

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE FEBRUARY 2006																																				
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 2			R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development/S100																																							
COST (Dollars in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		Cost to Complete	Total Cost																																
PE1160401BB	14.751	29.960	12.698	11.382	11.635	11.895	12.169		Cont.	Cont.																																
S100, SO TECHNOLOGY BASE DEV	14.751	29,960	12.698	11.382	11.635	11.895	12.169		Cont.	Cont.																																
<p>A. Mission Description and Budget Item Justification</p> <p>This program element enables USSOCOM to conduct 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, 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. This project provides an investment strategy for USSOCOM to link technology opportunities with USSOCOM capability deficiencies, capability objectives, technology thrust areas, and technology development objectives.</p> <p>B. Change Summary Explanation:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: right;"><u>FY05</u></th> <th style="text-align: right;"><u>FY06</u></th> <th style="text-align: right;"><u>FY07</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Previous President's Budget</td> <td style="text-align: right;">14.972</td> <td style="text-align: right;">13.595</td> <td style="text-align: right;">12.520</td> </tr> <tr> <td style="text-align: right;">Current President's Budget</td> <td style="text-align: right;">14.751</td> <td style="text-align: right;">29.960</td> <td style="text-align: right;">12.698</td> </tr> <tr> <td style="text-align: right;">Total Adjustments</td> <td style="text-align: right;">-0.221</td> <td style="text-align: right;">16.365</td> <td style="text-align: right;">0.178</td> </tr> <tr> <td style="text-align: right;">Congressional Program Reductions</td> <td></td> <td style="text-align: right;">-0.435</td> <td></td> </tr> <tr> <td style="text-align: right;">Congressional Increases</td> <td></td> <td style="text-align: right;">16.800</td> <td></td> </tr> <tr> <td style="text-align: right;">Reprogrammings</td> <td style="text-align: right;">-0.221</td> <td></td> <td style="text-align: right;">0.178</td> </tr> <tr> <td style="text-align: right;">SBIR Transfer</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	Previous President's Budget	14.972	13.595	12.520	Current President's Budget	14.751	29.960	12.698	Total Adjustments	-0.221	16.365	0.178	Congressional Program Reductions		-0.435		Congressional Increases		16.800		Reprogrammings	-0.221		0.178	SBIR Transfer			
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<p>FY05: Decrease reflects reprogramming to PE1160407BB for Casualty Care Management Initiatives (-\$0.221 million)</p> <p>FY06: Congressional reductions include (-\$0.303 million) for global 1% reduction and (-\$0.132 million) for Section 8125 reduction. Increase based on Congressional Plus-ups. (+16.800 million)</p> <ul style="list-style-type: none"> - AngelFire for FLAS \$8.000 million - Helios/Global Observer \$6.800 million - Navigational Technique Enhancements \$1.000 million - Technology Infusion Cells for SOF \$1.000 million <p>FY07: Increased funds (+\$0.178 million) for inflation rate changes.</p> <p>Schedule: None.</p> <p>Technical: None.</p>		

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Cost (\$ in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
SOF Technology Base Development	14.751	29.960	12.698	11.382	11.635	11.895	12.169
RDT&E Articles Quantity							

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 leverages 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 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 technology opportunities with USSOCOM capability deficiencies, capability objectives, technology thrust areas, and technology objectives. Efforts include:

- SOF Command, Control, Communications, Computers, and Intelligence (C4I) Technologies. 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. Exploit and demonstrate technologies that provide enhanced sensors and command and control. Develop technologies to provide new and improved capabilities in information operations and psychological operations.
- SOF Mobility Technologies. Exploit technologies to improve the performance and survivability, and reduce the detectability of SOF mobility assets. Exploit and develop technologies to provide SOF the capability to conduct ground, air, and sea mobility operations in denied areas. Exploit and develop technologies to enhance logistics support, reduce cost and improve the performance of SOF mobility platforms.
- SOF Weapons Technologies. Exploit technologies to provide SOF with standoff capabilities for targeting and locating personnel and equipment. Exploit technologies to discriminate targets and provide real-time active decision-making capabilities. Exploit technologies that enhance logistics, reduce cost and enhance performance of SOF weapons and munitions. Exploit technologies to provide multipurpose, adaptable weapons applicable to SOF platform and missions.

