

Space and Flight Support is comprised of separate Agency-level "enabling capabilities" program services including environmental support, space communications, Space Shuttle payloads processing, expendable launch vehicles, and rocket propulsion systems testing.

Space and Flight Support

MAJOR EVENTS IN FY 2005

- First full year of service for the Space Mission Communications and Data Service contractors; and
- Support the Shuttle Return to Flight manifest.

OVERVIEW

Space and Flight Support, managed by the Space Flight Enterprise (SFE), is comprised of several distinct Agency-level services. These services include Space Communications, Launch Services, Rocket Propulsion Testing, Crew Health and Safety, and Environmental (Plum Brook nuclear facility dismantling and Environmental Compliance and Restoration). The services are critical for conducting space exploration, aeronautical research, and biological and physical research. These services are provided to a wide range of customers, including NASA scientists and engineers, other federal agencies, universities, foreign governments and industry interests.

Missions	Goals supported by this Theme	Objectives supporting those Goals
To Understand and Protect Our Home Planet	Understand the Earth system and apply Earth system science to improve prediction of climate, weather, and natural hazards.	SFS provides services in support of NASA's Exploration and Science Goals.
To Explore the Universe and Search for Life	4. Explore the fundamental principles of physics, chemistry, and biology through research in the unique natural laboratory of space.	
	5. Explore the solar system and the universe beyond, understand the origin and evolution of life, and search for evidence of life elsewhere.	
To Inspire the Next Generation of Explorers	7. Engage the public in shaping and sharing the experience of exploration and discovery.	7.1 Improve public understanding and appreciation of science and technology, including NASA aerospace technology, research, and exploration missions.
Exploration Capabilities	8. Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	8.5 Provide services for space communications, rocket propulsion testing, and launch in support of NASA, other government agencies and industry.
	Extend the duration and boundaries of human space flight to create new opportunities for exploration and discovery.	9.1 Understand human physiological reactions to reduced gravity and develop countermeasures to assure survival of humans traveling far from Earth.

RELEVANCE

Space and Flight Support includes the enabling capabilities required to conduct space exploration and expand scientific knowledge of the Earth and our universe. Each of these capabilities play a critical support role in the success of NASA missions and goals. Without these capabilities NASA could not perform many of its missions and the American public would not receive many benefits of the Nation's space program. In addition, the Space and Flight Support Theme includes funding for environmental remediation intended to address the agency's environmental legacy liabilities and demonstrate NASA's commitment to providing a safe and clean natural environment for future generations of Americans.

Education and Public Benefits

Benefits of Space and Flight Support include the relay of scientific data from space to Earth, the safe launching of Space Shuttles and expendable launch vehicles necessary for research, and the assurance that rocket systems have been adequately tested. A space program properly supported by this theme will produce research data that can be used to generate new scientific knowledge through the study of the physical sciences, biological sciences, Earth sciences, planetary science, and beyond. These activities benefit both the general public and the education community.

IMPLEMENTATION

This theme is composed of multiple programs that provide capabilities across a customer base that includes internal NASA customers, other federal agencies, foreign governments, and commercial customers. These programs, while serving separate and distinct roles, serve a common role of continuous customer service. They work together to achieve the aforementioned goals and objectives. Those elements are summarized below. Space and Flight Support is a multiple-program Theme with program responsibility in the Space Flight Enterprise at NASA Headquarters. The Agency Program Management Council has governing responsibility. Enterprise official is William F. Readdy, Associate Administrator for Space Flight at HQ. The Headquarters Program Directors are: Space Communications - Robert Spearing; Launch Services - Karen Poniatowski; Rocket Propulsion Testing - Keith Brock; Crew Health and Safety - Dr. Jeffrey Davis; and Plum Brook decommission and the Environmental Compliance and Restoration programs - Olga Dominguez.

