Exhibit R-2, RDT&E Budget Item Justification: PB 2016 United States Special Operations Command	Date: February 2015
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 2: *Applied Research*	**R-1 Program Element (Number/Name)** PE 1160401BB / *SOF Technology Development*

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	374.118	27.561	36.750	37.517	-	37.517	38.104	33.766	34.329	35.016	Continuing	Continuing
S100: *SOF Technology Development*	374.118	27.561	36.750	37.517	-	37.517	38.104	33.766	34.329	35.016	Continuing	Continuing

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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	28.307	39.750	37.789	-	37.789
Current President's Budget	27.561	36.750	37.517	-	37.517
Total Adjustments	-0.746	-3.000	-0.272	-	-0.272
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-3.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.746	-			
• SBIR/STTR Transfer	-	-			
• Other	-	-	-0.272	-	-0.272

Change Summary Explanation

Funding:

FY 2014: Decrease of $0.746 million is due to a reprogramming to higher command priorities.

FY 2015: This program element was reduced due to a Congressional Directed Reduction of $3.000 million to the Special Operations Forces Technology Development program.

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 United States Special Operations Command	Date: February 2015
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 2: *Applied Research*	**R-1 Program Element (Number/Name)** PE 1160401BB / *SOF Technology Development*

FY 2016: Decrease of $0.272 million is due to a Departmental economic assumption decrease.

Schedule: None.

Technical: None.

Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command			Date: February 2015
Appropriation/Budget Activity 0400 / 2	R-1 Program Element (Number/Name) PE 1160401BB / *SOF Technology Development*	Project (Number/Name) S100 / *SOF Technology Development*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
S100: *SOF Technology Development*	374.118	27.561	36.750	37.517	-	37.517	38.104	33.766	34.329	35.016	Continuing	Continuing

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 SOF Technology Demonstration effort include:

• SOF 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 Quick Look Capabilities Based Assessments (QL-CBA). 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).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: SOF Technology Development	12.282	19.624	18.780
FY 2014 Accomplishments: Continued ongoing technology development sub-projects in areas such as, but not limited to: reduced signature technologies; advanced lightweight armor and materials; advanced energetics for improved terminal ballistics, and advanced laser technologies. Advanced technologies for combat medical equipment and tactics; sensor and processing improvements; improve interfaces and displays; and secure communications. Continued pursuit of methods to reduce operator load and provides advanced protection. Developed technologies for improved and widened window of target engagement (escalation of force); pursued enhancements to technologies that can aid in detection of enemy intentions and movement; and continued development and exploration across the electromagnetic spectrum. Based upon agreed technology maturity metrics, transferred successful projects into programs of record.			
FY 2015 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command		Date: February 2015
Appropriation/Budget Activity 0400 / 2	**R-1 Program Element (Number/Name)** PE 1160401BB / *SOF Technology Development*	**Project (Number/Name)** S100 / *SOF Technology Development*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Continue ongoing technology development sub-projects in areas such as, but not limited to: reduce signature technologies; advance lightweight armor and materials; long duration small form factor power supplies; and alternative fuel power systems. Advance technologies for combat medical equipment and tactics; sensor and processing improvements; improve interfaces and displays; and secure communications. Continue pursuit of methods to reduce operator load and provide advanced protection. Develop technologies for improved and widened window of target engagement (escalation of force); pursue enhancements to technologies that can aid in detection of enemy intentions and movement; and continue development and exploration across the electromagnetic spectrum. Based upon agreed technology maturity metrics, transfer successful projects into programs of record. Continue the integration of critical technologies focused on providing the dismounted special operator leap-ahead capabilities via innovative collaborative processes. Focus is on delivering prototype system for soldier protection and augmentation and continue development of situational awareness and command/control systems. ***FY 2016 Plans:*** Continues ongoing technology development sub-projects in areas such as, but not limited to: long duration small form factor power supplies, alternative fuel power systems, reduced signature technologies, high data-rate throughput, and advanced lightweight armor and materials. Advances technologies for combat medical equipment and tactics, sensor and processing improvements, improves interfaces and displays, and secure communications. Continues pursuit of methods to reduce operator load and provides advanced protection. Develops technologies for improved and widened window of target engagement (escalation of force); pursues enhancements to technologies that can aid in detection of enemy intentions and movement, and continues development and exploration across the electromagnetic spectrum. Based upon agreed technology maturity metrics, transfers successful projects into programs of record. Continues the integration of critical technologies focused on providing the dismounted special operator leap-ahead capabilities via innovative collaborative processes. Focus is on delivering prototype system for soldier protection and augmentation and continues development of situational awareness and command/control systems.			
Title: Tagging, Tracking, and Locating Technologies (TTL) ***FY 2014 Accomplishments:*** Specific objectives, priorities, technical approaches, and potential operational applications are classified. Continued projects to exploit nanotechnology, biotechnology and chemistry for application to TTL and TTL-enabling systems. Initiated projects linked to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/J8-approved annual TTL QL-CBA. ***FY 2015 Plans:*** Specific objectives, priorities, technical approaches, and potential operational applications are classified. Continue projects to exploit nanotechnology, biotechnology and chemistry for application to TTL and TTL-enabling systems. Initiate projects linked to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/J8-approved annual TTL QL-CBA. ***FY 2016 Plans:***	14.165	14.896	14.950

Exhibit R-2A, RDT&E Project Justification: PB 2016 United States Special Operations Command		Date: February 2015
Appropriation/Budget Activity 0400 / 2	**R-1 Program Element (Number/Name)** PE 1160401BB / *SOF Technology Development*	**Project (Number/Name)** S100 / *SOF Technology Development*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Specific objectives, priorities, technical approaches, and potential operational applications are classified. Continues projects to exploit nanotechnology, biotechnology and chemistry for application to TTL and TTL-enabling systems. Initiates projects linked to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/J8-approved annual TTL QL-CBA.			
Title: Classified ***FY 2014 Accomplishments:*** Details provided under separate cover. ***FY 2015 Plans:*** Details provided under separate cover. ***FY 2016 Plans:*** Details provided under separate cover.	1.114	2.230	3.787
Accomplishments/Planned Programs Subtotals	27.561	36.750	37.517

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A