

## Exhibit R-2, RDT&amp;E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

06 RDT&amp;E Management Support

PE NUMBER AND TITLE

0605864F Space Test Program

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	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	38.579	44.129	48.157	47.953	58.454	59.497	60.866	61.901	Continuing	TBD
2617 Free-Flyer Spacecraft Missions	38.579	44.129	48.157	47.953	58.454	59.497	60.866	61.901	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 US 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 the feasibility of new space systems and technologies
- Provide early operational capabilities to evaluate usefulness or 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, acquire advanced payload support hardware for Launch Vehicles/Shuttle/International Space Station
- Demonstrate and develop responsive R&D space capabilities

(U) The Deputy Secretary of Defense issued a 'Space Test Program Management & Funding Policy' in Jul 02 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 02 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 constantly 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 US 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 (SERB and non-SERB payloads), 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 limited resources available.

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 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	42.909	44.521	45.100	46.094
(U) Current PBR/President's Budget	38.579	44.129	48.157	47.953
(U) Total Adjustments	-4.330	-0.392		
(U) Congressional Program Reductions	-4.330	-0.392		
Congressional Rescissions				
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer				

(U) **Significant Program Changes:**

\$3M added in FY06 and \$1M added FY07 to cover increased integration costs caused by launch vehicle change for STP-1 mission. Launch vehicle changed from Boeing Delta IV to Lockheed Martin Atlas V due to Boeing Procurement Integrity Act (PIA) violations.

## Exhibit R-2a, RDT&amp;E Project Justification

DATE

February 2005

BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE			
06 RDT&E Management Support				0605864F Space Test Program				2617 Free-Flyer Spacecraft Missions			
Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	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	38.579	44.129	48.157	47.953	58.454	59.497	60.866	61.901	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

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**(U) B. Accomplishments/Planned Program (\$ in Millions)**

(U) Initiate, develop and continue piggyback/secondary payload missions and associated hardware,

FY 2004

16.311

FY 2005FY 2006FY 2007

**UNCLASSIFIED**

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BUDGET ACTIVITY <b>06 RDT&amp;E Management Support</b>				PE NUMBER AND TITLE <b>0605864F Space Test Program</b>			PROJECT NUMBER AND TITLE <b>2617 Free-Flyer Spacecraft Missions</b>			
spaceflight partnerships; planning and risk reduction; and program support										
(U)	Initiate, develop and continue DoD-sponsored human spaceflight (Shuttle/ISS) payloads and associated hardware, spaceflight partnerships; planning and risk reduction; and program support			1.480						
(U)	Initiate, develop and continue Small Launch Vehicle Class missions and associated hardware, spaceflight partnerships; planning and risk reduction; and program support			6.306						
(U)	Initiate, develop and continue Medium Launch Vehicle Class missions and associated hardware, spaceflight partnerships; planning and risk reduction; and program support			14.482						
(U)	Provide program support for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions				1.945	1.797	1.821			
(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				10.848	17.186	24.471			
(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				16.464	17.283	7.882			
(U)	Initiate, develop, and continue first year operations and operations planning for piggyback/secondary, Small Launch Vehicle, Medium Launch Vehicle, and manned spaceflight missions				10.479	6.933	6.240			
(U)	Conduct studies to explore future launch opportunities/risk reduction activities and mission planning				4.393	4.958	7.539			
(U)	Total Cost				38.579	44.129	48.157	47.953		
(U)	<b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>									
		<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>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</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)	Related Procurement: Not Required									
(U)	<b><u>D. Acquisition Strategy</u></b> Not Required									