RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE FEBRUARY 2008
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160479BB SOF Visual Augmentation, Lasers and Sensor Systems/S395

COST (Dollars in Millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY12	Cost to Complete	Total Cost
PE1160479BB			3.495	.496				Cont.	Cont.
S395, SOF Visual Augmentation, Lasers and Sensor Systems			3.495	.496				Cont.	Cont.

A new program element (PE)(1160479BB) was established beginning in FY 2009 for SOF Visual Augmentation, Lasers and Sensor Systems. FY 2009-2013 resources were moved from PE 1160404BB, Special Operations Tactical Systems Development.

A. Mission Description and Budget Item Justification: This program element provides for development, testing, and integration of specialized visual augmentation, laser and sensor systems equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to enemy threats to ensure mission success.

B. Program Change Summary:

	FY07	FY08	FY09
Previous President's Budget			
Current President's Budget			3.495
Total Adjustments			3.495
Congressional Program Reductions			
Congressional Increases			
Reprogrammings			
Other Program Adjustments			3.495
SBIR Transfer			

Funding:

FY09: A new PE (1160479BB) and project (S395), were established beginning in FY 2009 for SOF Visual Augmentation, Laser and Sensor Systems. FY 2009-2013 resources were moved from PE 1160404BB, Special Operations Tactical Systems Development and Project S375, Weapons Systems Advanced Development.

Schedule: None.

Technical: None

	Exhibit R-2a, RDT&E Project Justification	Date: FEBRUARY 2008
Appropriation/Budget Activity RDT&E BA # 7	SOF Visual Augmentation, Lasers and Sensor Systems/Project 395	

Cost ($ in million)	FY07	FY08	FY09	FY10	FY11	FY12	FY13
SOF Visual Augmentation, Lasers and Sensor Systems			3.495	.496			
RDT&E Articles Quantity							

A new project, S395, was established for SOF Visual Augmentation, Lasers and Sensor Systems beginning in FY 2009. FY 2009-2013 resources were moved from project S375, Weapons Systems Advanced Development. .

A. Mission Description and Budget Item Justification: This project provides for development, testing, and integration of specialized visual augmentation, laser and sensor systems equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to enemy threats to ensure mission success.

- Precision Laser Targeting Device (PLTD) - PLTD Block II is a combined day/night optical system with a laser range finder to allow the detection and observation of targets. The range finder calculates the Global Positioning System (GPS) location of the target for identification and targeting purposes. The PLTD provides precision accuracy in the geo-location of targets for the precision delivery of GPS-guided munitions. The system will greatly reduce fratricide incidents and reduce collateral damage during close air support missions.

- SOF Laser Rangefinder and Designator (SOFLRD) – The SOFLRD is a combined laser rangefinder and designator to support the combat air controller mission for the precise delivery of both GPS and laser guided munitions. The SOFLRD will employ both day/night optical systems to allow the detection and observation of targets. The range finder calculates the GPS location of the target for identification and targeting purposes. The laser designator will provide an encoded laser spot for the missile seeker head to track. The system will greatly reduce fratricide incidents and reduce collateral damage during close air support and air interdiction missions.

- SOF Visual Augmentation Systems Binocular/Monocular (SOVAS B/M) - The SOVAS B/M program procures head/helmet mounted night vision goggle systems. The current SOF standard goggle is the AN/PVS-15A binocular goggle. These goggles provide the SOF operator the ability to maneuver, conduct fire control operations, and perform surveillance and reconnaissance. Research and development

of increased capability and performance goggles are essential to the SOF operator. Such improvements include fusion, wide field of view, and color night vision goggles.

B. Accomplishments/Planned Program

Cost ($ in million)	FY07	FY08	FY09
Precision Laser Targeting Device			.993
RDT&E Articles Quantity			

FY09 Continues the size, weight and power reduction of the overall system and miniaturization of the inertial navigation system.

Cost ($ in million)	FY07	FY08	FY09
SOF Laser Rangefinder Designator			1.509
RDT&E Articles Quantity			

FY09 Continues the development of the next generation laser range finder and designator to support the delivery of laser guided and GPS-guided missiles and munitions.

Cost ($ in million)	FY07	FY08	FY09
SOF Visual Augmentation Systems Binocular/Monocular			.993
RDT&E Articles Quantity			

FY09 Develops an advanced night vision goggle (e.g., sensor fusion, wide field of view, color), providing the SOF operator an increased capability over existing goggles.

