Exhibit R-2, RDT&E Budget Item Justification: PB 2015 United States Special Operations Command	Date: March 2014
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160479BB / *SOF Visual Augmentation, Lasers and Sensor Systems*

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	13.960	3.649	-	-	-	-	-	-	-	-	-	17.609
S395: *SOF Visual Augmentation, Lasers and Sensor Systems*	13.960	3.649	-	-	-	-	-	-	-	-	-	17.609

The FY 2015 OCO Request will be submitted at a later date.

Note

Beginning in FY 2014, this Program Element (PE) 1160479BB, SOF Visual Augmentation, Lasers and Sensor Systems has been consolidated into SOCOM PE 1160431BB, Warrior Systems.

A. Mission Description and Budget Item Justification

This program element provides for development, testing, and integration of specialized visual augmentation, laser and sensor systems equipment to meet the unique requirements of Special Operations Forces (SOF). 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 enemy threats to ensure mission success.

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	4.448	-	-	-	-
Current President's Budget	3.649	-	-	-	-
Total Adjustments	-0.799	-	-	-	-
• Congressional General Reductions	-0.357	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-0.005	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.302	-			
• SBIR/STTR Transfer	-0.135	-			

Change Summary Explanation

Funding:

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 United States Special Operations Command	Date: March 2014
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160479BB *I SOF Visual Augmentation, Lasers and Sensor Systems*

FY 2013: Decrease of -$0.799 million is due to sequestration reductions (-$0.357 million), congressional rescissions (-$0.005 million), a reprogramming to higher command priorities (-$0.302 million) and a transfer of funds to Small Business Innovation Research (-$0.135 million).

Sequestration Impacts: Delays the testing of the Hand-Held Laser Marker Designator by four months.

Schedule: None.

Technical: None.

Exhibit R-2A, RDT&E Project Justification: PB 2015 United States Special Operations Command												Date: March 2014
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160479BB / *SOF Visual Augmentation, Lasers and Sensor Systems*				Project (Number/Name) S395 / *SOF Visual Augmentation, Lasers and Sensor Systems*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
S395: *SOF Visual Augmentation, Lasers and Sensor Systems*	13.960	3.649	-	-	-	-	-	-	-	-	-	17.609
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project provides for development, testing and integration of specialized visual augmentation, laser and sensor system equipment to meet the unique requirements of Special Operations Forces(SOF). Specialized equipment will permit small, highly trained forces to conduct required operations within 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, terrorist, or highly sophisticated threat mandates that SOF systems remain technologically superior to enemy threats to ensure mission success.

Visual Augmentation Systems (VAS). This program develops, buys prototypes, and supports fielding of operator-borne combat optics for SOF. These devices provide the SOF operator the ability to maneuver, conduct fire control operations, and perform surveillance and reconnaissance. Research and Development efforts will develop, test, and evaluate prototype systems of the next generation Fusion system.

These Visual Augmentation Systems will provide an all-weather, low-light capability for SOF personnel by employing a Block approach. This Block approach produces a family of VAS systems which will utilize a variety of different sensor technologies to satisfy the capabilities defined by individual Block requirement. Some examples of the types of sensor technologies that these systems may utilize include: Image Intensification, Thermal, Short Wave Infrared and/or multi-spectral. To date the Target Engagement Portfolio has utilized several Block system approaches that have been fielded by the VAS program. These VAS programs will be a developmental effort to produce and field the next generation systems for SOF personnel. SOF Improvements include the following: (1) Ability to detect, classify and engage targets without the use of an infrared illuminator; (2) ability to determine wind speed; (3) ability to observe bullet trace.

VAS Weapons Accessories (VASWA). This program effort enhances all SOF weapons, both individual and crew served, by leveraging the latest technological advances in optional accessories (up to 30 different functions / capabilities) such as combat optics, aiming laser modules, visible lights, and close quarters battle sights. Miniature Day-Night Sight (MDNS) for crew-served weapons enhances all SOF Weapons by leveraging existing image intensification and thermal technology to improve combat effectiveness for all crew-served weapon systems. Development efforts include test and evaluation of the Advanced Target Pointer Illuminator Aiming Laser hardening to withstand the live-fire shock profiles for the Combat Assault Rifle, VAS and clandestine pointer. Leveraging extensive modeling and simulation efforts executed by National Labs. Develop clandestine operator-borne visual augmentation devices. These accessories greatly improve the combat effectiveness of the weapon systems and the survivability of the SOF operator.

