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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 United States Special Operations Command **Date:** February 2016

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 1160480BB / <i>SOF Tactical Vehicles</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	28.494	3.553	3.212	3.316	-	3.316	2.578	2.624	2.677	2.730	Continuing	Continuing
S910: <i>SOF Tactical Vehicles</i>	28.494	3.553	3.212	3.316	-	3.316	2.578	2.624	2.677	2.730	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element provides for the development and testing of a variety of incremental upgrades to Special Operations Forces (SOF) Vehicles and ancillary equipment. Current SOF tactical vehicles include: Lightweight Tactical All Terrain Vehicles (Light), Ground Mobility Vehicles (Medium), Non-Standard Commercial Vehicles (Commercial) for use in tactical missions, and Mine Resistant Ambush Protected Vehicles (Heavy). The SOF mission mandates that SOF vehicles remain technologically superior, operate in multiple environments and be able to meet any threat to provide a maximum degree of survivability.

B. Program Change Summary (\$ in Millions)

	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>
Previous President's Budget	3.672	3.212	3.341	-	3.341
Current President's Budget	3.553	3.212	3.316	-	3.316
Total Adjustments	-0.119	0.000	-0.025	-	-0.025
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.119	-			
• Other Adjustments	-	-	-0.025	-	-0.025

Change Summary Explanation

Funding:

FY 2015: Decrease of -\$0.119 million is due to a transfer of funds to Small Business Innovative Research/Small Business Technology Research Transfer programs.

FY 2016: None.

FY 2017: Decrease of -\$0.025 million is due to Departmental economic assumption decrease.

Schedule: None.

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Appropriation/Budget Activity	R-1 Program Element (Number/Name)
0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	PE 1160480BB / <i>SOF Tactical Vehicles</i>

Technical: None.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 United States Special Operations Command										Date: February 2016		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160480BB / <i>SOF Tactical Vehicles</i>				Project (Number/Name) S910 / <i>SOF Tactical Vehicles</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
S910: <i>SOF Tactical Vehicles</i>	28.494	3.553	3.212	3.316	-	3.316	2.578	2.624	2.677	2.730	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project develops, tests, and evaluates Special Operations vehicles and modifications. The Special Operations Forces (SOF) mission mandates that SOF vehicles remain technologically superior, operate in multiple environments and be able to meet any threat to provide a maximum degree of survivability. The current family of SOF tactical vehicles include: individual mobility vehicles, light mobility vehicles, medium mobility vehicles, non-standard commercial vehicles, and heavy mobility vehicles.

Family of Special Operations Vehicles (FSOV). This initiative provides for product improvements in the areas of suspension, power management, armor protection and unique vehicle design for all SOF tactical vehicle configurations. Designs must be standardized across all SOF Components that utilize a tactical vehicle. Improvements include, but are not limited to, new engineering change proposals (ECPs), field safety issues and theater endorsed requirements that make it essential to keep up with the increased weight and minimize the impact to mobility on the basic vehicle. FSOV develops, integrates and tests Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems in order to reduce space and power claim on vehicles and develop safety and engineering improvements that specifically address the enemy's changing tactics on the battlefield which typically focuses on survivability, force protection, or mobility. Specific efforts include but are not limited to: Ground Mobility Vehicle (GMV) Medium Version 1.1 effort which provides for a medium vehicle variant capable of meeting specific requirements of internal aircraft transport on the C/MH-47. The effort also provides for engineering costs related to performance, endurance, safety testing, integration and logistical analysis of product samples. Additionally, efforts include ECPs associated with the Non-Standard Commercial Vehicle (NSCV), the Lightweight Tactical All Terrain Vehicle (LTATV). These ECPs will address any identified safety, reliability, and performance concerns. Finally, funding will be used to support vehicle signature reduction efforts.

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: Family of Special Operations Vehicle	3.553	3.212	3.316	-	3.316
FY 2015 Accomplishments: Continued design/development and integration of ECPs that implement incremental upgrades and improve the design of the light and medium mobility vehicles to meet mission requirements. Funded Initial Operational Test and Evaluation (IOT&E) of the GMV 1.1 medium mobility vehicle which will be completed first quarter of FY16. Continued enhancements/modifications on the NSCV to improve reliability and survivability, with a focus on alternative rear axles and low visibility C4ISR antennas.					
FY 2016 Plans:					

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Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160480BB / <i>SOF Tactical Vehicles</i>	Project (Number/Name) S910 / <i>SOF Tactical Vehicles</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Continue integration of ECPs that implement incremental upgrades and improve the design of the light and ground mobility vehicles (medium). Continue enhancements/modifications on the NSCV to improve reliability and survivability and engineering design changes. <i>FY 2017 Base Plans:</i> Continues design/development and integration of ECPs that implement incremental upgrades and improve the design of the light tactical all-terrain vehicles (LTATV), Ground Mobility Vehicles (GMV - medium), and NSCV, to include a C4 effort to incorporate a Chairman of the Joint Chiefs of Staff directed Global Positioning System upgrade to M-Code. Continues enhancements/modifications on the NSCV to improve reliability and survivability.					
Accomplishments/Planned Programs Subtotals	3.553	3.212	3.316	-	3.316

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• PROC/0204TACVEH: <i>Tactical Vehicles</i>	63.134	73.520	67.849	3.200	71.049	62.956	39.303	17.923	17.092	Continuing	Continuing

Remarks

D. Acquisition Strategy
Vehicle improvements integrate emerging technology or commercial-off-the-shelf/non-developmental items. Materiel solutions will be procured via existing contracts or through a competitive procurement.