IMPLEMENTATION SCHEDULE

Theme Element	Schedule by Fiscal Year		Purpose		
	95 96 97 98 99 00 01 02 03 04 05 06	07 08 09 10			
Launch Services			Responsible for enabling access to space for all NASA missions and other select government missions as required.		
Rocket Propulsion Testing			Provides development of space transportation propulsion systems by sustaining "world-class" core capabilities required by NASA rocket engine development and testing programs for space		
Crew Health and Safety			Protects our astronauts from the hazards of space travel and identifies methods that allow astronauts to improve their performance.		
Plum Brook Reactor Facility Decommissioning			Supports the decontaminating, demolition and disposal of NASA's Plum Brook Nuclear Reactor Facility.		
Environmental Compliance and Restoration			Supports activities necessary for compliance with environmental statutory and regulatory requirements and standards, orders, regulatory and cooperative agreements, and support of environmental program initiatives.		
Space Communications			Provides space communications services to STS, ISS, Low Earth Orbiting (LEO) satellites and launch vehicles, and telecommunications services among facilities such as NASA flight support networks, mission control centers and science facilities, and administrative communications.		
Tech	& Adv Concept Development Dp	perations	Research		

No exceptions to NPG 7120.5B have been taken.

STATUS

Over the past year, the Space and Flight Support Theme continued to provide critical support in all areas under its domain. Each program provided customer support as measured by their individual annual performance goals. In the area of environmental interests, NASA continues to demonstrate its dedication to environmental stewardship and regulatory assurance as demonstrated by closing 90+ percent of compliance findings, and reducing unfunded environmental liabilities. Space Communications successfully provided support for all Shuttle flights and low Earth orbiting missions. Launch Services met all customer requirements and deadlines that resulted in the successful launch of eight vehicles. The Rocket Propulsion Test program provided 24 test cells and associated facilities to meet customer demands.

Go to Program homepages for more detailed status information. Plum Brook: http://www.lerc.nasa.gov/WWW/pbrf/; Environmental Compliance and Restoration: http://www.hq.nasa.gov/office/codej/codeje/je_site/about_us/about_us.html; Launch Services http://www.ksc.nasa.gov/elvnew/elv.htm http://sspp.gsfc.nasa.gov/; Rocket Propulsion Test Program https://rockettest.ssc.nasa.gov/; Space Communications http://www.spacecommunications.nasa.gov/

PERFORMANCE MEASURES

Outcome 8.5.1	Provide safe, well-managed and 95% reliable space communications, rocket propulsion testing, and launch services to meet agency requirements.
5SFS8	Establish the Agencywide baseline space communications architecture, including a framework for possible deep space and near Eart laser communications services.
5SFS15	Maintain NASA success rate at or above a running average of 95% for missions on the FY2004 Expendable Launch Vehicle (ELV) manifest.
	Achieve at least 95% of planned data delivery for the International Space Station, each Space Shuttle mission, and low-Earth orbiting missions in FY2004.
5SFS19	Define and provide space transportation requirements for future human and robotic exploration and development of space to all NAS/ and other government agency programs pursuing improvements in space transportation.
Outcome 9.1.1	By 2008, develop and test candidate countermeasures using ground-based analysis and space flight.
5SFS20	Certify the medical fitness of all crew members before launch.
niform Measures	
5SFS21	Complete all development projects within 110% of the cost and schedule baseline.
5SFS22	Deliver at least 90% of scheduled operating hours for all operations and research facilities.

