

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 1160477BB SOF Weapon Systems/S375
--	---

COST (Dollars in Millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY12	Cost to Complete	Total Cost
PE1160477B			2.759	1.290	.298	.298	.298	Cont.	Cont.
S375 Weapon Systems Advanced Development			2.759	1.290	.298	.298	.298	Cont.	Cont.

A new Program Element (PE)(1160477BB) was established beginning in FY 2009 for SOF Weapon 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 weapon systems, weapon accessories and ammunition to meet the unique requirements of Special Operations Forces (SOF). This 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 threat forces to ensure mission success.

B. Program Change Summary:

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>
Previous President's Budget			
Current President's Budget			2.759
Total Adjustments			2.759
Congressional Program Reductions			
Congressional Increases			
Reprogrammings			
Other Program Adjustments			2.759
SBIR Transfer			

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 1160477BB SOF Weapon Systems/S375	
<p>Funding:</p> <p>FY07: No change.</p> <p>FY08: No change.</p> <p>FY09: Increase of \$2.759 million is the result of establishing a new PE. Funds were moved from PE 1160404BB Special Operations Tactical Systems Development.</p> <p>Schedule: None.</p> <p>Technical: None</p>		

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Weapons and Support Systems Advanced Development /Project S375
---	--

Cost (\$ in millions)	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Weapons and Support Sys Adv Dev	24.768	16.540	2.759	1.290	.298	.298	.298
RDT&E Articles Quantity							

A new program element 1160477BB, SOF Weapons Systems was established for this project beginning in FY 2009. FY 2009-2013 resources were moved from program element 1160404BB, Special Operations Tactical Systems Development.

A. Mission Description and Budget Item Justification: This project provides for development and testing of specialized, lightweight individual weapons, fire control/surveillance devices, and combat equipment to meet the unique requirements of Special Operations Forces (SOF). SOF often deploy as small, independent, quick reaction, foot-mobile teams independent of primary logistics support. Existing weapons and combat equipment are frequently unsuited to these conditions. Sub-projects include:

- Family of Sniper Detection Systems (FSDS). Provides the capability for SOF units to rapidly locate the position of a sniper’s origin of fire in near-real-time. Detects and locates small arms gunfire from 5.56mm, 7.62mm and .50 caliber weapons for the conduct of counter-sniper operations. This system also provides passive area surveillance at day or night and can be configured for urban or rural environments. This program was increased by an FY 2007 Congressional add.

- Family of Sniper Weapons (FSW) formerly Heavy Sniper Rifle (HSR). Precision Sniper Rifle (PSR) will characterize .338 ammunition and upgrade existing MK13 sniper weapons (300 WinMag) to a new caliber. The .338 round provides SOF with a highly accurate round for target engagements with ranges up to 1500 meters or more. The Anti-Materiel Rifle (AMR) will pursue technology that will provide SOF with accurate engagement capabilities on hard target, critical nodes, and other materiel.

- Lightweight Anti-Armor Weapon (LAW) Confined Space. The M72 66mm Lightweight Attack Weapon is a shoulder-fired, man-portable, self-contained, single use, lightweight rocket. The LAW has two warhead variants--the Anti Armor (AA) and Anti Structural Munitions (ASM) warheads. The LAW has two propulsion variants--the current rocket motor and the Fire From Enclosure (FFE) propulsion system that is under development. This program was increased by an FY 2006 Congressional add.

- Weapons Accessories formerly M4A1 SOF Carbine Accessory Kit (M4MOD). The Weapons Accessories program, enhances all SOF weapons by using the latest technological advances in optional accessories (up to 30 different functions/capabilities) such as day scopes, night scopes, active aiming laser module, visible lights, grenade launchers, suppressors, hand grips, and close quarters battle sights. These accessories greatly enhance the lethality of the weapon system and the survivability of the SOF operator. This program was

Appropriation/Budget Activity
RDT&E.A BA # 7

Weapons and Support Systems Advanced Development /Project S375

increased by FY 2004, FY 2005, FY 2006, and FY 2007 Congressional adds.

