,758
LMC 98-C-0005***		SS/CPAF		1QFY98		257,381		256,829		62,705
Facilities		n/a		n/a						6,993
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2003	
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0305144F TITAN SPACE LAUNCH VEHICLES			PROJECT 4135	
(U) <u>Government Furnished Property:</u>								
	<u>Contract</u>							
	<u>Method/Type</u>	<u>Award or</u>						
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>
<u>Product Development Property</u>								
None								
<u>Support and Management Property</u>								
None								
<u>Test and Evaluation Property</u>								
None								
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
<u>Subtotals</u>				<u>to FY 2002</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>Complete</u>
Subtotal Product Development				2,503,404	16,947	0	0	0
Subtotal Support and Management				485,813	0	0	0	0
Subtotal Test and Evaluation								
Total Project				2,989,217	16,947	0	0	0
								3,006,164

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