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- SOF Sustainment/Warrior Technologies. Exploit technologies to increase SOF's survivability and performance. Exploit technologies to improve the human endurance and sensory performance without interfering with normal sensory functions. Exploit and develop technologies to counter the threat of electro-optical devices--devices that detect human presence and enhance individual operator capabilities.
- Concept Exploration Studies. Explore and validate concepts for projects being continued or initiated in support of USSOCOM desired operational capabilities.
- 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.

Additionally, these efforts were added by Congress:

- AngelFire for FCLAS. Investigate, develop and demonstrate prototype system for full spectrum, Close-in Active Protection (FCLAS) that will protect SOF assets from Rocket Propelled Grenades (RPGs) using counter munitions.
- Helios/Global Observer. Congressional add for persistent surveillance in denied areas.
- Navigational Technique Enhancements. Congressional add to research complementary navigational methods to perform in environments where existing navigation systems are denied.
- Technology Infusion Cell for SOF. Congressional add to research, develop, evaluate, validate and harness the latest emerging technological developments in support of rapid deployments forces.

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B. Accomplishments/Planned Program

	FY05	FY06	FY07	
SOF Command, Control, Communications, Computers, and Intelligence (C4I) Technologies.	2.780	2.172	2.135	
RDT&E Articles Quantity				
<p>FY05 Continued development of FY04 efforts. Transitioned Undersea Master Comms Node to Sea Eagle Advanced Concepts Technology Demonstration.</p> <p>FY06 Continue development of FY05 efforts. Continue to exploit, develop and demonstrate technologies that provide SOF with improved situational awareness and communications in all environments, the capability to accurately detect and track threats or targets, provide enhanced sensors and command and control, and continue investigations of research and development focus areas.</p> <p>FY07 Continue development of FY06 efforts. Continue to exploit, develop and demonstrate technologies that provide SOF with improved situational awareness and communications in all environments, the capability to accurately detect and track threats or targets, provide enhanced sensors and command and control, and continue investigations of technology thrust areas.</p>				
	FY05	FY06	FY07	
SOF Mobility Technologies	3.095	2.160	2.300	
RDT&E Articles Quantity				
<p>FY05 Continued development of FY04 efforts. Initiated Enhanced Hostile Detection Capability for SOF Combatant Craft (river application).</p> <p>FY06 Continue development of FY05 efforts. Continue to exploit technologies to improve the performance and survivability, and reduce the detection of SOF mobility assets. Continue to exploit and develop technologies to provide SOF the capability to conduct ground, air, and sea mobility operations in denied areas and continue investigations of research and development focus areas. Continue to exploit and develop technologies to enhance logistics support, reduce cost and improve the performance of SOF mobility platforms. Initiate alternative power systems and enhanced unmanned vehicles.</p> <p>FY07 Continue development of FY06 efforts. Continue to exploit technologies to improve the performance and survivability, and reduce the detection of SOF mobility assets. Continue to exploit and develop technologies to provide SOF the capability to conduct ground, air, and sea mobility operations in denied areas and continue investigations of technology thrust areas. Continue to exploit and develop technologies to enhance logistics support, reduce cost, and improve the performance of SOF mobility platforms.</p>				

