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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				PE 1160479BB: <i>SOF Visual Augmentation, Lasers and Sensor Systems</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	3.000	4.448	-	4.448	-	-	-	-	Continuing	Continuing
S395: <i>SOF Visual Augmentation, Lasers and Sensor Systems</i>	-	3.000	4.448	-	4.448	-	-	-	-	Continuing	Continuing

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)	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	-	3.000	2.395	-	2.395
Current President's Budget	-	3.000	4.448	-	4.448
Total Adjustments	-	-	2.053	-	2.053
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	2.053	-	2.053

Change Summary Explanation

Funding:

FY 2011: None.

FY 2012: None.

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APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160479BB: SOF Visual Augmentation, Lasers and Sensor Systems	
FY 2013: Net increase of \$2.053 million is due to a reprogramming (\$2.000 million) to support Visual Augmentation Systems Binocular for continued development and integration of operator-borne visual augmentation devices to include engineering support and to purchase prototypes and an economic assumption increase of \$0.053 million. Schedule: None. Technical: None.		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 1160479BB: SOF Visual Augmentation, Lasers and Sensor Systems				PROJECT S395: SOF Visual Augmentation, Lasers and Sensor Systems			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S395: SOF Visual Augmentation, Lasers and Sensor Systems	-	3.000	4.448	-	4.448	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

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 fields operator-borne night vision devices 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 (SWIR) 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. Some of the capability shortfalls identified by the SOF community are the following: (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.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: VAS	-	3.000	4.448	-	4.448
FY 2012 Plans: Initiates the development of the next generation of operator-borne visual augmentation devices to improve situational awareness, sharing of data/images and target acquisition.					
FY 2013 Base Plans: Continue 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					

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B. Accomplishments/Planned Programs (\$ in Millions)							FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
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							-	3.000	4.448	-	4.448
C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• PROC1: <i>VISUAL AUGMENTATION, LASERS AND SENSOR SYSTEMS</i>	43.090	19.289	33.920	0.108	34.028	18.532	18.610	14.589	11.213	Continuing	Continuing
D. Acquisition Strategy											
VAS utilizes FY 2012 and FY 2013 RDT&E funds to develop prototypes for the SOF next generation soldier-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 to support SOF procurement of the production version of the next generation soldier-borne visual augmentation devices.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Special Operations										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide				PE 1160479BB: SOF Visual Augmentation, Lasers and Sensor Systems				S395: SOF Visual Augmentation, Lasers and Sensor Systems					
BA 7: Operational Systems Development													
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
VAS	C/FFP	Joint Special Operations Program Office:Crane, IN	1.015	2.800	Jun 2012	3.453	Jun 2013	-		3.453	Continuing	Continuing	
Prior Year Funding	C/CPFF	PM Sensors and Lasers:Ft Belvoir, VA	7.844	-		-		-		-	Continuing	Continuing	
Subtotal			8.859	2.800		3.453		-		3.453			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
VAS	C/CPFF	Joint Special Operations Program Office:Crane, IN	-	0.200	Jan 2012	0.995	Jan 2013	-		0.995	Continuing	Continuing	
Prior Year Funding	C/CPFF	HQ USSOCOM:Tampa, FL	2.390	-		-		-		-	Continuing	Continuing	
Subtotal			2.390	0.200		0.995		-		0.995			
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			11.249	3.000		4.448		-		4.448			
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command						DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			R-1 ITEM NOMENCLATURE PE 1160479BB: <i>SOF Visual Augmentation, Lasers and Sensor Systems</i>			PROJECT S395: <i>SOF Visual Augmentation, Lasers and Sensor Systems</i>

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Visual Augmentation System Binocular/ Monocular																												
Development of the Next Generation Soldier-borne Night Vision Devices																												
Integration and Testing of the Next Generation Soldier-borne Night Vision Devices																												
Development of the Next Generation Night Vision Devices for Target Engagement Systems																												
Integration and Testing of the Next Generation Night Vision Devices for Target Engagement Systems																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 1160479BB: <i>SOF Visual Augmentation, Lasers and Sensor Systems</i>	PROJECT S395: <i>SOF Visual Augmentation, Lasers and Sensor Systems</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Visual Augmentation System Binocular/Monocular</i>				
Development of the Next Generation Soldier-borne Night Vision Devices	1	2012	4	2013
Integration and Testing of the Next Generation Soldier-borne Night Vision Devices	3	2013	2	2014
Development of the Next Generation Night Vision Devices for Target Engagement Systems	2	2013	2	2014
Integration and Testing of the Next Generation Night Vision Devices for Target Engagement Systems	2	2014	2	2015

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