- Weapons Shot Counter. This was a FY 2007 Congressional add to develop a device to improve the reliability and maintainability of weapons used by the SOF operator. These devices will provide the Unit Armorer a means to track the number of rounds fired and anticipate the need for maintenance and repair prior to the firearms failure, ultimately minimizing or eliminating parts failures and malfunctions in combat.
- SOF Laser Range Finder and Designator (SOFLRD). The SOFLRD will be a combined laser range finder, geological locator, and laser designator for directing both Global Positioning System (GPS) and laser guided munitions.
- SOF Visual Augmentation Systems Binocular/Monocular (SOVAS B/M). The SOVAS B/M program is developing the next generation SOF night vision goggle. This goggle will incorporate a fusion sensor that includes both image intensification and thermal imagery. This capability will allow the SOF operator to conduct mission in the full spectrum of ambient light levels.
- Precision Laser Targeting Device (PLTD). The PLTD will be a hand-held laser range finder and targeting device with an embedded GPS to provide the SOF operator with the ability to direct close air support missions by determining the geo-location of a target to support the delivery of GPS-guided munitions.
- SOF Combat Assault Rifle (SCAR). SCAR is an evolutionary acquisition, incremental approach that will provide the SOF operator with a 5.56 mm (SCAR-L) and a 7.62mm (SCAR-H) family of rifles that are modular in barrel length. SCAR variants will replace a suite of weapons currently in the SOF inventory. The objective design of SCAR is a single upper receiver assembly that is capable of accepting 5.56 NATO, 7.62 NATO and any other caliber ammunition developed and will be the primary focus. SCAR includes the 40mm Enhanced Grenade Launcher Module (EGLM), which replaces the M203 grenade launcher. EGLM includes a fire control unit (FCU) that provides precision ballistic solution. Enhanced ammunition for both SCAR and EGLM will be developed. This program was increased by a FY 2007 Congressional add.
- SOF Personal Equipment Advanced Requirements (SPEAR). SPEAR develops and acquires items that provide SOF Personnel required protection from natural threats (environmental, terrain, etc.), enemy (ballistics, laser, blunt trauma) threats, and survival items that allow them to perform at the required level to meet SOF Missions. SPEAR Kit includes; 1), ballistic armor, helmets, and eye wear, 2) cold weather, maritime and other protective clothing, 3) communication headsets and equipment, 4) load carriage and backpack

Appropriation/Budget Activity
RDT&E.A BA # 7

Weapons and Support Systems Advanced Development /Project S375

systems, and other systems that address SOF operator deficiencies with regard to survival and mission execution in all terrains, climates and environments world wide.

- Artic/Mountain Climbing Warfare Boot. This was a FY 2006 and FY 2007 Congressional add to conduct market surveys for Commercial-off-the-shelf (COTS) products to conduct combat evaluations or develop a warfare boot that can provide the SOF operator footwear flexibility and protection in harsh warfare environments.
- Combat Boot-Polyurethane. This was a FY 2007 Congressional add to conduct market surveys for COTS products to conduct combat evaluations or develop a Polyurethane Combat Boot that can provide the SOF operator footwear flexibility and protection in harsh warfare environments.
- SOF Tactical Boot Suite Development. This was a FY 2007 Congressional add to develop a family of boots for use by the SOF operator in various mission sets and environments.
- Tactical Combat Casualty Care Equipment – Kit (TCCCEKIT). The TCCCEKIT is a technology transfer initiative to identify a variety of medical items and equipment approved by the Food and Drug Administration to include intraosseous infusion devices, patient monitoring and assessment devices, emergency airway kits, and devices that support patient management and enroute care capabilities for the far-forward treatment of SOF casualties in remote and austere environments.
- Multi-User Panoramic Synthetic Vision System. This initiative is a FY 2008 Congressional add. Provides for the evaluation of panoramic synthetic vision systems technology. Supports development of enhancements for perimeter protection and situational awareness.
- Nickel Boron Coating. This initiative was funded by Congressional adds in FY 2006 and FY 2007. Nickel Boron Coatings technology has the potential to provide a lubrication-free operation and corrosion protection to pistols, semi-automatic rifles and machine guns.
- Holographic Close Combat Optic. This initiative was funded by a FY 2007 Congressional add. Holographic sights provide operators with a rapid target acquisition display to engage in close quarters as well as distant targets with increased identification and accuracy.
- Special Operations Forces Advanced Mission Planning Tools. This initiative was funded by a FY 2008 Congressional add.

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Weapons and Support Systems Advanced Development /Project S375
---	--

Provides modernization to flight performance modules used to quickly calculate aircraft performance in preparation for SOF missions.

- SOF Special Purpose Tagging, Tracking and Locating Tool Kit. This initiative is a FY 2008 Congressional add. Provides for the development of tools for the operators to locate, identify, and defeat enemy forces in the Global War on Terror (GWOT).
- Expendable AirDrop Delivery Systems: Demonstrate utility of low-cost guided and unguided small cargo payload system for SOF resupply operations.

B. Accomplishments/Planned Program

	FY07	FY08	FY09
Family of Sniper Detection Systems (FSDS) (formerly HSR)	1.170		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Developed a version of the FSDS to integrate onto combatant craft.			
	FY07	FY08	FY09
Family of Sniper Weapons (FSW)		.487	.497
RDT&E Articles Quantity			
FY08 Pursue a Precision Sniper Rifle capability. Conduct market research, industry conferences, and developmental testing.			
FY09 Conducts both developmental and operational test on the Anti-Materiel Rifle (AMR) capability.			
	FY07	FY08	FY09
Lightweight Anti-Armor Weapon (LAW) Confined Space (CS)	5.271		
RDT&E Articles Quantity			
FY07 Continued development of the LAW M72 variants. Continued development of the M72E8 with the Anti-Armor (AA) warhead and the Fire From Enclosure (FFE) propulsion, and the M72E10 with the Anti-Structural Munition (ASM) warhead and the FFE propulsion. The M72A9 with the ASM warhead and the rocket motor propulsion will have a Fielding & Deployment Release (F&DR) in FY08.			
	FY07	FY08	FY09
Weapons Accessories (Formerly M4MOD)	.237	.249	.261
RDT&E Articles Quantity			
FY07 Tested and evaluated Mini Day/Night Sight (MDNS) project improvements.			
FY08 Pursue fused clip-on imaging device through market research, industry conference, and solicitation to replace two systems: Image			

