

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE FEBRUARY 2000			
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7			R-1 ITEM NOMENCLATURE PE1160401BB Spec Operations Technology Development						
COST (Dollars in Millions)	FY99	FY00	FY01	FY02	FY03	FY04	FY05	Cost to Complete	Total Cost
PE1160401BB	3.750	6.875	7.360	8.268	8.885	9.056	9.235	Cont.	Cont.
S100 SO TECHNOLOGY BASE DEV	3.750	6.875	7.360	8.268	8.885	9.056	9.235	Cont.	Cont.
<p>A. Mission Description and Budget Item Justification</p> <p>This program element conducts rapid prototyping and advanced technology demonstrations. It provides a means for demonstrating and evaluating emerging/advanced technologies in as realistic an operational environment as possible by Special Operations Forces users. Evaluation results are included in a transition package which assists in the initiation of or insertion into an acquisition program. The program element also addresses projects that are a result of unique joint, special mission, or area-specific needs for which a few-of-a-kind prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase.</p> <p>Change Summary Explanation:</p> <p>Funding:</p> <p>FY 2000 decrease is project cost share of the Small Business Innovative Research program, Congressionally mandated rescission of \$23K, and revised Administration inflation assumptions.</p> <p>FY 2001 decrease is project cost share of revised Administration inflation assumptions.</p> <p>Schedule: None.</p> <p>Technical: None.</p>									

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7		R-1 ITEM NOMENCLATURE PE1160401BB Spec Operations Technology Development		
B. Program Change Summary		FY 1999	FY 2000	FY 2001
Previous President's Budget		3.750	7.093	7.706
Appropriated Value		4.026	7.093	
Adjustments to Appropriated Value / President's Budget		(.276)	(.218)	(.346)
Current Budget Submit		3.750	6.875	7.360

RDT&E PROJECT JUSTIFICATION SHEET (R-2A Exhibit)					DATE FEBRUARY 2000					
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7			R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100							
COST (Dollars in Millions)		FY99	FY00	FY01	FY02	FY03	FY04	FY05	Cost to Complete	Total Cost
S100, Special Operations Technology Development		3.750	6.875	7.360	8.268	8.885	9.056	9.235	Cont.	Cont.

A. Mission Description and Budget Item Justification

This project conducts studies and develops laboratory prototypes for applied research and advanced technology development, as well as leverage other organizations' technology projects that may not otherwise be affordable within MFP-11. Applying small incremental amounts of investments to DOD, other government agencies, and commercial organizations allows the Commander-in-Chief USSOCOM to influence the direction of technology development or the schedule against which it is being pursued, and to acquire emerging technology for Special Operations Forces (SOF). This project provides an investment strategy for USSOCOM to link non-systems technology opportunities to USSOCOM deficiencies, capability objectives, technology development objectives and mission area analyses. Sub-projects include:

- Active Noise Cancellation. Reduce acoustic signature of SOF propeller craft.
- Color Night Vision Fusion. Develop broad spectrum sensors and fuse these sensors while incorporating SOF size, weight, and human factor requirements.
- Head-Mounted Thermal Vision. Lightweight, low-volume, low-power thermal viewer providing a passive night/obscured vision capability using an uncooled infrared focal plane array. This project leverages other government efforts.
- Low Probability of Intercept/Detection Imagery Forwarding. A high data-rate, secure server, long-range data transmission capability. This project leverages various commercial and government technology efforts.

RDT&E PROJECT JUSTIFICATION SHEET (R-2A Exhibit)	DATE FEBRUARY 2000
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100
<ul style="list-style-type: none"> • SOF) Clothing and Equipment. Peripheral sensor technologies to monitor status of an individual SOF operator and his equipment and to detect threats. <p>FY 1999 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> • (0.725) SOF Command, Control, Communications, Computers and Intelligence (C4I) Technologies. Completed evaluation of Head-Mounted Thermal Vision. Completed development and began evaluation of SOF Color Night Vision Fusion device. Completed development of low probability of intercept/detection imagery forwarding and began evaluation. Exploited emerging C4I technologies to provide improvements in weight/volume reduction, support, power consumption/management, and enhanced antennae. Exploited technology efforts to demonstrate a capability for SOF to detect surveillance threats. (1QTR99-4QTR99) • (0.525) SOF Mobility Technologies. Completed development and began evaluation of the Active Noise Cancellation effort. Completed development of Integrated Bridge System subprojects. (1QTR99-3QTR99) • (0.708) SOF Sustainment Technologies. Completed development of and evaluated the FY98 sub-projects. Exploited technology to provide improvements in weight/volume reduction and increased power capabilities for the individual SOF operator. (1QTR99-4QTR99) • (0.350) Concept Exploration Studies. Explored/validated concepts for a precision guided canister bomb for leaflet delivery and concepts for a hydrographic reconnaissance littoral mapping device to support the Naval Special Warfare very shallow water mine countermeasures. (3QTR99-4QTR99) • (1.442) Classified Project. Provided under separate cover. (1QTR99-4QTR99) 	

