Exhibit R-2, RDT&E Budget Item Justification: PB 2014 United States Special Operations Command

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 2: Applied Research

APPROPRIATION/BUDGET ACTIVITY

PE 1160401BB: Special Operations Technology Development

, , ,												
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	295.615	40.517	28.739	29.246	-	29.246	29.750	30.289	30.834	31.389	Continuing	Continuing
S100: SO Technology Development	295.615	40.517	28.739	29.246	-	29.246	29.750	30.289	30.834	31.389	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

### A. Mission Description and Budget Item Justification

This program element enables USSOCOM to conduct studies and develop 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 USSOCOM to influence the direction of technology development or the schedule against which it is being pursued, and to acquire emerging technologies for Special Operations Forces. This project provides an investment strategy for USSOCOM to link technology opportunities with capability deficiencies, capability objectives, technology thrust areas, human endurance and sensory performance, and technology development objectives.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	41.591	28.739	29.246	-	29.246
Current President's Budget	40.517	28.739	29.246	-	29.246
Total Adjustments	-1.074	0.000	0.000	-	0.000
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-1.074	-			

### Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: S100: SO Technology Development Congressional Add: Unfunded Requirement

		=
	15.000	-
Congressional Add Subtotals for Project: S100	15.000	0.000
Congressional Add Totals for all Projects	15.000	0.000

FY 2012

FY 2013

DATE: April 2013

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

	nge Summary Explanation								
Exhibit R-2, RDT	&E Budget Item Justification: PB 2014 United States	s Special Operations Command	DATE: April 2013						
	Development, Test & Evaluation, Defense-Wide		nology Development						
<u>Change S</u> Funding:	Summary Explanation								
FY 2012:	Program decrease of \$1.074 million is due to a transfe	r of funds to the Small Business Innovative Resea	arch Program.						
FY 2013:	None.								
FY 2014:	None.								
Schedule:	None.								
Technical	: None.								

PE 1160401BB: *Special Operations Technology Development* United States Special Operations Command

Exhibit R-2A, RDT&E Project J	ustification	: PB 2014 L	Jnited State	s Special C	perations C	Command				<b>DATE</b> : Apr	ril 2013	
APPROPRIATION/BUDGET AC 0400: Research, Development, T BA 2: Applied Research		ation, Defen	se-Wide		PE 116040	NOMENCL 01BB: Spec y Developm	ial Operatio	ns	PROJECT S100: SO		Developme	nt
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
S100: SO Technology Development	295.615	40.517	28.739	29.246	-	29.246	29.750	30.289	30.834	31.389	Continuing	Continuing

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## A. Mission Description and Budget Item Justification

This project conducts studies and develops laboratory prototypes for applied research and advanced technology developments, and leverages other organizations' technology projects that may not otherwise be affordable within MFP-11. Small incremental co-investments with DoD, other government agencies, and commercial organizations allows USSOCOM to influence the schedule and direction of technology developments, emerging technologies, and capabilities for Special Operations Forces (SOF), with significant economies of investment. This USSOCOM investment strategy is used to link technology opportunities with USSOCOM capability deficiencies, capability objectives; technology thrust areas, and technology 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. Sub-projects within the Special Operations Technology Demonstration effort include:

- Special Operations Technology Development Sub-Project: This project conducts studies and develops laboratory prototypes for applied research and advanced technology developments, and leverages other organizations' technology projects that may not otherwise be affordable within MFP-11.
- Tagging, Tracking, and Locating (TTL) Sub-Project: TTL funds Applied Research projects identified in the USSOCOM Capabilities Based Assessments. TTL applies leading edge nanotechnology, biometric and biotechnology, and chemistry S&T which is directed towards the development of revolutionary tags, taggants, sensors, communications, and data processing.
- Classified Sub-Project (provided under separate cover).
- The following technology activity was added by Congress in FY 2012:
- Congressional add: Unfunded Requirement Increased development of multi-spectral optics which will address night vision capability gaps; assessed approaches to address unique power requirements for SOF mobility platforms; and initiated efforts to address biometric and non-lethal engagement needs. Classified unfunded requirement details are provided under separate cover.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Special Operations Technology Development	11.462	12.226	12.427
FY 2012 Accomplishments:			