E. Performance Metrics
N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 United States Special Operations Command **Date:** February 2016

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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FSOV Ground Mobility Vehicles (GMV) 1.1 Medium and Non Standard Commercial Vehicle (NSCV) Engineering Change Proposal (ECP) Development	MIPR	Naval Air Systems Command : Patuxent River, MD	2.477	-		-		0.358	Nov 2016	-		0.358	0.000	2.835	-
FSOV GMV 1.1 Medium Enviro, simulation and modeling	WR	TARDEC : Warren, Michigan	0.090	0.050	Feb 2015	-		0.250	Nov 2016	-		0.250	Continuing	Continuing	-
FSOV GMV 1.1 Medium ECP Development & C4 Integration	C/FFP	General Dynamics - OTS : St. Petersburg, FL	6.558	1.305	Jul 2015	2.297	Jun 2016	0.250	Apr 2017	-		0.250	Continuing	Continuing	-
FSOV Lightweight Tactical All Terrain Vehicles (LTATV) ECP Development	C/FFP	Polaris Defense : Minneapolis, MN	0.381	-		0.312	Oct 2015	0.741	Mar 2017	-		0.741	Continuing	Continuing	-
FSOV Non-Standard Commercial Vehicles (NSCV) ECP Development/Signature Reduction	MIPR	TBD : TBD	0.807	-		0.603	Jun 2016	1.717	Mar 2017	-		1.717	Continuing	Continuing	-
Prior Year Funding	Various	Various : Various	0.383	-		-		-		-		-	0.000	0.383	-
Subtotal			10.696	1.355		3.212		3.316		-		3.316	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
FSOV GMV 1.1 Medium ECP Development & C4 Integration	C/FFP	General Dynamics - OTS : St. Petersburg, FL	-	0.952	Jun 2015	-		-		-		-	0.000	0.952	-
FSOV LTATV ECP Development	C/FFP	Polaris Defense : Minneapolis, MN	-	0.187	Aug 2015	-		-		-		-	0.000	0.187	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 United States Special Operations Command **Date:** February 2016

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160480BB / SOF Tactical Vehicles	Project (Number/Name) S910 / SOF Tactical Vehicles
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**Family of Special Operations Vehicles (FSOV)
Schedule**

Activity	FY15				FY16				FY17				FY18				FY19				FY20				FY21							
	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				
RDT&E																																
Product Development (GMV 1.1, LTATV, NSCV)	□				□				□				□				□				□				□							
Support (GMV 1.1, LTATV, NSCV)	□				□																											
Test & Evaluation (GMV 1.1)	□				□																											
	IOT&E																															
Procurement																																
GMV 1.1 (w/C4 A-Kit) Procure/Field	△				FRP DO 1				FRP DO 2				FRP DO 3				FRP DO 4				FRP DO 5				FRP DO 6				△			
	MS C																								IOC							
NSCV (w/C4 A-Kit) Procure/Field	◇				△				LCR DO				LCR DO				LCR DO				LCR DO				LCR DO							
					FOC				Contract Award																							
ITV Procure/Field/Sustain					LRIP DO				FRP DO 1				FRP DO 2				FRP DO 3				FRP DO 4											
MIRAP SOF Kit (MARSOC) Procure/Field	◇				◇																											
O&M																																
GMV 1.0 Sustainment																																
GMV 1.1 Sustainment																																
LTATV Procure/Field/Sustain	LCR DO				LCR DO				LCR DO				LCR DO				LCR DO				LCR DO				LCR DO							
NSCV Sustainment																																
MIRAP Enduring Requirement (HST/APS) (280 USASOC/WARCOM)	IROAN / Reset																															
MIRAP RSM/OIR/EA Sustainment (224 TPE sustained w/OCO)	Sustained by the Services; SOF-P sustained by SOCOM																															
	Divest as Operational Environment Dictates																															

◇ Production Award	□ RDT&E Award	△ Major Event	▭ Previously Reported	▭ RDT&E	▭ Procurement	▭ O&M
FOC - Full Operational Capability	FRP DO - Full Rate Production Delivery Order	IOT&E - Initial Operational Test & Evaluation	LCR DO - Life Cycle Replacement Delivery Order	MS C - Milestone C	NSCV - Non Standard Commercial Vehicle	
GMV - Ground Mobility Vehicle	LTATV - Light Tactical All Terrain Vehicle	IROAN - Inspect & Repair Only As Necessary	LRIP DO - Low Rate Initial Production Delivery Order	MIRAP - Mine Resistant Ambushed Protected	SOE - Special Operation Force Peculiar	
IOC - Initial Operational Capability						

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 United States Special Operations Command **Date:** February 2016

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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>FSOV GMV 1.1 Medium</i>				
FSOV GMV 1.1 Medium Enviro, Simulation and Modeling	1	2015	4	2021
<i>FSOV Lightweight Tactical All Terrain Vehicles (LTATV)</i>				
FSOV LTATV ECP Development	1	2015	4	2021
FSOV GMV 1.1 Medium ECP Development and Support	1	2015	4	2021
FSOV GMV 1.1 Medium Initial Operational Test & Evaluation	4	2015	4	2016
FSOV GMV 1.1 Medium Test Support	3	2015	3	2016
<i>FSOV Non-Standard Commercial Vehicles (NSCV)</i>				
FSOV NSCV ECP Development/Signature Reduction and Support	3	2015	4	2021