INDEPENDENT REVIEWS

Review Types	Performer	Last Review Date	Next Review Date	Purpose
See Individual Programs				

BUDGET

Budget Authority (\$ millions)	FY03	FY04	Change	FY05	Comr
Space and Flight Support	444.5	431.8	+60.3	492.1	
<u>Development</u>	<u>92.3</u>	<u>84.2</u>	<u>-7.7</u>	<u>76.5</u>	
Plum Brook Reactor Facility Decommissioning	52.0	43.4	-12.9	30.5	
Environmental Compliance and Restoration	40.3	40.8	+5.2	46.0	
<u>Operations</u>	<u>352.2</u>	<u>341.6</u>	<u>+74.0</u>	<u>415.6</u>	
<u>Technology</u>		<u>6.0</u>	<u>-6.0</u>		



Development: Plum Brook Reactor Facility Decommissioning

Purpose

Objectives	Performance Measures
	5SFS21

1) Decontaminate NASA's Plum Brook Reactor Facility (PBRF) to levels to allow for unrestricted release required under 10 Code of Federal Regulations 20 Subpart E, Radiological Criteria for License Termination. 2) Demolish and dispose of contaminated and uncontaminated buildings and structures. 3) Terminate the Nuclear Regulatory Commission (NRC) licenses for PBRF, as required by the NRC.

OVERVIEW

The PBRF is an area of about 27 acres located within NASA's Plum Brook Station, a Federal reservation of 6,400 acres, near Sandusky, Ohio. The PBRF includes a 60-megawatt (thermal) materials testing and research reactor, a 100-kilowatt mock-up reactor, and other facilities that support the reactors. The PBRF was built for nuclear irradiation testing of nuclear-fueled and unfueled experiments for space applications. PBRF operated from 1961 to 1973. The NRC has required, through its license process and regulations, that NASA decommission PBRF by 2007. Moreover, the decommissioning schedule is driven by the one commercially available disposal facility (Barnwell, SC) for Class B and C radioactive wastes, which is accepting less waste each year and will stop accepting wastes in 2007.

Go to Plum Brook Reactor Decommissioning Project: http://www.grc.nasa.gov/WWW.PBRF/.

PROGRAM MANAGEMENT

PBRF is a single-project program with program responsibility delegated to the Glenn Research Center. The Glenn Research Center Program Management Council has governing responsibility for the PBRF. This is not an aerospace program and as such is not subject to the requirements of NPG 7120. The responsible office at NASA Headquarters is the Environmental Management Division, Mr. Richard Wickman.

TECHNICAL COMMITMENT

Decontaminate the site to meet NRC's unrestricted release levels for License Termination per 10 CFR 20.1402

Technical Specifications	FY 2005 President's Budget	Change from Baseline
Complete reactor building decontamination	Sept 05	
Complete Hot Lab decontamination	Sept 05	
Complete decontamination on remaining structures	Sept 05	
Continue license termination activities	May 05 through June 06	

Schedule	FY 2005 President's Budget	Baseline	Change from Baseline
Begin demolition/disposal efforts	Jan-04	Aug-04	+ 7 months
Commence reactor building demolition/disposal	Aug-04	Jul-05	+ 11 months
NRC Validation - termination of licenses	Jul-06	Jun-07	+ 11 months
Site-wide demolition/disposal completed	June 07	Mar-06	+15 months

ACQUISITION STRATEGY AND PERFORMING ORGANIZATIONS

NASA signed a Space Act Agreement with the U.S. Army Corps of Engineers. The Corps is using a cost reimbursable type contract primarily because of the flexibility and continuous "cradle to grave" involvement. Moreover, the Corps claims that its cost reimbursable contract was selected because of: 1) ability to provide incentives to contractors, 2) small business goals, 3) use of local contractors, 4) competitively awarded. Changes since FY04 President's Budget: None.

