Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force											Date: February 2015	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 6: *RDT&E Management Support*					R-1 Program Element (Number/Name) PE 0605864F / *Space Test Program (STP)*							
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	-	11.642	21.161	28.228	-	28.228	27.339	25.570	26.051	26.518	Continuing	Continuing
662617: *Free-Flyer Spacecraft Missions*	-	11.642	21.161	28.228	-	28.228	27.339	25.570	26.051	26.518	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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 Space Experiments Review Board (SERB) priority, opportunity, and funding. STP missions provide a cost-effective way to flight test new militarily relevant space system technologies, concepts, and designs, providing a way to:

- Support the 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, integrate, test, and acquire advanced payload support hardware for launch vehicles (LV) and human-rated spaceflight vehicles

The Deputy Secretary of Defense Space Test Program Management & Funding Policy, issued in July 2002, reaffirmed STP as the primary provider of spaceflight for the DoD space research community. The July 2002 policy statement also reaffirmed STP's role as the single manager for all DoD payloads on the International Space Station (ISS).

This program is in Budget Activity 6, RDT&E Management Support because this budget activity includes research, development, test and evaluation efforts and funds to sustain and/or modernize the installations or operations required for general research, development, test and evaluation.

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B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	11.642	21.161	28.416	-	28.416
Current President's Budget	11.642	21.161	28.228	-	28.228
Total Adjustments	-	-	-0.188	-	-0.188
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-0.188	-	-0.188

C. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Payload Integration	5.247	12.964	17.634

Description: Integrate payloads onto spaceflight missions, including free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial missions. Includes acquisition of associated spacecraft and integration hardware. Provide the unique program costs required for the operation of the Space Test Program in its management and oversight role including program management, administrative, information technology, travel and supply support. This funding line now includes what was previously referred to as program support.

FY 2014 Accomplishments:
Continued payload integration efforts onto spaceflight missions, including free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial missions, and acquisition of associated spacecraft and integration hardware. FY14 support included mission design, spacecraft procurement and payload integration for the Space Test Program (STP) Satellite #3 (STPSat-3) which hosted six payloads including the Air Force Research Laboratory (AFRL) Strip Sensor Unit (Space Experiment Review Board (SERB) #10), Naval Research Laboratory Small Wind and Temperature Spectrometer (SERB #26), the US Air Force Academy's Integrated Miniaturized Electostatic Analyzer Re-Flight (SERB #72), NASA/NOAA's Total Solar Irradiance Calibration Transfer Equipment, AFRL Joint Component Research (SERB Unranked), and the STP/AFRL De-orbit Module (enabling technology). STPSat-3, launched in 1QFY14, also included cubesats from West Point's BlackKnight-1 (SERB #29) and Naval Postgraduate School Solar Cell Array Tester (NPS-SCAT) (SERB #60). Funded the Eagle Spacecraft Platform to host a minimum of three SERB experiments requiring flight to geo-synchronous orbit including Hyper Temporal-spectrometer Imager (HTI) missile detection (SERB #1), MYCROFT (SERB #5) and Resilient Spacecraft Bus Development Experiment (ARMOR) (SERB #32). Began development of STPSat-5 to host four SERB payloads for a polar orbit launch in 2017. Provided the unique

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
program costs required for the operation of the Space Test Program in its management and oversight role including program management, administrative, information technology, travel and supply support. ***FY 2015 Plans:*** Continue payload integration efforts onto spaceflight missions, including free-flyer payloads (STPSat-4 and STPSat-5), hosted payloads, sounding rockets, experiments on the ISS, and commercial missions; including acquisition of associated spacecraft and integration hardware. Continue to provide the unique program costs required for the operation of the Space Test Program in its management and oversight role including program management, administrative, information technology, travel and supply support. ***FY 2016 Plans:*** Continue payload integration efforts onto spaceflight missions, including free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial missions; including acquisition of associated spacecraft and integration hardware. Continue to provide the unique program costs required for the operation of the Space Test Program in its management and oversight role including program management, administrative, information technology, travel and supply support.			
Title: Launch Vehicle and Launch Services ***Description:*** Purchase launch services, launch vehicles and launch vehicle support for free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial spaceflight missions. ***FY 2014 Accomplishments:*** Purchased launch services, launch vehicles, and launch vehicle support for free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial spaceflight missions. FY14 efforts included launch of several SERB experiments on the ISS resupply mission (STP-H4) including Small Wind and Temperature Spectrometer (SWATS) (SERB #27), Global Awareness Data exfiltration International Satellite (GLADIS) (SERB #20), Active Thermal Tile (ATT) (SERB #22), Miniature Array of Radiation Sensors (MARS) (SERB #55) and Integrated Miniaturized Electrostatic Analyzer-Reflight (iMESA-R) (SERB #60). Successfully launched the Automated Navigation and Guidance Experiment for Local Space (ANGELS) (SERB #1) experiment on AFSPC-4 in July 2014. Began Kestrel Eye II mission for launch and deployment from the ISS and Charged Aerosol Release Experiment II (CARE II) sounding rocket mission. ***FY 2015 Plans:*** Continue purchase of launch services, launch vehicles, and launch vehicle support for free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial spaceflight missions. ***FY 2016 Plans:***	3.386	6.044	7.294

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Continue purchase of launch services, launch vehicles, and launch vehicle support for free-flyer payloads, hosted payloads, sounding rockets, experiments on the ISS, and commercial spaceflight missions. Begin funding of the STP-2 medium launch mission.			
Title: On Orbit Satellite Operatons ***Description:*** Execute first-year operations and operations support for STP-sponsored missions. ***FY 2014 Accomplishments:*** Executed first-year operations and/or operations support for STP-sponsored missions, including Space Test Program Satellite-3 and completed launch and early-orbit checkout of Automated Navigation and Guidance Experiment for Local Space (ANGELS). ***FY 2015 Plans:*** Complete ANGELS first-year operations and execute first-year operations and/or operations support for STP-sponsored missions. ***FY 2016 Plans:*** Execute first-year operations and/or operations support for STP-sponsored missions.	3.009	2.153	3.300
Accomplishments/Planned Programs Subtotals	11.642	21.161	28.228

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• RDT&E: BA03: PE0603401F: *Advanced Spacecraft Technology*	13.095	10.000	-	-	-	-	-	-	-	-	-

Remarks

STP-2 integration and mission operations continues in FY15 via existing funding in PE 0603401F Advanced Spacecraft Technology, RDT&E AF. STP-2 is a dedicated research and development launch mission that will carry multiple Space Experiments Review Board approved payloads.

E. Acquisition Strategy

N/A

F. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.