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Weapons and Support Systems Advanced Development /Project S375
---	--

Intensified Clip-on Night Vision Device (CVND- I2) and Thermal Clip-on Night Vision Device (CNVD-T). FY09 Conducts user assessments, test and evaluation and source selection of CNVD-F (Fused), and begins efforts on Family of Muzzle Brake Suppressors.			
	FY07	FY08	FY09
Weapons Shot Counter	.974		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Developed a shot counter capability for machine guns and heavy weapons.			
	FY07	FY08	FY09
SOF Laser Range Finder and Designator (SOFLRD)		3.411	
RDT&E Articles Quantity			
FY08 Develop the next generation laser range finder and designator to support the delivery of laser guided and Global Positioning System (GPS) guided missiles and munitions.			
	FY07	FY08	FY09
Special Operations Visual Augmentation Systems Binocular/Modular (SOVAS B/M)		1.463	
RDT&E Articles Quantity			
FY08 Develop an advanced Night Vision Goggle system (i.e., sensor fusion), increasing the capabilities of the existing goggles.			
	FY07	FY08	FY09
Precision Laser Target Device (PLTD)	3.300	.973	
RDT&E Articles Quantity			
FY07 Procured long lead items for the development of four Low Rate Initial Production (LRIP) PLTDs. FY08 Continues weight reduction and miniaturization of the inertial navigation system.			
	FY07	FY08	FY09
SOF Combat Rifle (SCAR)	4.904		2.001
RDT&E Articles Quantity			
FY07 Continued development of the SCAR Sniper Support Rifle (SSR) and the Fire Control Unit (FCU) on the Enhanced Grenade Launcher Module (EGLM). The Initial Operational Test and Evaluation of the SCAR was funded by a FY 2007 Congressional add. FY09 Completes development of SCAR SSR and FCU on the EGLM. Conduct user assessment, test and evaluation of objective SCAR SSR.			

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Weapons and Support Systems Advanced Development /Project S375
---	--

	FY07	FY08	FY09
Polyurethane Combat Boot	.974		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Developed United States manufacturing capability for polyurethane direct injection and conducted early user assessment.			
	FY07	FY08	FY09
SOF Personal Equipment Advanced Requirement (SPEAR)	3.543	2.048	
RDT&E Articles Quantity			
FY07 Completed development of ballistic eyewear, body armor, eye protection, and backpacks. FY08 Initiate development of the next generation headset for the Modular Integrated Communication Helmet (MICH) and environmental protection for extremities and maritime.			
	FY07	FY08	FY09
SPEAR-Artic/Mountain Climbing Warfare Boot	.974		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Research, develop, test and evaluate an extreme cold weather boot for SOF operators.			
	FY07	FY08	FY09
SOF Tactical Boot Suite Development	.974		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Researched, developed, tested and evaluated a SOF peculiar boot suite.			
	FY07	FY08	FY09
Tactical Combat Casualty Care Equipment Kit (TCCCEKIT)	.499	.698	
RDT&E Articles Quantity			
FY07 Entered concept development for modernization of SOF medical capabilities for operating in austere environments. Initiated prototype demonstrations of lighter, more efficient medical Sets, Kits and Outfits (SKOs) and far-forward surgical capabilities. Conduct operational assessment of SKOs in preparation for procurement and fielding. FY08 Initiates evaluation and qualification of SOF Surgeon and Casualty Evacuation (CASEVAC) kits.			

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity RDT&E.A BA # 7	Weapons and Support Systems Advanced Development /Project S375
---	--

	FY07	FY08	FY09
Multi_User Panoramic Synthetic Vision System		2.339	
RDT&E Articles Quantity			
FY08 This initiative was a Congressional add. Developed technology associated panoramic vision systems.			
	FY07	FY08	FY09
Nickel Boron Coating	.974		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Continued the effort to test and evaluate a nickel boron coating on SOF machine guns.			
	FY07	FY08	FY09
Holographic Close Combat Optic	.974		
RDT&E Articles Quantity			
FY07 This initiative was a Congressional add. Developed a Holographic Close Combat Optic application to be utilized on low velocity 40mm weapons and heavy machine guns.			
	FY07	FY08	FY09
Special Operations Forces Advanced Mission Planning Tools		3.118	
RDT&E Articles Quantity			
FY08 This initiative is a Congressional add. Develops software tools that enable management flight performance modules in preparation for SOF missions.			
	FY07	FY08	FY09
Special Operations Forces Special Purpose Tagging, Tracking, and Locating Took Kit		.974	
RDT&E Articles Quantity			
FY08 This initiative is a Congressional add. Provides for the development of tools for operators to locate, identify and defeat enemy forces.			
	FY07	FY08	FY09
Expendable AirDrop Delivery System		.780	
RDT&E Article Quantity			
FY08 This initiative is a Congressional add. Provides for the evaluation of technology associated with expendable airdrop delivery systems.			