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

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Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special C	perations Command		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 1160401BB: Special Operations Technology Development	PROJEC S100: Sc		gy Developm	nent
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2013	FY 2014
Pursued reduced signature technologies; developed advanced lightweight armording duration small form factor power supplies, and alternative fuel power system combat medical equipment and tactics. Continued pursuit of methods to reduce Developed technologies for improved Man-Machine Interface and functionality technologies that can be applied to increase human performance and endurance aid in detection of enemy intentions and movement. Continued further develop Digital Fusion, Short-Wave Infrared Radar Characterization, Power Systems are into programs of record.	ems. Continued to advance technologies for the operator load and provide advanced protect of Target Engagement Systems and investigate; pursue enhancements to technologies that the oment of Multi-Spectral Optics, Digital Night V	ate it can ision,			
FY 2013 Plans: Continue ongoing technology development sub-projects in areas such as, but r advanced lightweight armor and materials; multi-domain mobility platforms; lon alternative fuel power systems and eco-friendly energy devices. Advance tech tactics; sensor and processing improvements; improve interfaces and displays; of methods to reduce operator load and provide advanced protection. Develop of target engagement (escalation of force); pursue enhancements to technolog and movement; and continue development and exploration across the electrom maturity metrics, transfer successful projects into programs of record.	g duration small form factor power supplies; nologies for combat medical equipment and and secure communications. Continue purs technologies for improved and widened wind ies that can aid in detection of enemy intentic	uit Iow ns			
FY 2014 Plans: Continues ongoing technology development sub-projects in areas such as, but advanced lightweight armor and materials; long duration small form factor power Advances technologies for combat medical equipment and tactics; sensor and displays; and secure communications. Continues pursuit of methods to reduce Develops technologies for improved and widened window of target engagement technologies that can aid in detection of enemy intentions and movement; and electromagnetic spectrum. Based upon agreed technology maturity metrics, tra	er supplies; and alternative fuel power system processing improvements; improve interfaces operator load and provides advanced protect (escalation of force); pursues enhancement continues development and exploration acros	s and tion. s to ss the			
Title: Tagging, Tracking, and Locating Technologies (TTL)			12.059	14.371	14.634
FY 2012 Accomplishments: Specific objectives, priorities, technical approaches, and potential operational a exploit nanotechnology, biotechnology and chemistry for application to TTL sys DoD TTL Roadmap. Support the JCS TTL Quick Look Capability Assessment.	stems. Initiated projects linked to the USSOC				
FY 2013 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Special C	perations Command			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		PROJE			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	PE 1160401BB: Special Operation Technology Development	ns	S100: S	SO Technolo	gy Developm	ent
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Specific objectives, priorities, technical approaches, and potential operational a exploit nanotechnology, biotechnology and chemistry for application to TTL and to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/J8-approx Assessment (QL-CBA).	TTL-enabling systems. Initiate pro	ojects linke	d			
FY 2014 Plans: Specific objectives, priorities, technical approaches, and potential operational a exploit nanotechnology, biotechnology and chemistry for application to TTL and to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/J8-approx Assessment (QL-CBA).	d TTL-enabling systems. Initiates p	rojects link	ed			
Title: Classified				1.996	2.142	2.18
FY 2012 Accomplishments: Details provided under separate cover.						
FY 2013 Plans: Details provided under separate cover.						
FY 2014 Plans: Details provided under separate cover.						
	Accomplishments/Planned Prog	grams Subt	otals	25.517	28.739	29.24
		FY 2012	FY 201	13		
Congressional Add: Unfunded Requirement		15.000		-		
FY 2012 Accomplishments: Expanded and enhanced current Unclassified Teas evaluating, developing, prototyping and fabricating quick reaction prototypes classified area that will provide SOF the ability to quickly transition candidate to classification. Continued integration of Multi-Spectral optics, which addresses signature management improvements; developed power solutions for SOF more efforts to address non-lethal engagement needs.	s. Included in this effort, is a echnologies with multiple levels of night vision capability gaps and					
	Congressional Adds Subtotals	15.000	0.0	000		

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N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2014 United States Sp		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160401BB: Special Operations	S100: SO	Technology Development
BA 2: Applied Research	Technology Development		
C. Other Program Funding Summary (\$ in Millions)			
Remarks			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
N/A			