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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2015 United States Special Operations Command **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 1160478BB / <i>SOF Soldier Protection and Survival Systems</i>
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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	7.168	3.748	-	-	-	-	-	-	-	-	-	10.916
S385: <i>Soldier Protection and Survival Systems</i>	6.297	2.707	-	-	-	-	-	-	-	-	-	9.004
S385A: <i>Theater Body Armor and Associated Equipment</i>	0.871	1.041	-	-	-	-	-	-	-	-	-	1.912

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

**Note**

Beginning in FY 2014, this PE 1160478BB "Soldier Protection and Survival Systems" has been consolidated in SOCOM PE 1160431BB "Warrior Systems." The National Defense Authorization Act of 2010 directed a separate project (S385A) be created for ballistic protection efforts within the existing program element.

**A. Mission Description and Budget Item Justification**

This program element provides for development, testing, and integration of specialized equipment to meet the unique soldier protection and survival requirements of Special Operations Forces (SOF). Specialized equipment will improve survivability and mobility of SOF while conducting varied missions. These missions are generally conducted in harsh environments, for unspecified periods, and in locations requiring small unit autonomy.

**B. Program Change Summary (\$ in Millions)**

	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015 Base</u>	<u>FY 2015 OCO</u>	<u>FY 2015 Total</u>
Previous President's Budget	4.263	-	-	-	-
Current President's Budget	3.748	-	-	-	-
Total Adjustments	-0.515	-	-	-	-
• Congressional General Reductions	-0.193	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-0.005	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.182	-			
• SBIR/STTR Transfer	-0.135	-			

**Change Summary Explanation**

Funding:

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FY 2013: Decrease of \$0.515 million is due to sequestration (-\$0.193 million), congressional rescission (-\$0.005 million), a reprogramming to higher command priorities (-\$0.182 million) and a transfer of funds to Small Business Innovative Research (-\$0.135 million).		
Schedule: None.		
Technical: None.		

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**Exhibit R-2A, RDT&E Project Justification:** PB 2015 United States Special Operations Command **Date:** March 2014

<b>Appropriation/Budget Activity</b> 0400 / 7	<b>R-1 Program Element (Number/Name)</b> PE 1160478BB / <i>SOF Soldier Protection and Survival Systems</i>	<b>Project (Number/Name)</b> S385 / <i>Soldier Protection and Survival Systems</i>
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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
S385: <i>Soldier Protection and Survival Systems</i>	6.297	2.707	-	-	-	-	-	-	-	-	-	9.004
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 provided specialized equipment to meet the unique soldier protection and survival requirements of Special Operations Forces (SOF) to include: Army Rangers; Army Special Forces; Navy Sea, Air, Land (SEAL) teams; Navy Special Boat Units; Air Force Special Tactics Operators; and Marine Forces Special Operations Command. Specialized equipment improved survivability protection from the environment and load bearing equipment to improve the mobility of SOF while conducting varied missions. These missions are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy.
  
- SOF Personal Equipment Advanced Requirements (SPEAR) program provided for the research, development, testing and evaluation of a variety of individual and survival equipment to include: ballistic and environmental protective systems, combat uniforms, load carriage systems, communications headsets, and visual augmentation system (VAS) mounts. NOTE: In compliance with the National Defense Authorization Act of 2010, resources to support ballistic protection efforts were moved from SPEAR to a separate project (S385A) beginning in FY 2012.
  
- Radio Counter-Improvised Explosive Device (RC-IED) program provided SOF with the ability to counter current and future radio controlled improvised explosive devices threats used by terrorist networks. NOTE: The RC-IED efforts were conducted in the program element 1160408BB. The resources for these efforts were split beginning in FY 2013 to support the SOF theater force requirements.