Current Acquisition	Actual*	Selection Method	Actual*	Performer	Actual*
Cooperative Agreement	0%	Full & Open Competition	0%	Industry	0%
Cost Reimbursable	100%	Sole Source 100%		Government	100%
Fixed Price	0%		100%	NASA Intramural	0%
Grants	0%			University	0%
Other	0%	Sci Peer Review	%	Non Profit	0%
*As of FY 2003 direct		*As of FY 2003 direct		*As of FY 2003 direct	
procurement	100%	procurement		procurement	100%

Development: Plum Brook Reactor Facility Decommissioning

Future Acquisition - Major	Selection	Goals
None		

AGREEMENTS

INTERNAL AGREEMENTS: None EXTERNAL AGREEMENTS: 1) Nuclear Regulatory Commission license TR-3 for 60 megawatt research test reactor "possess but not operate"; 2) Nuclear Regulatory Commission license R-93 for 100 kilowatt swimming pool mock-up reactor "possess but not operate"; 3) Space Act Agreement signed on September 13, 1999, and SAA Modification #1 signed on August 3, 2000, provide the scope that allowed USACE to be a partner for PBRF decommissioning. (Reimbursable Interagency Agreement between National Aeronautics and Space Administration and the Department of the Army for Activities Leading to the Decommissioning of the Plum Brook Station Nuclear Reactor Facility); 4) USACE contract with Montgomery Watson; 5) Montgomery Watson's contract and agreements with subcontractors (Duke Engineering & Services, and MOTA, Inc.); 6) NASA's agreements and contracts with support contractors: U.S. Department of Energy's Argonne National Laboratory, Plum Brook Operations and Support Group, Focus Group, and others; 7) NRC Letter of Indemnification dated July 8, 2000, indemnifying NASA, USACE, and contractors and subcontractors up to \$500 million for radiological incidents during decommissioning. Changes since FY04 President's Budget: None.

INDEPENDENT REVIEWS

Review Types	Performer	Last Review Date	Next Review Date	Purpose
NASA Non-Advocate Review	IPAO	10/01		No further non-advocate reviews planned

BUDGET/LIFE CYCLE COST

Budget Authority (\$ millions)	Prior	FY03	FY04	FY05	FY06	FY07	FY08	FY09	втс	Total Comments
FY2005 PRESBUD	<u>16.0</u>	64.0	43.4	<u>30.5</u>	9.2	<u>0.6</u>				99.7
Development	16.0	64.0	43.4	30.5	9.2	0.6				99.7
Changes since 2004 PRESBUD			<u>-0.3</u>							
Development			-0.3							
FY2004 PRESBUD			43.7	<u>30.5</u>	9.2	<u>0.6</u>				<u>84.0</u>
Development			43.7	30.5	9.2	0.6				84.0

Development: Environmental Compliance and Restoration

Purpose

Objectives	Performance Measures
	5SFS21

Compliance with environmental requirements including environmental management system initiatives as outlined in Executive Order 13148. Activities necessary for NASA to comply with environmental statutory and regulatory requirements, standards, orders, cooperative agreements and environmental management system initiatives. Program is focused in areas of compliance, remediation, conservation, pollution prevention and closures and includes projects, studies, assessments, investigations, plans, designs, engineering, support, sampling, monitoring, and operation of remedial treatment sites as part of remediation and cleanup measures. Also includes regulatory oversight costs and acquisition of land if necessary to implement compliance and remediation measures. Activities will be performed at NASA installations, NASA-owned industrial plants supporting NASA activities, and other current or former NASA sites where NASA operations have contributed to environmental problems and is obligated to contribute to cleanup costs.

OVERVIEW

The program is a phased approach that prioritizes Agency requirements for environmental remediation measures that must be implemented within the next several years, as well as needed requirements for other environmental compliance measures and management system initiatives. Based on relative urgency and potential health hazards and safety, these activities are the highest priority requirements currently planned for accomplishment in FY 2005. Deferral of these necessary compliance and remediation measures would preclude NASA from complying with environmental requirements and regulatory agreements, and could jeopardize NASA operations. NASA is requesting an increase of 22 percent for environmental compliance and restoration to assure continued compliance in an environment of increasing requirements. As studies, assessments, investigations, plans, regulatory approvals, and designs progress and as new discoveries or regulatory requirements change, it is expected that priorities may change and revisions to these activities may become necessary

Go to NASA's Environmental Compliance and Restoration Program: http://www.hq.nasa.gov/office/codej/codeje/je_site/about_us/about_us.html.