Exhibit R-2a, RDT&E Project Justification

Date: FEBRUARY 2008

Appropriation/Budget Activity
RDT&E.A BA # 7

Weapons and Support Systems Advanced Development /Project S375

C. Other Program Funding Summary:

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>To Complete</u>	<u>Total Cost</u>
PROC, Small Arms and Weapons	192.184	201.397	15.689	30.089	29.501	4.341	12.839	Cont.	Cont.

D. Acquisition Strategy.

- FSW (formerly HSR). Precision Sniper Rifle will pursue a .338 round to meet range capability gap from 1000-1500m. Anti-Materiel Rifle will pursue technology that will provide SOF with accurate engagement on hard targets, critical nodes, and other materiel.

- SCAR. SCAR program develops a weapon system to replace current M4A1, MK18 Close Quarters Battle Rifle (CQBR), MK11 and MK12 Sniper Support Rifles, the M14 Assault Rifle, and the M203 Grenade Launcher. SCAR in its threshold design is a 5.56mm (SCAR-L) and a 7.62mm (SCAR-H) weapon that will have modular barrel lengths to ensure versatility to mission requirement. Spiral development within the program seeks the objective of a single weapon capable of complete caliber modularity. Additionally, the Enhanced Grenade Launcher Module (EGLM) will provide SOF with a 40mm shoulder fired capability. EGLM is compatible with both SCAR-H and SCAR-L and has spiral developments within 40mm ammunition as well as Fire Control capability furthering the combat effectiveness of SOF.

- Weapons Accessories (formerly M4MOD). The Weapons accessories program funds efforts to optimize the effectiveness of all SOF weapons in order to increase their operational effectiveness through improved target recognition, acquisition and hit capability during day and night from close quarters to maximum effective range of each weapon. The program spiral develops new capabilities in block upgrades that are first developed and tested, and then fielded to the full spectrum of SOF operators. This program will leverage and then drive the advancement of accessories within this program. All SOF weapons programs leverage the weapons accessories program to increase operational effectiveness. Blocks include family of muzzle brake suppressors, Clip-On Night Vision Devices (CNVD)–Image Intensified, CNVD-Thermal, and CNVD-Fused, as well as numerous other components designed to enhance the capabilities of the weapon while at the same time combining capabilities into single, smaller devices.

Exhibit R-3 RDT&E Project Cost Analysis

DATE: FEBRUARY 2008

APPROPRIATION / BUDGET ACTIVITY RDT&E DEFENSE-WIDE / 7 SOF Weapons Systems/PE1160477BB Weapons Systems Advance Development/S375

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
Hardware Dev											
Family Sniper Detection System (FSDS) - CP	FFP/T&M	PM-CCS, Picatinny, NJ	1.687	0.845	Dec-06						2.532
Light Weight Anti-Armor Weapon (LAW)	Various	NSWC-Crane, Crane, IN	1.664	1.881	Dec-06						3.545
Weapons Accessories (formerly M4MOD)	Various	NSWC-Crane, Crane, IN	5.213	0.163	Jan-07						5.376
Nickle Boron Coating - CP	ALLOT	NSWC-Crane, Crane, IN		0.259	Jun-07						0.259
M4MOD Shot Counter -SOF Machine Gun (SMG) - CP	ALLOT	NSWC-Crane, Crane, IN		0.269	Dec-07						0.269
SOF Laser Rangefinder (SOFLRD)	ALLOT	TBD				3.411	Jun-08				3.411
SOF VAS Bino/Mono	ALLOT	Various				1.463	Jun-08				1.463
Precision Laser Targeting Device	CPFF	PM Sensors & Lasers, Ft. Belvoir, VA	2.870	3.300	Sep-07	0.973	Jan-08				7.143
SOF Combat Assault Rifle (SCAR) - Sniper Support Rifle (SSR)	ALLOT	NSWC-Crane, Crane, IN		1.294	Jan-07					Cont.	Cont.
SCAR - Enhanced Grenade Launcher Module (EGLM) - Fire Control Unit	ALLOT	NSWC-Crane, Crane, IN		1.200							1.200
SOF Personal Equipment Advanced Requirements (SPEAR)	Various	PM Spear, Natick, MA	3.507	1.202	Jun-07						4.709
Tactical Combat Casualty Care Equipment Kit (TCCCE) Kit	Various	Various	0.051	0.499	Mar-07	0.200	Mar-08				0.750
Holographic Close Combat Optic-CP	TBD	TBD		0.974	TBD						0.974
Advanced Planning Tools-CP	CPFF	SAIC Morgantown WV				3.118	Feb-08				3.118
Subtotal Product Dev			14.992	11.886		9.165		0.000		Cont.	Cont.