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

	FY 2013	FY 2014	FY 2015
<b>Title:</b> SPEAR	1.789	-	-
<b>FY 2013 Accomplishments:</b> Provided continuation of profile refinement to support signature management, reactive fiber testing and material research for uniforms. Developed a solicitation for an advanced maritime communications system. Developed and test safety belt, lanyard efforts. In addition, tested nano-coatings for water repellency for individual equipment. Continued on-going prototype testing and research on load effects for survivability and marksmanship.			
<b>Title:</b> RC-IED	0.918	-	-
<b>FY 2013 Accomplishments:</b>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
Provided for National Assessment Group test support to the RC-IED program. Support system engineering, test and evaluation, test article acquisition, and market research of the RC-IED programs. Maintained range effectiveness and currency, ensuring the ability to accurately test against current and emerging threat systems.			
<b>Accomplishments/Planned Programs Subtotals</b>	2.707	-	-

**C. Other Program Funding Summary (\$ in Millions)**

<b>Line Item</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PROC/0607SPSS: <i>Soldier Protection and Survival Systems</i>	14.572	-	-	-	-	-	-	-	-	-	50.415

**Remarks**

**D. Acquisition Strategy**

• SPEAR primarily took advantage of modified commercial off- the- shelf or non-developmental items through open competition. The majority of SPEAR purchases are made with O&M.

• RC-IED - Resources supports the on-going development and effectiveness testing through the National Assessment Group of the SOF-Unique Next Generation Electronic Countermeasure Counter Radio-Controlled Improvised Explosive Device (RC-IED) Warfare system.

**E. Performance Metrics**

N/A

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2015 United States Special Operations Command		<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 0400 / 7	<b>R-1 Program Element (Number/Name)</b> PE 1160478BB / <i>SOF Soldier Protection and Survival Systems</i>	<b>Project (Number/Name)</b> S385 / <i>Soldier Protection and Survival Systems</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
<b><i>SPEAR Protective Combat Uniform (PCU)</i></b>																												
Reactive Fiber Testing																												
PCU P3I																												
Signature Management Profile Characterization																												
Materials Research																												
Modular Glove System																												
Market Research, Lightweight Power for Active Heating																												
<b><i>SPEAR MICH Comms</i></b>																												
Market Research/Interoperability Assessment																												
Maritime Comms Develop																												
<b><i>SPEAR LCS, Body Armor Vest (BAV and Backpacks)</i></b>																												
LCS/BAV/Backpack Material and Prototyping Testing																												
Safety Belt and Lanyard Test Methods																												
Testing Water Repellant Nanocoatings																												
Load Effects on Survivability																												
<b><i>RC-IED</i></b>																												
NAG RC-IED Test Support																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2015 United States Special Operations Command		<b>Date:</b> March 2014
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>SPEAR Protective Combat Uniform (PCU)</i></b>				
Reactive Fiber Testing	1	2013	4	2013
PCU P3I	1	2013	2	2014
Signature Management Profile Characterization	1	2013	2	2014
Materials Research	1	2013	4	2013
Modular Glove System	2	2013	2	2014
Market Research, Lightweight Power for Active Heating	1	2013	4	2013
<b><i>SPEAR MICH Comms</i></b>				
Market Research/Interoperability Assessment	1	2013	2	2014
Maritime Comms Develop	2	2013	4	2013
<b><i>SPEAR LCS, Body Armor Vest (BAV and Backpacks)</i></b>				
LCS/BAV/Backpack Material and Prototyping Testing	2	2013	2	2014
Safety Belt and Lanyard Test Methods	2	2013	4	2013
Testing Water Repellant Nanocoatings	2	2013	4	2013
Load Effects on Survivability	2	2013	4	2013
<b><i>RC-IED</i></b>				
NAG RC-IED Test Support	2	2013	3	2014

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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
<i>S385A: Theater Body Armor and Associated Equipment</i>	0.871	1.041	-	-	-	-	-	-	-	-	-	1.912
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 provided specialized equipment to meet the unique soldier protection and survival requirements of SOF, to include: Army Rangers; Army Special Forces; Navy Sea, Air, Land (SEAL) teams; Navy Special Boat Units; Air Force Special Tactics Operators; and Marine Forces Special Operations Command. Specialized ballistic equipment improved survivability and load bearing equipment impacting the mobility of SOF while conducting varied missions. These missions are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy.

