

Exhibit R-2, RDT&E Budget Item Justification							Date: February 2003	
Appropriation/Budget Activity RDT&E, Defense Wide/BA 3				R-1 Item Nomenclature: * High Energy Laser Advanced Development PE 0603924D8Z				
Cost (\$ in millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	F 2008	FY 2009
Total Program Element (PE) Cost	15.842	13.086	0	0	0	0	0	0
High Energy Laser Initiative/P924	15.842	13.086	0	0	0	0	0	0
A.Mission Description and Budget Item Justification:								
* Beginning in FY 2004, High Energy Laser advanced Development program management and execution responsibilities will be transferred to the Air Force under PE-0603924F and will result in a more appropriate policy-level role for OSD.								
<p>(U) This program element funds High Energy Laser (HEL) advanced technology development aimed at translating technology solutions for broadly defined military problems into demonstrated performance pay-offs, increased capabilities, increased supportability, or increased affordability. HEL weapons systems have many potential advantages, including speed-of-light time-to-target, high precision, nearly unlimited magazine depth, low cost per kill, and reduced logistics requirements because of no need for stocks of munitions or warheads. As a result, HELs have the potential to perform a wide variety of military missions, including some that are impossible, or nearly so, for conventional weapons. These include interception of ballistic missiles in boost phase, defeat of high-speed, maneuvering anti-ship and anti-aircraft missiles, and the ultra-precision negation of targets in urban environments with no collateral damage. Research conducted under this program element develops and demonstrates the technology necessary to enable these and other HEL missions.</p> <p>(U) This program element is part of an overall DOD initiative in HEL science and technology being conducted by the HEL Joint Technology Office (JTO). The goals of this HEL JTO-funded research are to provide the technology to make HEL systems more effective and also to make them lighter, smaller, cheaper, and more easily supportable on the battlefield. In general, efforts funded under this program element are chosen for their potential to have major impact on multiple HEL systems and on multiple Service missions. As a result of this focus and of close coordination with the military departments and defense agencies, this program element complements other DOD HEL programs that are directed at more specific Service and agency needs.</p> <p>(U) A broad range of technologies are addressed in key areas such as chemical lasers, solid-state lasers, beam control, optics, propagation, and free-electron lasers. Under this program element these technologies are integrated and tested in sub-scale demonstration systems or sub-systems. Research is conducted by Government laboratories and industry, often teamed together. The program element funds integrated theoretical, computational, and experimental investigations. These integrated investigations are structured to convincingly demonstrate the piercing of technology barriers that currently prevent HELs from being fielded as viable weapon systems. In addition, they are structured to permit rapid technology transition. As results become available, DOD will transmit them to appropriate military-department, defense-agency, and industry programs for technology transition, where appropriate.</p>								
B. Program Change Summary:								
	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>				
Previous President's Budget	15.842	13.567	11.133	8.723				
Current FY04 President's Budget	15.842	13.086						
Total Adjustments		-481	-11.133	-8.723				
Congressional program reductions		-481						
Congressional rescissions								
Congressional increases								
Reprogrammings								
SBIR/STTR Transfer								
Other				-11.133	-8.723			
C. Other Program Funding Summary:								