C. Other Program Funding Summary:

	FY07	FY08	FY09	FY10	FY11	FY12	FY13	To Complete	Total Cost
PROC SOF Visual Augmentation, Laser and Sensor Systems			30.201	32.136	31.721	30.824	17.820	Cont.	Cont.
PROC Small Arms and Weapons	48.466	45.191							
RDTE S375, Weapons Systems and Advanced Development	3.300	.973							

D. Acquisition Strategy:

- Precision Laser Targeting Device (PLTD). The PLTD program will leverage an Army warfighter rapid acquisition program to develop a SOF version of a laser targeting device capable of providing geo-location of a target for the delivery of Global Positioning System guided munitions. This version is required to improve the accuracy of coordinate geo-location to reduce the possibility of fratricide incidents.

- SOF Laser Rangefinder and Designator (SOFLRD). The SOFLRD program will use an evolutionary acquisition and block approach to achieve user requirements. The program will develop a SOF version of a laser targeting device capable of providing geo-location of a target for the delivery of GPS guided munitions combined with the ability to laser designate targets for the delivery of laser guided munitions.

- SOF Visual Augmentation Systems Binocular/Monocular (SOVAS B/M). Develops the SOF next generation night vision goggle. Program will use an evolutionary acquisition approach.

Exhibit R-3 RDT&E Project Cost Analysis						DATE: FEBRUARY 2008					
APPROPRIATION / BUDGET ACTIVITY RDT&E DEFENSE-WIDE / 7			SOF Visual Augmentation, Lasers and Sensor Systems/PE1160479BB SOF Visual Augmentation, Lasers and Sensor Systems/S395								
Actual or Budget Value ($ in millions)											
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	Budget Cost FY07	Award Date FY07	Budget Cost FY08	Award Date FY08	Budget Cost FY09	Award Date FY09	To Complete	Total Program
Primary Hardware Dev											
Precision Laser Targeting Device (PLTD)	CPFF	PM Sensors & Lasers, Ft. Belvoir, VA						0.900	Jan-09		0.900
SOF Laser Rangefinder and Designator (SOFLRD)	CPFF	NSWC-Crane, Crane, IN						1.300	Jan-09		1.300
Special Operations Visual Augmentation System Binocular/Monocular (SOVAS B/M)	CPFF	GAPO, Ft Belvoir, VA						0.900	Jan-09	0.496	1.396
Subtotal Product Dev			0.000	0.000		0.000	0.000	3.100		0.496	3.596
Remarks:											
Developmental Test & Eval											
PLTD		PM Sensors & Lasers, Ft. Belvoir, VA						0.093	Jan-09		0.093
SOFLRD		NSWC-Crane, Crane, IN						0.209	Mar-08		0.209
SOVAS B/M		GAPO, Ft Belvoir, VA						0.093	Jan-09		0.093
Subtotal T&E			0.000	0.000		0.000		0.395		0.000	0.395
Remarks:											
Contractor Engineering Spt											
Subtotal Management											
Remarks:											
Total Cost			0.000	0.000		0.000		3.495		0.496	3.991
Remarks:											

Exhibit R-4, RDT&E Program Schedule Profile		Date: FEBRUARY 2008
Appropriation/Budget Activity	Program Element and Name	Project Number and Name
RDT&E/7	PE1160479BB/Special Operations Forces Visual Augmentation, Lasers and Sensor Systems	Project S395/SOF Visual Augmentation, Lasers and Sensor Systems

	2007				2008				2009				2010				2011				2012				2013			
Fiscal Year	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Precision Laser Targeting Device																												
Inertial Navigation System Minaturization, P3I development										△	—	△																
Development test												△																
SOF Laser Range Finder Designator																												
Prototype Development										△	—	△																
Prototype Development Test												△																
Special Operations Visual Augmentation System Binocular/Monocular																												
Prototype Development										△	—	△																
Prototype Development Test													△															

Exhibit R-4a, RDT&E Program Schedule Detail					Date: FEBRUARY 2008		
Appropriation/Budget Activity	Program Element Number and Name		Project Number and Name				
RDT&E/7	PE1160479BB/SOF Visual Augmentation, Lasers and Sensor Systems		Project S395/SOF Visual Augmentation, Lasers and Sensor Systems				
Schedule Profile	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
Precision Laser Targeting Device							
Inertial Navigation System Minaturization, P3I			2 - 4Q				
Developmental Test			4Q				
SOF Laser Range Finder Designator							
Prototype Development			2Q				
Developmental Test			4Q				
Special Operations Visual Augmentation System Binocular/Monocular							
Prototype Development			2 - 4Q				
Developmental Test				1Q			