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	FY05	FY06	FY07	
SOF Weapons Technologies	1.855	1.617	1.587	
RDT&E Articles Quantity				
<p>FY05 Continued development of FY04 efforts. Initiated Hostile Fire Detection and Defeating Systems. Transitioned SOF Demolition Kit Enhancements to acquisition.</p> <p>FY06 Continue development of FY05 efforts. Continue to exploit technologies to provide SOF with standoff capabilities for targeting and locating personnel and equipment. Exploit technologies to discriminate targets and provide real-time active decision-making capabilities. Exploit technologies that enhance logistics, reduce cost and enhance performance of SOF weapons and munitions. Exploit technologies to provide multipurpose, adaptable weapons applicable to SOF platforms and missions. Continue investigations of research and development focus areas.</p> <p>FY07 Continue development of FY06 efforts. Continue to exploit technologies to provide SOF with standoff capabilities for targeting and locating personnel and equipment. Exploit technologies to discriminate targets and provide real-time active decision-making capabilities. Exploit technologies that enhance logistics, reduce cost and enhance performance of SOF weapons and munitions. Exploit technologies to provide multipurpose, adaptable weapons applicable to SOF platforms and missions. Continue investigations of research and development focus areas.</p>				
	FY05	FY06	FY07	
SOF Sustainment/Warrior Technologies	1.655	1.644	1.522	
RDT&E Articles Quantity				
<p>FY05 Continued development of FY04 efforts.</p> <p>FY06 Continue development of FY05 efforts. Continue to exploit technologies to increase SOF's survivability and performance. Continue to exploit technologies to improve the human endurance and sensory performance. Continue investigations of research and development focus areas.</p> <p>FY07 Continue development of FY06 efforts. Continue to exploit technologies to increase SOF's survivability and performance. Continue to exploit technologies to improve the human endurance and sensory performance. Continue investigations of research and development focus areas.</p>				
	FY05	FY06	FY07	
Concept Exploration Studies	.814	.500	.839	
RDT&E Articles Quantity				
<p>FY05 Continued to conduct concept studies to explore/validate projects that support USSOCOM desired operational capabilities. Completed the following studies: Combatant Craft Modularity Study and low cost autonomous attack system for AC-130 Gunship.</p> <p>FY06 Continue to conduct concept studies to explore/validate projects that support USSOCOM desired operational capabilities.</p>				

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FY07 Continue to conduct concept studies to explore/validate projects that support USSOCOM desired operational capabilities.				
	FY05	FY06	FY07	
Technology Development Exploitation	.625	.500	.638	
RDT&E Articles Quantity				
FY05 Continued to exploit technologies to meet critical SOF capability objectives. Continue Technology Roadmaps for focus areas. FY06 Continue to exploit technologies to meet critical SOF capability objectives. Continue Technology Roadmaps for focus areas. FY07 Continue to exploit technologies to meet critical SOF capability objectives. Continue Technology Roadmaps for focus areas.				
	FY05	FY06	FY07	
Classified	1.531	2.049	2.150	
RDT&E Articles Quantity				
FY05 Details provided under separate cover. FY06 Details provided under separate cover. FY07 Details provided under separate cover.				
	FY05	FY06	FY07	
SPIKE Urban Warfare System	2.396			
RDT&E Articles Quantity				
FY05 Initiated precision guided missile tests. Full integration of flight-worthy tracker algorithms.				
	FY05	FY06	FY07	
SOF Mobility Technologies		2.758	1.527	
RDT&E Articles Quantity				
FY06 Program funding provides for initial studies, analyses, market research and investigation of new and existing technologies needed to replace the MK V SOC. FY07 Program funding provides for follow-on studies, analyses, market research and investigation of new and existing technologies needed to replace the MK V SOC.				

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		FY05	FY06	FY07	
Angel Fire for FCLAS			7.885		
RDT&E Articles Quantity					
FY06 This initiative is a Congressional add. Investigate, develop and demonstrate prototype system for full spectrum, Close-in Active Protection (FCLAS) that will protect SOF assets from RPGs using counter munitions.					
		FY05	FY06	FY07	
Helios/Global Observer			6.703		
RDT&E Articles Quantity					
FY06 This initiative is a Congressional add. Continuous PSYOP Broadcast in denied areas.					
		FY05	FY06	FY07	
Navigational Technique Enhancements			.986		
RDT&E Articles Quantity					
FY06 This initiative is a Congressional add. Research complementary navigational methods to perform in environments where existing navigation system are denied.					
		FY05	FY06	FY07	
Technology Infusion Cell for SOF			.986		
RDT&E Articles Quantity					
FY06 This initiative is a Congressional add. Research, develop, evaluate, validate and harness the latest emerging technological developments in support of rapid deployment forces.					
C. Other Program Funding Summary: None.					
D. Acquisition Strategy: N/A.					