This budget line enhanced the SOF Personal Equipment Advanced Requirements (SPEAR) program by supporting body armor plates, soft armor, helmets, and eye protection. It also provided for the research, development, and testing of a variety of body armor and personal protective equipment. Creation of a separate project for ballistic protection efforts was directed in the National Defense Authorization Act of 2010.

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

	FY 2013	FY 2014	FY 2015
<b>Title:</b> SPEAR	1.041	-	-
<b>FY 2013 Accomplishments:</b> Continued foreign ammunition testing and threat validation to assess armor effectiveness. Continued the helmet design and blast studies. Conducted body armor material research and testing along with the soldier load analysis and on behind armor effects. Conducted evaluation of transparent armor products which include ballistic and optical testing of transition lenses. Initiated work on anti-fogging technologies and continued development of low visibility eyewear to support future eye protection capabilities.			
<b>Accomplishments/Planned Programs Subtotals</b>	1.041	-	-

**C. Other Program Funding Summary (\$ in Millions)**

N/A

**Remarks**

**D. Acquisition Strategy**

SPEAR ballistic protection equipment took advantage of modified commercial-off-the-shelf or non-developmental items acquired through full and open competition. Currently these SPEAR purchases are made with O&M. As USSOCOM requirements are different from those of the Services, items leveraged from industry are often

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0400 / 7	PE 1160478BB / <i>SOF Soldier Protection and Survival Systems</i>	S385A / <i>Theater Body Armor and Associated Equipment</i>

on the cutting edge of technology and require substantial testing in the SOF environments. Some SPEAR ballistic systems have transitioned to the U.S. Army, other services and other government agencies.

**E. Performance Metrics**

N/A.

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	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
<b>Body Armor (BA)</b>																												
Market Survey (Pre-Solicitation)																												
Verification Testing (Pre-Validation)																												
Soldier Load Analysis Research and Perceptual Encapsulation																												
BA Materials/Testing																												
<b>SPEAR Eye Protection</b>																												
Market Survey																												
Ballistic & Optical Development of Transition Lenses																												
Anti-Fogging Development																												
Low Visibility Eyewear																												
<b>SPEAR Ballistic/Life Support</b>																												
Threat Validation																												
Foreign Ammunition Exploitation Testing																												
Non-Destructive Inspection Development & Testing																												
Helmet Design Research																												
Next Generation Helmet																												
Next Generation Lightweight Materials																												
Behind Armor Effects																												
Slow Impact Research																												
Material Development/Analysis																												
Blast Research																												

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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Body Armor (BA)</b>				
Market Survey (Pre-Solicitation)	3	2013	3	2013
Verification Testing (Pre-Validation)	1	2013	4	2013
Soldier Load Analysis Research and Perceptual Encapsulation	1	2013	4	2013
BA Materials/Testing	1	2013	4	2014
<b>SPEAR Eye Protection</b>				
Market Survey	1	2013	4	2013
Ballistic & Optical Development of Transition Lenses	1	2013	4	2013
Anti-Fogging Development	1	2013	4	2014
Low Visibility Eyewear	1	2013	4	2013
<b>SPEAR Ballistic/Life Support</b>				
Threat Validation	1	2013	4	2014
Foreign Ammunition Exploitation Testing	1	2013	4	2014
Non-Destructive Inspection Development & Testing	1	2013	4	2013
Helmet Design Research	1	2013	4	2013
Next Generation Helmet	1	2013	4	2014
Next Generation Lightweight Materials	1	2013	4	2014
Behind Armor Effects	1	2013	4	2014
Slow Impact Research	1	2013	4	2013
Material Development/Analysis	1	2013	4	2014
Blast Research	1	2013	4	2014