RDT&E PROJECT JUSTIFICATION SHEET (R-2A Exhibit)		DATE FEBRUARY 2000
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100	
<p>FY 2000 PLAN:</p> <ul style="list-style-type: none"> • (2.184) SOF Command, Control, Communications, Computers and Intelligence (C4I) Technologies. Complete evaluation and transition of Low Probability of Intercept/Detection Imagery Forwarding and SOF Color Night Vision Fusion devices. Complete development of and evaluate FY99 new sub-projects. Exploit technologies to provide SOF with improved situational awareness in all mission environments. Exploit technologies to provide significant improvements to SOF's capability to accurately detect and track threats or targets. (1QTR00-3QTR00) • (1.710) SOF Mobility Technologies. Complete evaluation and transition of Active Noise Cancellation effort. Complete development of and evaluate FY99 new sub-projects. Exploit technologies to improve the performance and reduce the detection of SOF mobility assets. Exploit technologies to provide SOF the capability to conduct undetectable ground, air and sea mobility operations in denied areas. (1QTR00-3QTR00) • (0.911) SOF Weapons Technologies. Initiate efforts to exploit technologies that provide SOF with stand-off capabilities for targeting, tracking and locating personnel and equipment. Exploit technologies to broaden the range and performance of SOF munition capabilities to support a variety of operations. (1QTR00-3QTR00) • (1.364) SOF Sustainment Technologies. Complete development and begin evaluation of threat detection devices for the individual SOF operator. Continue to exploit technologies to increase SOF's survivability and performance. Exploit technologies to improve the human sensory performance without interfering with normal sensory functions. Exploit technologies to provide SOF with a lightweight and accurate system to assess potential assault zone areas. Exploit information technologies to provide SOF with advanced mission planning and rehearsal capabilities. (1QTR00-3QTR00) 		

RDT&E PROJECT JUSTIFICATION SHEET (R-2A Exhibit)	DATE FEBRUARY 2000
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100
<ul style="list-style-type: none"> • (0.506) Concept Exploration Studies. Explore/validate concepts for projects being continued or initiated in support of the USSOCOM desired operational capabilities. (2QTR00) • (0.200) Technology Development Exploitation. Exploit technologies to meet critical Special Operations Forces (SOF) capability objectives. Requirements in these areas may be advertised to industry and government research and development agencies via broad area announcements and calls for white papers. (3QTR00) <p>FY 2001 PLAN:</p> <ul style="list-style-type: none"> • (1.880) SOF Command, Control, Communications, Computers and Intelligence (C4I) Technologies. Complete development of FY 2000 new sub-projects. Continue to exploit technologies that provide SOF with improved situational awareness and communications in all environments. Develop technologies to provide significant improvements to SOF's capability to accurately detect and track threats or targets. Develop C4I technologies to support mission accomplishment with reality manipulation techniques. (1QTR01-3QTR01) • (1.803) SOF Mobility Technologies. Complete development of FY 2000 new sub-projects. Continue to exploit technologies to improve the performance and reduce the detection of SOF mobility assets. Continue to exploit and develop technologies to provide SOF the capability to conduct undetectable ground, air, and sea mobility operations in denied areas. (1QTR01-3QTR01) • (1.102) SOF Weapons Technologies. Complete development of FY 2000 new sub-projects. Continue to exploit technologies to provide SOF with stand-off capabilities for targeting, tracking and locating personnel and equipment. Exploit technologies to discriminate targets and provide real-time active decision making capabilities. Exploit technologies to reduce weapon overpressure in support of SOF missions. (1QTR01-3QTR01) 	

RDT&E PROJECT JUSTIFICATION SHEET (R-2A Exhibit)		DATE FEBRUARY 2000
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100	
<ul style="list-style-type: none"> • (1.856) SOF Sustainment Technologies. Complete development of FY 2000 new sub-projects. Continue to exploit technologies to increase SOF's survivability and performance. Continue to exploit technologies to improve the human sensory performance without interfering with normal sensory functions. (1QTR01-3QTR01) • (0.519) Concept Exploration Studies. Explore/validate concepts for projects being continued or initiated in support of the USSOCOM desired operational capabilities. (2QTR01) • (0.200) Technology Development Exploitation. Exploit technologies to meet critical SOF capability objectives. Requirements in these areas may be advertised to industry and government research and development agencies via broad area announcements and calls for white papers. (3QTR01) <p>B. <u>Other Program Funding Summary</u>: None.</p> <p>C. <u>Acquisition Strategy</u>: None.</p> <p>D. <u>Schedule Profile</u>: None.</p>		