PROGRAM MANAGEMENT

The Environmental Compliance and Restoration (ECR) program is managed from NASA Headquarters under the Office of Management Systems and involves all NASA facilities. Annual budget requirements are presented to the Institutional Committee and the Executive Committee for concurrence. This is not an aerospace program and as such is not subject to the requirements of NPG 7120. The responsible office at NASA Headquarters is the Environmental Management Division, Mr. Richard Wickman.

TECHNICAL COMMITMENT

A comprehensive environmental program as directed under Executive Order 13148 and a host of Federal, state, and local environmental regulations.

Technical Specifications	FY 2005 President's Budget	Change from Baseline
Environmental Remediation Activities under the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), and State equivalent Statutes.		
Environmental Compliance Requirements under 40 CFR and State and Local laws and regulations.		
Environmental Management System Initiatives as required under Executive Order 13148.		
Environmental functional reviews as required under Executive Order 13148.		
Environmental resource stewardship requirements under federal, state, and local laws and regulations.		

Schedule	FY 2005 President's Budget	Baseline	Change from Baseline
No set schedule/milestones exist for this ongoing program - instead, worst-first prioritization methods		Oct 04 thru Sept	
employed.	Oct 04 thru Sept 05	05	

Development: Environmental Compliance and Restoration

ACQUISITION STRATEGY AND PERFORMING ORGANIZATIONS

Environmental Compliance and Restoration requirements are prevalent at all NASA locations and are contracted for through a variety of means at NASA's centers. This may include all of the different types of contracts and performers noted below. Changes since FY04 President's Budget: None.

Current Acquisition	Actual*	Selection Method	Actual*	Performer	Actual*
Cooperative Agreement	0%	Full & Open Competition	55%	Industry	78%
Cost Reimbursable	63%	Sole Source	45%	Government	15%
Fixed Price	37%		100%	NASA Intramural	1%
Grants	0%			University	6%
Other	0%	Sci Peer Review	%	Non Profit	0%
*As of FY 2003 direct		*As of FY 2003 direct		*As of FY 2003 direct	
procurement	100%	procurement		procurement	100%

Future Acquisition - Major	Selection	Goals
no major acquisitions planned	n/a	n/a

AGREEMENTS

Most NASA Centers perform environmental remediation under one or more regulatory agreements. These agreements range from very formal (as in the case of Consent Orders issued by courts or Federal Facility Agreements signed by NASA and the Environmental Protection Agency or the States) to less formal (outlines of project plans sent between Center environmental offices and State Regulatory Agencies). Changes since FY04 President's Budget: None.

INDEPENDENT REVIEWS

Review Types	Performer	Last Review Date	Next Review Date	Purpose
				Agency review of FY05 budget
Institutional Committee Reviews	IC	5/03	5/04	requirements for budget build.

BUDGET/LIFE CYCLE COST

Budget Authority (\$ millions)	Prior	FY03	FY04	FY05	FY06	FY07	FY08	FY09	втс	Total Comments
FY2005 PRESBUD		40.3	<u>40.8</u>	<u>46.0</u>	<u>51.0</u>	<u>51.0</u>	<u>51.0</u>	<u>51.0</u>		<u>331.0</u>
Development		40.3	40.8	46.0	51.0	51.0	51.0	51.0		331.0
Changes since 2004		0.7	0.2	15.0	110.0	110.0	110.0	LE4 O		Increased Environmental
PRESBUD Development		<u>-0.7</u> -0.7	<u>-0.2</u> -0.2	<u>+5.0</u> +5.0	<u>+10.0</u> +10.0	+10.0 +10.0	+10.0 +10.0	<u>+51.0</u> +51.0		+85.1 requirements +85.1
FY2004 PRESBUD		41.0	41.0	41.0	41.0	41.0	41.0			<u>246.0</u>
Development		41.0	41.0	41.0	41.0	41.0	41.0			246.0