Remarks:

Development Spt											
Lightweight Anti-Armor Weapon (LAW)	Various	NSWC-Crane, Crane, IN	1.314	1.397	Dec-06						2.711
Weapons Accessories	ALLOT	NSWC-Crane, Crane, IN	0.413	0.042	Various						0.455
Nickle Boron Coating -CP	ALLOT	NSWC-Crane, Crane, IN		0.245	May-07						0.245
Shot Counter -SMG CP	ALLOT	NSWC-Crane, Crane, IN		0.199	Dec-07						0.199
PLTD	CPFF	PM Sensors & Lasers, Ft. Belvoir, VA	0.250	0.200	Sep-07		Feb-08				0.450

APPROPRIATION / BUDGET ACTIVITY RDT&E DEFENSE-WIDE / 7	SOF Weapons Systems/PE1160477BB Weapons Systems Advance Development/S375
---	---

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
SCAR	ALLOT	NSWC-Crane, Crane, IN	0.443	0.240	Jan-07						0.683
SPEAR	Various	PM Spear, Natick, MA	2.414	0.589	Various		Various				3.003
SPEAR Combat boot-CP	ALLOT	PM Spear, Natick, MA	0.000	0.374	May-07						0.374
SPEAR Arctic boot-CP	ALLOT	PM Spear, Natick, MA	0.000	0.350	May-07						0.350
SPEAR Tactical Boot Suite-CP	ALLOT	PM Spear, Natick, MA	0.000	0.454	Jul-07						0.454
Integrated Logistics Spt											
SCAR	ALLOT	NSWC-Crane, Crane, IN		0.112	Jan-07					Cont.	Cont.
Configuration Mgmt											0.000
SPEAR	ALLOT	PM Spear, Natick, MA	0.000	0.066	Various						0.066
Subtotal Spt			4.834	4.268		0.000				Cont.	Cont.

Remarks:

Developmental Test											
Family of Sniper Weapons (FSW) Anti-Materiel Rifle (AMR)	ALLOT	NSWC-Crane, Crane IN						0.497	TBD	Cont.	Cont.
FSW Precision Sniper Rifle (PSR)	ALLOT	NSWC-Crane, Crane IN				0.487	Feb-08			Cont.	Cont.
Shot Counter -SMG CP	ALLOT	NSWC-Crane, Crane, IN		0.139	Apr-07						0.139
Nickle Boron Coating -CP	ALLOT	NSWC-Crane, Crane, IN		0.220	Various						0.220
Weapons Accessories-Enhanced Combat Optical Sight (ECOS) - Close quarter	Various	NSWC-Crane, Crane, IN				0.038	Mar-08			Cont.	Cont.
Weapons Accessories-CNVD-Fused Image	Various	NSWC-Crane, Crane, IN				0.092		0.099	Jan-09	Cont.	Cont.
Weapons Accessories-Image Intensified	Various	NSWC-Crane, Crane, IN				0.050		0.025	Jan-09	Cont.	Cont.
Weapons Accessories-CNVD-Thermal	Various	NSWC-Crane, Crane, IN				0.050		0.025	Jan-09	Cont.	Cont.
Weapons Accessories-ECOS	Various	NSWC-Crane, Crane, IN						0.010	Feb-09	Cont.	Cont.
Weapons Accessories-ECOS- Close quarter	Various	NSWC-Crane, Crane, IN						0.010	Feb-09	Cont.	Cont.
Family of Muzzle Breaks and Suppressors Carbine (FMBS-C)	Various	NSWC-Crane, Crane, IN				0.014	Jan-08	0.010	Jan-09	Cont.	Cont.
Family of Muzzle Breaks and Suppressors Heavy (FMBS-H)	Various	NSWC-Crane, Crane, IN						0.005	Jan-09	Cont.	Cont.

