

UNCLASSIFIED

PE NUMBER: 0605864F

PE TITLE: Space Test Program

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2006

BUDGET ACTIVITY

06 RDT&E Management Support

PE NUMBER AND TITLE

0605864F Space Test Program

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	44.705	47.308	46.310	57.000	57.651	58.129	58.600	Continuing	TBD
2617 Free-Flyer Spacecraft Missions	44.705	47.308	46.310	57.000	57.651	58.129	58.600	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**

(U) The Space Test Program (STP) conducts space test missions for the purpose of accelerating DoD space technology transformation while lowering developmental risk and enabling future U.S. space superiority. The program flies an optimal number of DoD sponsored experiments consistent with priority, opportunity, and funding. STP missions are the most cost-effective way to flight test new space system technologies, concepts and designs, providing an inexpensive way to:

- Demonstrate and develop responsive research and development (R&D) space capabilities
- Provide early operational capabilities to quickly react to new developments
- Perform operational risk reduction through direct flight test of prototype components
- Improve operational design by characterizing the space environment, event, or sensor physics proposed for an operational system/system upgrade
- Develop, test, and acquire advanced payload support hardware for Launch Vehicles/Shuttle/International Space Station

(U) The Deputy Secretary of Defense issued a 'Space Test Program Management & Funding Policy' in Jul 2002 reaffirming STP as the primary provider of spaceflight for the entire DoD space research community. "The STP funding level must be sufficient to provide spaceflight for DoD Space Experiments Review Board (SERB) approved experiments in a timely manner." "As a goal the Air Force funding level should provide for a Small-Launch-Vehicle-Class mission every 2 years and a Medium-Launch-Vehicle-Class mission every 4 years." This is in addition to funding required to support secondary payload and spacecraft missions on other organizations' spacecraft and launch vehicles. The Jul 2002 policy statement also reaffirms STP role as the single manager for all DoD payloads on the Space Shuttle and the International Space Station. Air Force Space Command policy establishes STP as the front door for all agencies requesting launch services as a piggyback payload or secondary satellite on a Combatant Command mission.

(U) STP has a continually evolving mission portfolio, whereby space experiments and technology payloads are selected for spaceflight from the most recent list approved by the SERB. STP is authorized to initiate new missions from the prioritized, SERB-approved list. STP may also support non-SERB customers, both DoD and other U.S. Government, on a cost-reimbursable basis. Selection of the most appropriate spaceflight mode for a payload is dependent on optimizing the combination of SERB list priority, timing and readiness of experiments, launch opportunity, and availability of funding. STP support for these payloads includes some or all of the following: mission planning and related support activities; acquisition of a dedicated satellite, launch vehicle, and/or associated integration hardware; integration onto a host satellite, launch vehicle, NASA shuttle, and/or the International Space Station; readiness reviews, launch support, and approximately one year of on-orbit operations. This flexible approach is essential in order to take advantage of 'target of opportunity' space hardware, including operational spacecraft, and ensures the maximum amount of DoD space research is accomplished with the resources available.

(U) STP is in Budget Activity 6, RDT&E Management Support, because it supports RDT&E satellite launches.

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(U) B. Program Change Summary (\$ in Millions)

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	44.129	48.157	47.953
(U) Current PBR/President's Budget	44.705	47.308	46.310
(U) Total Adjustments	0.576	-0.849	
(U) Congressional Program Reductions	-0.034	-0.849	
Congressional Rescissions			
Congressional Increases			
Reprogrammings	1.800		
SBIR/STTR Transfer	-1.190		
(U) <u>Significant Program Changes:</u>			

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2617 Free-Flyer Spacecraft Missions

Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
2617 Free-Flyer Spacecraft Missions	44.705	47.308	46.310	57.000	57.651	58.129	58.600	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) **A. Mission Description and Budget Item Justification**

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- Demonstrate and develop responsive research and development (R&D) space capabilities
- Provide early operational capabilities to quickly react to new developments
- Perform operational risk reduction through direct flight test of prototype components
- Improve operational design by characterizing the space environment, event, or sensor physics proposed for an operational system/system upgrade
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(U)	<u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>						
(U)	Provide program support for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions	2.704	3.316	1.954						
(U)	Initiate, develop, and continue integration of payloads onto piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions to include acquisition of associated spacecraft and integration hardware	16.439	17.351	26.624						
(U)	Initiate and continue purchase of launch vehicles and launch vehicle support for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions	13.765	15.441	5.391						
(U)	Initiate, develop, and continue first year operations and operations planning for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions	10.458	7.926	5.900						
(U)	Conduct studies to explore future launch opportunities, risk reduction activities, and mission planning	1.339	3.274	6.441						
(U)	Total Cost	44.705	47.308	46.310						
(U)	<u>C. Other Program Funding Summary (\$ in Millions)</u>									
		<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</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>Complete</u>	
(U)	Related Procurement: Not Required									
(U)	<u>D. Acquisition Strategy</u>									
	Not Required									