Operations

Purpose

Objectives	Performance Measures
8.5, 9.1	5SFS8,15-16,20,22

SPACE COMMUNICATION PROGRAM: Provide high quality, reliable and cost-effective space communications services to the Shuttle, ISS, other low Earth orbit satellites, and launch vehicles. In addition, perform conceptual studies on the continuing use of data relay satellite system(s) to meet NASA and National mission requirements. LAUNCH SERVICES: Principal objective is to provide safe, reliable, cost-effective, on schedule processing, advanced analysis and integration and launch services for NASA and NASA-sponsored payloads seeking launch on Space Shuttle and/or expendable Launch Vehicles. PROPULSION TEST PROGRAM: Provide rocket propulsion test facilities in support of NASA programs, commercial partners, and the Department of Defense. Space and Flight Support budget also provides for astronaut crew health and safety issues.

OVERVIEW

Space and Flight Support, managed by the Space Flight Enterprise, is comprised of four separate Agency-level services: SPACE COMMUNICATION PROGRAM: Comprised of two major elements: (1) The Tracking and Data Relay Satellite system, which supports the Space Shuttle program, the International Space Station, other low-Earth orbiting satellites, expendable launch vehicles, and research aircraft; and (2) the NASA Integrated Services Network, which provides telecommunications services among facilities such as NASA flight support networks, mission control centers and science facilities and administrative communications among NASA Centers. LAUNCH SERVICES PROGRAM: Develops and administers policies and procedures for assuring access (e.g. pricing, acquisition planning) and scheduling of payload launches on the Shuttle and commercial expendable launch vehicles. Manifesting and scheduling of payload launches are accomplished on a routine basis through the auspices of the Flight Planning Board, which the Space Flight Enterprise chairs and is comprised of members from each of the NASA Enterprises. PROPULSION TEST PROGRAM: Develop low-cost, safe, and reliable space transportation propulsion systems and testing of operational rockets. Program includes staff support at test facilities at SSC, MSFC, GRC and JSC-White Sands Test facility. CREW HEALTH AND SAFETY: Protects astronauts from the hazards of space travel and identifies methods that allow astronauts to improve their performance. For more information, go to: Launch Services http://www.ksc.nasa.gov/elvnew/elv.htm; http://sspp.gsfc.nasa.gov/; Rocket Propulsion Test https://rockettest.ssc.nasa.gov/; Space Communications http://spacecommunications.nasa.gov/

PROGRAM MANAGEMENT

Enterprise official is Mr. William F. Readdy, Associate Administrator for Space Flight at HQ. The Space Flight Enterprise Program Management Council has governing responsibility for the programs below. SPACE COMMUNICATIONS: The Program Office Director is Robert Spearing, Assistant Associate Administrator for Space Communications, Office of Space Flight at HQ. LAUNCH SERVICES: The Program Office Director is Karen S. Poniatowski, Assistant Associate Administrator for Launch Services at HQ. ROCKET PROPULSION TEST: The Program Office Director is Keith Brock of Stennis Space Center. CREW HEALTH AND SAFETY: The Program Office Director is Jeffrey Davis, Assistant Associate Administrator for Crew Health and Safety, Office of Space Flight at HQ.

TECHNICAL COMMITMENT

Technical Specifications	FY 2005 President's Budget	Change from Baseline
Space Communication	Manage/operate nine satellites (six in operation, three inactive). Manage NASA Integrated Services Network.	
Launch Services	Manage processing and launch facilities at KSC, Cape Canaveral Air Force Station, and Vandenberg Air Force Base in support of current launch manifests.	
Rocket Propulsion Testing	Manage 24 test cells and the supporting facilities.	
Crew Health and Safety	Manage health care for entire Astronaut Corps, both in space and during ground-based training.	