APPROPRIATION / BUDGET ACTIVITY			SOF Weapons Systems/PE1160477BB								
RDT&E DEFENSE-WIDE / 7			Weapons Systems Advance Development/S375								
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
Family of Muzzle Breaks and Suppressors Pistol (FMBS-P)	Various	NSWC-Crane, Crane, IN						0.005	Apr-09	Cont.	Cont.
Family of Muzzle Breaks and Suppressors Sniper (FMBS-S)	Various	NSWC-Crane, Crane, IN						0.010	Apr-09	Cont.	Cont.
Visible Bright Light Illuminator	Various	NSWC-Crane, Crane, IN				0.005	Jan-08	0.005	Jan-09	Cont.	Cont.
SCAR - Light	ALLOT	NSWC-Crane, Crane, IN	0.654	0.010	Jan-07			2.001	Jan-09	Cont.	Cont.
SPEAR	ALLOT	NSWC-Crane, Crane, IN									
SPEAR Body Armor P3I	ALLOT	PM Spear, Natick, MA	1.719	0.200	Various	0.300	Various			Cont.	Cont.
SPEAR Modular Side Armor Protection (MSAP)	ALLOT	PM Spear, Natick, MA		0.189	Various						0.189
SPEAR Backpacks	ALLOT	PM Spear, Natick, MA		0.030	Various						0.030
SPEAR Eye Protection	ALLOT	PM Spear, Natick, MA		0.015	Various						0.015
SPEAR MICH Helmet	ALLOT	PM Spear, Natick, MA		0.246	Nov-08	1.251	Various				1.497
SPEAR Environmental Protection	ALLOT	PM Spear, Natick, MA				0.398	Various				0.398
SPEAR Maritime	ALLOT	PM Spear, Natick, MA				0.099	Various				0.099
Operational Test											
FSDS - CP	ALLOT	PM-CCS, Picatinny, NJ	0.075	0.245	Dec-06						0.320
Weapons Accessories	ALLOT	NSWC-Crane, Crane, IN	2.982							Cont.	Cont.
Shot Counter -SMG- CP	ALLOT	NSWC-Crane, Crane, IN		0.367	Various						0.367
Nickle Boron Coating - CP	ALLOT	NSWC-Crane, Crane, IN		0.250	Various						0.250
SPEAR											
SPEAR MSAP	ALLOT	PM Spear, Natick, MA		0.060	Various						0.060
SPEAR Backpacks	ALLOT	PM Spear, Natick, MA		0.030	Nov-07						0.030
SPEAR Eye Protection	ALLOT	PM Spear, Natick, MA		0.051	Nov-07						0.051
SPEAR Combat boot-CP	ALLOT	PM Spear, Natick, MA		0.350	May-07						0.350
SPEAR Artic boot-CP	ALLOT	PM Spear, Natick, MA		0.474	May-07						0.474
SPEAR Tactical Boot Suite-CP	ALLOT	PM Spear, Natick, MA		0.520	Various						0.520
SCAR -SSR	ALLOT	NSWC-Crane, Crane, IN	1.592	1.194	Jan-07				Dec-08	Cont.	Cont.
SCAR - EGLM - FCU	ALLOT	NSWC-Crane, Crane, IN		0.350	Nov-07						0.350
SOF Special Purpose Tagging, Tracking, and Locating Tool	ALLOT	TBD				0.974	TBD				0.974

Exhibit R-3 RDT&E Project Cost Analysis

DATE: FEBRUARY 2008

APPROPRIATION / BUDGET ACTIVITY
RDT&E DEFENSE-WIDE / 7

SOF Weapons Systems/PE1160477BB
Weapons Systems Advance Development/S375

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
Tactical Combat Casualty Care Equipment TCCCE-Kits	ALLOT	USAMMA-Medical Material				0.498	Jan-08				0.498
Subtotal T & E			7.022	4.940		4.256		2.702		Cont.	Cont.

Remarks:

Government Eng Spt SPEAR	ALLOT	PM Spear, Natick, MA	0.447	0.717	Various						1.164
Engineering Support LAW	ALLOT	NSWC-Crane, Crane, IN	0.200	1.993	Dec-06						2.193
SCAR	ALLOT	NSWC-Crane, Crane, IN	0.300	0.144	Jan-07					Cont.	Cont.
SPEAR Combat boot-CP	ALLOT	PM Spear, Natick, MA		0.250	May-07						0.250
SPEAR Artic boot-CP	ALLOT	PM Spear, Natick, MA		0.150	May-07						0.150
Multi-Panoramic Vision Sys-CP	ALLOT	TBD				2.339	Various				2.339
Expendable Airdrop Del-CP	ALLOT	TBD				0.780	Various				0.780
Weapons Accessories-Sustain Eng	ALLOT	TBD						0.057	Jan-09	Cont.	Cont.
Travel FSDS	ALLOT	PM-CCS, Picatinny, NJ	0.125	0.080	Dec-06						0.205
M4MOD	ALLOT	NSWC-Crane, Crane, IN	0.384	0.032	Various						0.416
SCAR	ALLOT	NSWC-Crane, Crane, IN	0.070	0.160	Various					Cont.	Cont.
SPEAR	ALLOT	PM Spear, Natick, MA	0.323	0.148	Various						0.471
Subtotal Management			1.849	3.674		3.119		0.057		Cont.	Cont.

Systems Engineering											
Subtotal Sytems Engineering										Cont.	

Remarks:

Total Cost			28.697	24.768		16.540		2.759		Cont.	0.000
------------	--	--	--------	--------	--	--------	--	-------	--	-------	-------

Remarks

Exhibit R-4, RDT&E Program Schedule Profile																	Date: FEBRUARY 2008																																	
Appropriation/Budget Activity																	Program Element Number and Name																	Project Number and Name																
RDT&E/7																	PE1160477BB/Special Operations Forces Weapons Systems																	Project S375/Weapons Systems Advanced Development																
Fiscal Year																	2007				2008				2009				2010				2011				2012				2013									
																	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						
SOF Advanced Planning Tools-CP																																																		
Hardware Development																																																		
Expendable Airdrop Delivery System-CP																																																		
Developmental Support																																																		
Family of Sniper Detection Systems (FSDS) - CP																																																		
FSDS Block I Variant Hardware Development																																																		
FSDS OT																																																		
Family of Sniper Weapons (FSW) - (formerly HSR)																																																		
FSW-PSR DT/OT																																																		
FSW Anti Materiel Rifle Development																																																		
SOF Special Purpose Tagging Tracking Locating Tool-CP																																																		
Developmental Test																																																		
Lightweight Anti-Armor Weapon (LAW) M72																																																		
LAW Confined Space Development																																																		
LAW-CS MS C																																																		
Weapons Accessories (Formerly M4MOD)																																																		
Weapon Shot Counter LRIP - CP																																																		
Weapon Shot Counter SMG Development -CP																																																		
Weapon Nickel Boron Coating Lube-free M-4 - CP																																																		
Weapon Nickel Boron Coating Development SMG- CP																																																		
Mini Day/Night Sight (MDNS) Development																																																		

