

Space Weapons Spending in the Fiscal Year 2006 President's Request: A Preliminary Assessment

Feb. 10, 2005

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This handout is also available at <http://www.armscontrolwonk.com> and <http://www.cdi.org>. Both websites contain more detailed information about the programs, as does <http://www.stimson.org>.

In the absence of a clear national strategy and policy on new military missions in outer space, the administration of President George W. Bush is funding programs that will create "facts in orbit."

These facts -- the development and testing of space weapons and the deployment of dual-use systems -- will drive U.S. policy toward space weapons without a debate in either Congress or the public.

Our major concerns in the Fiscal Year 2006 (FY 06) Budget Request are four programs:

- **Experimental Spacecraft System (XSS)** is the old "Clementine 2" program, with microsatellite payloads reconfigured to conduct proximity operations near satellites instead of asteroids. The Air Force Research Laboratory (AFRL) received \$18.6 million (M) in FY 05 for work on XSS-11, scheduled to launch in 2006.
- **Micro-satellite Propulsion Experiment (MPX)** The Micro-satellite Propulsion Experiment (MPX) is reportedly a special access program (SAP) in the Missile Defense Agency's (MDA) classified program element. The nature of the experiment isn't clear. It may be related to the Micro-satellite Propulsion Integration experiment.
- **Near Field Infrared Experiment (NFIRE)** is a risk reduction effort for the space-based interceptor. MDA received \$68.0 M under "Experimentation & Test" in FY 05.
- **Space Based Interceptor Test Bed.** MDA received \$10.6 M in FY 05 to initiate technology development and testing of advanced, lightweight space-based interceptor components.

In addition to these four programs, we note that the president has requested large sums for classified programs and research on lasers. After the R2 (Detailed Summaries) become available, we will undoubtedly discover the existence of other programs of concern.

Directed Energy Research

With the closure of the Space-Based Laser (SBL) program office and the cancellation of an integrated flight experiment scheduled for 2012, there is no ballistic missile defense or anti-satellite directed energy system scheduled for on-orbit testing.

That said, the Bush administration continues to spend large sums on a variety of directed energy programs, some of which are explicitly intended to support ballistic missile defense and anti-satellite missions.

Selected Directed Energy Programs in the 2006 Appropriations Process

	R1	Program	Service	2006	+/-
0602605F	12	Directed Energy Technology	USAF	37.7	+0.8
0603605F	29	Advanced Weapons Technology	USAF	27.0	-2.2
0601108F	3	High Energy Laser Research Initiatives	USAF	11.9	-0.6
0603500F	27	Multi-disciplinary Advanced Dev. Space Technology	USAF	53.4	-6.2
0602500F	9	Multi-disciplinary Space Technology	USAF	81.3	+0.2
0603924F	34	High Energy Laser Advanced Technology Program	USAF	5.8	-0.3
		Joint High Power Solid State Laser Program			
0602890F	15	High Energy Laser Research	USAF	45.7	-2.6
0605605A	138	DoD High Energy Laser Test Facility	Army	17.7	+2.2
		Mid-Infrared Advanced Chemical Laser			

What We Don't Know

As noted earlier, the 2006 Budget Request appears to include substantial funds for classified MDA and Defense Advanced Research Project Agency (DARPA) programs.

In the face of public and Congressional opposition, the administration appears willing to simply classify controversial programs such as the Space-Based Laser or invent innocuous mission profiles as they have done with the Experimental Spacecraft System (XSS) and the Near Field Infrared Experiment (NFIRE).

XSS and NFIRE are scheduled to launch on Minotaur SLVs. The Air Force has ordered another Minotaur SLV to launch a "classified Air Force payload" in 2005. Determining the identity of this payload is a priority.

Summary Chart
Selected Space Programs in the President's FY 06 Defense Budget Request

R1	Program	Service	2004	2005	2006	+/-	Note	
0603401F	26	Advanced Spacecraft Technology Experimental Spacecraft System (XSS-11) ¹	USAF	105.6	89.8	60.9 25.1	-5.0	The XSS program is the old "Clementine 2" Asteroid Interceptor Program originally funded by BMDO and canceled by the Clinton administration in 1998.
0603500F	28	Multi-disciplinary Advanced Development Space Technology Advanced Optics & Laser Space Technology Rocket Propulsion Demonstration Advanced Space Sensors	USAF	58.2	56.9	27.0 22.8 28.2 8.7	-32.6	"Space Weapons Grab Bag": This PE previously contained money for (1) "beam control experiments for applications including anti-satellite weapons..."; (2) a "small satellite propulsion demonstration" that may be the Micro-satellite Propulsion Experiment (MPX) and (3) a study to "develop space-based support jamming technologies."
0603438F	45	Space Control Technologies	USAF	13.0	14.9	14.2	+ 0.1	Incubator that developed CSRS, CounterCom and RAIDRS.
0604421F	75	Counterspace Systems Counter Satellite Communications System (CSCS) Rapid Attack Id. and Threat Reporting System (RAIDRS)	USAF	70.7	26.1	24.7 6.3 16.4	-3.1	Principal account for funding offensives and defensive counterspace systems. Currently focused on a single system to jam communications satellites.
0602702E	16	Tactical Technology	DARPA	247.4	327.8	361.6	-7.1	Another "grab bag" that includes a number of technology programs.
0603175C	29	Ballistic Missile Defense Technology Multiple Kill Vehicle (MKV) Technology ³	MDA	226.8	231.1	136.2	-63.2	At the MDA budget briefing (Feb. 2, 2005), the comptroller indicated MKV was fully funded in the FY 06 request.
0603287E	32	Space Programs and Technology Orbital Express	DARPA		222.9	223.8	-10.7	Orbital Express, along with XSS and DART, was listed as a technology demonstrator for the "space tug" under consideration to de-orbit Hubble—a "friendly" anti-satellite mission.
0603765E	50	Classified DARPA Programs	DARPA	211.2	180.8	162.5		"We also know there are known unknowns; that is to say we know there are some things we do not know." <i>Secretary of Defense Donald Rumsfeld.</i>
0603886C	74	Ballistic Missile Defense System (BMDS) Interceptor Space Based Interceptors Test Bed Near Field Infrared Experiment (NFIRE) ²	MDA	114.7	279.8	229.7	-888.9	MDA comptroller reportedly said the FY 06 request contains no money for the Space-Based Test Bed, but full funding for NFIRE. Other reports suggest indicate NFIRE will not be funded in FY 06. Although MDA removed the kill vehicle from the NFIRE program in 2004, that decision is not binding.
0603891C	78	Special Programs (formerly ACES)	MDA		159.9	349.5		Reports that Space-Based Laser (SBL) was moved to black account after the closure of the program office in 2002. MDA comptroller told reporters most of money in Special Accounts was slated for laser-related work. Also, Space-Based Interceptors (SBI) work may simply have been classified.

¹ Experimental Spacecraft System is funded as "3834 Integrated Space Technology Demonstrations"

² Near Field Infrared Experiment is funded as "0013 Ballistic Missile Defense Interceptor Block 2010, Experimentation and Test"

³ Multiple Kill Vehicle (MKV) Technology is funded as 0502 Advanced Technology Development, Engagement Systems Technology, along with the Advanced Discrimination Initiative.