Operations

Schedule	FY 2005 President's Budget	Change from Baseline
Launch Service	Provide expertise, facilities, and capabilities for integrating payloads with Expendable Launch Vehicles and the Shuttle manifest.	
Space Communication	Provide 24/7 operational readiness of network. Provide system operational readiness.	
Rocket Propulsion Testing	Maintain facilities and support for propulsion testing.	
Crew Health and Safety	Certify the medical health of astronauts before flight and provide them with care throughout their careers.	

ACQUISITION STRATEGY AND PERFORMING ORGANIZATIONS

The Prime Contractor for space communications/data services is Lockheed Martin under the Consolidated Space Operations Contract, which ends Dec. 31, 2003. Follow-on contracts were awarded January 1, 2004 to continue providing space communication services without interruption. Boeing Satellite Systems, the TDRS Replenishment prime contractor, developed and launched three new satellites. NASA accepted the last satellite in July 2003. The Expendable Launch Vehicle Integrated Support contractor is the Analex Corporation. This contract covers three years of operations, renewable in FY 2005. Contract Awarded May 2002. The Checkout and Payload Processing Services contractor is the Boeing Space Operations Company. This contract covers four years of operations, renewable in FY 2006. The primary Rocket Test contractors at each test site are SSC: Lockheed Martin and Mississippi Space Services; MSFC: LB&B; JSC/WSTF: Honeywell; GRC/PB: Plum Brook Operations.

Current Acquisition	Actual*	Selection Method	Actual*	Performer	Actual*
Cooperative Agreement	0%	Full & Open Competition	100%	Industry	100%
Cost Reimbursable	77%	Sole Source	0%	Government	0%
Fixed Price	23%			NASA Intramural	0%
Grants	0%		100%	University	0%
Other	0%	Sci Peer Review	0%	Non Profit	0%
*As of FY 2003 direct procurement	100%	*As of FY 2003 direct procurement		*As of FY 2003 direct procurement	100%

Future Acquisition	Selection	Goals
1. Space Communications Operations	Selected	100% Full & Open Competition, 15% Small business

AGREEMENTS

Internal: Rocket Propulsion Test Management Board (Intra-Center). External: Three NASA and DOD Memoranda of Agreement for increased efficiencies between agencies.

RISK MITIGATION

Top Risks	G	Overall	Υ	Cost	G	Schedule	G	Technical	Probability	Impact	Mitigation Plan
G	G Launch Failure (Overall)						Moderate	High	In place		
Υ	Pote	Potential decline in reimbursables for Space Communications						Moderate	High	In development	

INDEPENDENT REVIEWS

Review Types	Performer	Last Review Date	Next Review Date	Purpose
(RPT) Program Review	PIMC	12/03	3/04	Rocket Propulsion Testing quarterly review

Operations

BUDGET

Budget Authority (\$ millions)	FY 2003	FY 2004	FY 2005	Comments
FY2005 PRESBUD	<u>352.2</u>	<u>341.6</u>	<u>415.6</u>	
				Space Communications still includes studies for the TDRS Continuation Program, which is being
Space Communications	115.3	124.1	195.4	covered with off-set funds.
Payloads	48.7			
ELV	35.8			
Rocket Test	27.0	61.9	66.7	
Miscellaneous	125.4	14.4	7.6	
Launch Services		141.2	145.9	
Changes since 2004 PRESBUD	<u>+113.5</u>	<u>-8.0</u>		
Space Communications	+0.4	-6.8		
				Combined Payloads and ELV into Launch
Payloads	-0.4	-75.3		Services
ELV	-0.8	-65.8		
Rocket Test	+3.9	-0.4		
Miscellaneous	+110.3	-1.0		
Launch Services		+141.2		
FY2004 PRESBUD	<u>238.7</u>	<u>349.6</u>		
Space Communications	114.9	130.9		
Payloads	49.1	75.3		
ELV	36.6	65.8		
Rocket Test	23.1	62.3		
Miscellaneous	15.0	15.4		

Inc