Exhibit R-4, RDT&E Program Schedule Profile													Date: FEBRUARY 2008																							
Appropriation/Budget Activity					Program Element Number and Name												Project Number and Name																			
RDT&E/7					PE1160477BB/Special Operations Forces Weapons Systems												Project S375/Weapons Systems Advanced Development																			
Fiscal Year					2007				2008				2009				2010				2011				2012				2013							
					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				
MDNS DT								▲																												
Clip-On Night Vision Device - Fused (CNVD-F) - Development (Formerly under MDNS)								▲	—	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△				
CNVD-F DT																△																				
CNVD - Image Intensified (I2) Development								▲	—	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△				
CNVD-I2 DTMDNS Image Intensified DT																△																				
CNVD-Thermal Development								▲	—	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△				
CNVD-T DT																△																				
Enhanced Combat Optical Sight (ECOS) Close Quarter DT												△																								
ECOS Close Quarter OT																△	—	—	△																	
Family of Muzzle Break and Suppressors (FMBS) - Carbine System Engineering								▲	—	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△				
FMBS-H (Heavy) Systems Engineering																△	—	—	△									△	—	—	△					
FMBS - P(Pistol) Systems Engineering																△			△				△				△									
FMBS-S (Sniper) Systems Engineering																△	—	—	△	△	—	—	△	△	—	—	△									
Visible Bright Light Illuminator Systems Engineering								△	—	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△	△	—	—	△								
SOF Laser Rangefinder and Designator (SOFLRD)																																				
Prototype Development												△	—	△																						
Special Operations Visual Aug Sys Bino/Mono																																				
Prototype Development																△	—	△																		
Multi-User Panoramic Synthetic Vision System-CP																																				
Engineering Support												△	—	△																						
Precision Laser Targeting Device (PLTD)																																				
PLTD Block I MS C								▲																												

Exhibit R-4, RDT&E Program Schedule Profile													Date: FEBRUARY 2008																					
Appropriation/Budget Activity					Program Element Number and Name													Project Number and Name																
RDT&E/7					PE1160477BB/Special Operations Forces Weapons Systems													Project S375/Weapons Systems Advanced Development																
Fiscal Year					2007				2008				2009				2010				2011				2012				2013					
					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		
PLTD BLK II Inertial Navigational System Minaturization, P3I									▲	—	—	—	△																					
SOF Combat Assault Rifle - Light																																		
Initial Operation Test and Evaluation (IOT&E)						▲	—	—	▲																									
MS-C Full Rate Product (FRP)												△																						
First Unit and Equipment (FUE)																△																		
SCAR - EGLM System Engineering																△	—	△																
SCAR - SSR System Engineering																△	—	△																
SOF Personnel Equipment Advanced Requirements (SPEAR)																																		
SPEAR Body Armor P3I																																		
DT						▲	—	—	▲																									
OT						▲	—	—	▲																									
MS C								▲																										
IOC						▲																												
SPEAR Body Armor Modular Side Armor (MSAP) P3I																																		
DT/OT						▲																												
MS C							▲																											
IOC								▲																										
SPEAR Backpacks																																		
DT							▲																											
OT							▲	—	▲																									
MS C												▲																						
SPEAR Eye Protection																																		
MS A/B						▲																												
DT							▲	—	▲																									

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	PE1160404BB/Special Operations Tactical Systems Development (FY06-08)/PE1160477BB/SOF Weapon Systems (FY09-13)	Project 375/Weapons Systems Advanced Development						
Schedule Profile		FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
SOF Advanced Planning Tools-CP								
Hardware Development			2-4Q					
Expendable Airdrop Delivery System-CP								
Developmental Support			2-4Q					
Family of Sniper Detection Systems (FSDS) - CP								
FSDS Block I Variant - Hardware Development & Fabrication		1 - 4Q	1Q					
FSDS OT			1Q					
Family of Sniper Weapon (FSW) - (Formerly HSR)								
DT/OT			2 - 3Q	3Q	1Q			
Anti-Materiel Rifle Development				1 - 4Q				
SOF Special Purpose Tagging Tracking Locating Tool-CP								
Developmental Test			2-3Q					
Lightweight Anti-Armor Weapon (LAW) M72								
Develop LAW Confined Space		3-4Q	1-2Q					
LAW - CS MS C			4Q					
Weapons Accessories (formerly M4MOD)								
Weapon Shot Counter LRIP-CP		4Q						
SOF Machine Gun (SMG) Shot Counter Development-CP		4Q	1-2Q					
Nickel Boron Coating Lube-free M-4-CP		1 - 4Q						
Nickel Boron Coating Development SMG-CP		4Q	1-4Q					
Mini Day/Night Sight (MDNS) Development		2 -4Q						
MDNS DT		4Q						
Clip-on Night Vision Device - Fused Image Development			1-4Q	2-4Q	2-4Q	2-4Q	2-4Q	2-4Q
Clip-on Night Vision Device - Fused Image DT				3 Q				
Clip-on Night Vision Device - I2 Development			1-4Q	2-4Q	2-4Q	2-4Q	2-4Q	2-4Q
Clip-on Night Vision Device - I2 DT				4Q				
Clip-on Night Vision Device - T Development			1-4Q	2-4Q	2-4Q	2-4Q	2-4Q	2-4Q
Clip-on Night Vision Device Thermal DT				4Q				
Enhanced Combat Optical Sight (ECOS) DT			3Q	2-4Q				
ECOS Close Quarter OT				2-4Q				
Family of Muzzle Break and Suppressors (FMBS)-Carbine System Engineering			1-4Q	2-4Q	2-4Q	2-4Q	2-4Q	1-2Q