Exhibit R-2A, RDT&E Project Justification: PB 2015 United States Special Operations Command		Date: March 2014
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160479BB / *SOF Visual Augmentation, Lasers and Sensor Systems*	**Project (Number/Name)** S395 / *SOF Visual Augmentation, Lasers and Sensor Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Title: VAS	3.649	-	-
FY 2013 Accomplishments: Continued the development of the next generation of operator-borne visual augmentation devices to improve situational awareness, sharing of data/images and target acquisition. The primary capability shortfalls addressed include the following under all lighting conditions: (1) Ability to detect, classify, and engage targets out to 800 m without the use of an infra-red illuminator; (2) Ability to determine wind speed at ranges out to 500 m or greater; and (3) Ability to observe bullet trace at ranges of 800 m or greater.			
Accomplishments/Planned Programs Subtotals	3.649	-	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• PROC/0607SVALSS: *Visual Augmentation, Lasers and Sensor Systems*	31.158	-	-	-	-	-	-	-	-	-	50.062

Remarks

D. Acquisition Strategy

VAS utilizes FY 2012 and FY 2013 RDT&E funds to develop prototypes for the SOF next generation operator-borne visual augmentation devices. These developmental efforts will leverage Science and Technology projects conducted to date and lead to the development of prototype systems for SOF to evaluate and an Indefinite Delivery Indefinite Quantity production contract in FY 2014 and FY 2015 to support SOF procurement of the production version of the next generation operator-borne visual augmentation devices.

E. Performance Metrics

N/A

Exhibit R-4, RDT&E Schedule Profile: PB 2015 United States Special Operations Command		Date: March 2014
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160479BB / *SOF Visual Augmentation, Lasers and Sensor Systems*	**Project (Number/Name)** S395 / *SOF Visual Augmentation, Lasers and Sensor Systems*

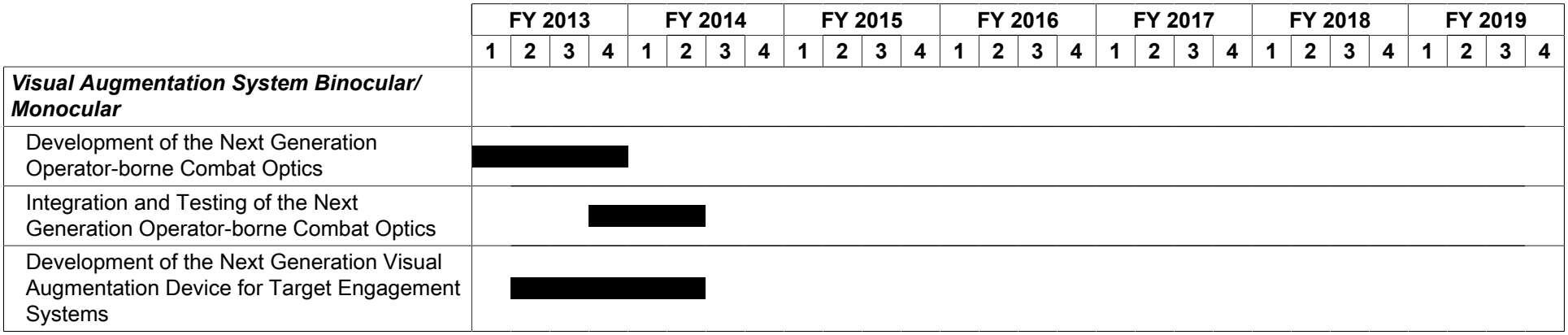

Exhibit R-4A, RDT&E Schedule Details: PB 2015 United States Special Operations Command		Date: March 2014
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160479BB / *SOF Visual Augmentation, Lasers and Sensor Systems*	**Project (Number/Name)** S395 / *SOF Visual Augmentation, Lasers and Sensor Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Visual Augmentation System Binocular/Monocular				
Development of the Next Generation Operator-borne Combat Optics	1	2013	4	2013
Integration and Testing of the Next Generation Operator-borne Combat Optics	4	2013	2	2014
Development of the Next Generation Visual Augmentation Device for Target Engagement Systems	2	2013	2	2014