

UNCLASSIFIED

PE NUMBER: 0605864F
 PE TITLE: Space Test Program

Exhibit R-2, RDT&E Budget Item Justification								DATE February 2008	
BUDGET ACTIVITY 06 RDT&E Management Support				PE NUMBER AND TITLE 0605864F Space Test Program					
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	48.801	47.129	48.072	49.070	50.145	51.250	52.376	Continuing	TBD
2617 Free-Flyer Spacecraft Missions	48.801	47.129	48.072	49.070	50.145	51.250	52.376	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. The program flies an optimally selected 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:

- Support the space acquisition block development approach
- 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 small and medium expendable launch vehicles and manned spaceflight vehicles

(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 policy states in part that "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's role as the single manager for all DoD payloads on the Space Shuttle and the International Space Station. Air Force Space Command issued a policy in May 2004 that establishes STP as the sole gateway for all agencies requesting launch services as a piggyback payload or secondary satellite on a Combatant Command mission. STP maintains a SERB ranked list of these prospective payloads seeking assistance. This list contained 51 experiments in 2007. The 2007 SERB list was approved following the board meeting in Nov 07.

(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. These STP efforts led to the flight of 15 successful experiments in

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FY07 and the planned launch of 17 experiments in FY08.

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

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	46.135	47.430	58.361
(U) Current PBR/President's Budget	48.801	47.129	48.072
(U) Total Adjustments	2.666		
(U) Congressional Program Reductions			
Congressional Rescissions		-0.301	
Congressional Increases			
Reprogrammings	3.924		
SBIR/STTR Transfer	-1.258		

(U) Significant Program Changes:

\$3.9M reprogrammed in FY07 to cover costs associated with rebuilding new solar array panels for the Communication/Navigation Outage Forecasting System (C/NOFS).

FY09 funding reduced (~\$10M) due to higher Air Force priorities.

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06 RDT&E Management Support				0605864F Space Test Program			2617 Free-Flyer Spacecraft Missions		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
2617 Free-Flyer Spacecraft Missions	48.801	47.129	48.072	49.070	50.145	51.250	52.376	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

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(U) B. Accomplishments/Planned Program (\$ in Millions)	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Provide program support for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions	1.266	3.545	4.979
(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	28.333	20.623	12.866
(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	5.130	10.496	15.492
(U) Initiate, develop, and continue first year operations and operations planning for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions	5.250	3.154	4.747
(U) Conduct studies to explore future launch opportunities, risk reduction activities, and mission planning	8.822	9.311	9.988
(U) Total Cost	48.801	47.129	48.072

(U) C. Other Program Funding Summary (\$ in Millions)	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</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									