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	PE1160404BB/Special Operations Tactical Systems Development (FY06-08)/PE1160477BB/SOF Weapon Systems (FY09-13)		Project 375/Weapons Systems Advanced Development				
Schedule Profile	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
FMBS- H (Heavy) Systems Engineering			2-4Q	2-4Q		2Q	1-2Q
FMBS-P (Pistol) Systems Engineering			3Q	3Q	3Q	3Q	3Q
FMBS-S (Sniper Rifle) Systems Engineering			2-4Q	1-2Q	3-4Q	1-2Q	
Visible Bright Light Illuminator Systems Engineering		1-4Q	2-4Q	1-2Q	2-4Q	1-2Q	
SOF Laser RangeFinder and Designator							
Prototype Development		3-4Q					
Special Operations Visual Augmentation System Binocular/Monocular							
Prototype Development		2-4Q					
Multi-Use Panoramic Synthetic Vision System							
Engineering Support		2 - 4Q					
Precision Laser Target Device (PLTD)							
Block I PLTD - MS C	4Q						
Block II PLTD Inertial Navigation System (INS) Minaturization, P3I		1-4Q					
SOF Combat Assault Rifle - Light							
Initial Operational Test and Evaluation (IOT&E)	2 - 4Q	1Q					
MS C Full Rate Production (FRP)		2Q					
First Unit and Equipped (FUE)			2Q				
SCAR - EGLM Systems Engineering			3-4Q	3-4Q			
SCAR - SSR Systems Engineering			1-2Q	1-2Q			
SOF Personal Equipment Advanced Requirements (SPEAR)							
SPEAR Body Armor P3I							
DT	1 - 4Q						
OT	1 - 4Q						
MS C	3Q						
IOC	1Q						
SPEAR Body Armor P3I Modular Side Armor (MSAP)							
DT/OT	1Q						
MS C	2Q						
IOC	4Q						
SPEAR Backpacks							
DT	2Q						

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	PE1160404BB/Special Operations Tactical Systems Development (FY06-08)/PE1160477BB/SOF Weapon Systems (FY09-13)	Project 375/Weapons Systems Advanced Development					
Schedule Profile	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
SPEAR Backpacks (Cont'd)							
OT	2 - 3Q						
MS C		1Q					
SPEAR Eye Protection							
MS A/B	1Q						
DT	2 - 3Q						
OT	2 - 3Q						
MS C		1Q					
IOC		3Q					
SPEAR Modular Integrated Communications Helmet							
Next Generation Communications Headsets DT/OT		1 - 4Q	1Q				
SPEAR Protective Combat Uniform (PCU)							
SPEAR-Environmental Protection (Developmental Testing)		2Q					
SPEAR-Maritime (Developmental Testing)		2Q					
Extremity Protection Gloves - MS B		2Q					
Extremity Protection - Gloves - DT		4Q					
SPEAR Polyurethane Combat Boot-CP							
Concept Development	2 - 3Q						
Early User Assessment	3 - 4Q	1 - 2Q					
SPEAR Arctic Warfare Mountaineering Boot-CP							
Concept Development	2 - 3Q						
Early User Assessment	3 - 4Q	1 - 2Q					
SPEAR SOF Tactical Boot Suite Development-CP							
Concept Development	2 - 3Q						
Early User Assessment	3 - 4Q	1 - 2Q					
Tactical Combat Casualty Care Equipment Kit							
Medical and Operator Kits							
Prototype Demonstrations	1Q						
Operational Assessment	1 - 2Q						
Initial Fielding	3Q						
Tactical Combat Casualty Evacuation (CASEVAC) Kits							
CASEVAC - Concept Development	1-4Q	1Q					
CASEVAC - Prototype Demonstrations		2 - 4Q					
Tactical-Combat Casualty Care Equipment Kit							
SOF Surgeon Kits Development (test articles)		2Q					
Developmental Testing		3-4Q					

