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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2020 United States Special Operations Command	<b>Date:</b> March 2019
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<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 1160480BB / <i>SOF Tactical Vehicles</i>
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COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	37.735	2.483	1.846	11.150	-	11.150	9.263	4.191	5.221	4.820	Continuing	Continuing
S910: <i>SOF Tactical Vehicles</i>	37.735	2.483	1.846	11.150	-	11.150	9.263	4.191	5.221	4.820	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 are categorized into Light, Medium, Heavy, and Commercial, and include the following: Light Tactical All-Terrain Vehicles (LTATV), Ground Mobility Vehicles (GMV 1.1), Mine Resistant Ambush Protected (MRAP) vehicles, and Non Standard Commercial Vehicles (NSCV). 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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
Previous President's Budget	2.578	1.846	3.551	-	3.551
Current President's Budget	2.483	1.846	11.150	-	11.150
Total Adjustments	-0.095	0.000	7.599	-	7.599
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.095	-			
• Other Adjustments	-	-	7.599	-	7.599

**Change Summary Explanation**

Funding:

FY 2018: Decrease of -\$0.095 million is due to the transfer of funds to Small Business Innovative Research/Small Business Technology Research Transfer programs.

FY 2019: None.

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<p>FY 2020: Increase of \$7.599 million is to incorporate technology insertion into the GMV 1.1 and NSCV programs. Specifically, funding increase in FY20 will allow for the integration and testing of designated Counter Unmanned Aerial Systems (CUAS)/Precision Strike systems on SOF tactical vehicle platforms; Electric GMV 1.1 design to include Engineering Change Proposals (ECPs) and testing; Purpose Built NSCV development from design into testing; and additional Technology Insertion Roadmap (TIR) efforts such as vehicle performance ECPs, armor upgrades, and lightweight vehicle/armor efforts.</p> <p>Schedule: None.</p> <p>Technical: None.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2020 United States Special Operations Command										Date: March 2019		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160480BB / SOF Tactical Vehicles				Project (Number/Name) S910 / SOF Tactical Vehicles			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
S910: SOF Tactical Vehicles	37.735	2.483	1.846	11.150	-	11.150	9.263	4.191	5.221	4.820	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

The Family of Special Operations Vehicles (FSOV) project develops, tests, and evaluates SOF Tactical Vehicles and associated modifications. FSOV engages in annual technology insertion efforts, to include rapid prototyping/fielding efforts targeted at ground vehicle capability enhancements across the mobility, survivability, payload, and durability spectrum. 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: light mobility vehicles, medium mobility vehicles, non-standard commercial vehicles, and heavy mobility vehicles.

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

	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
<b>Title:</b> FSOV	2.483	1.846	11.150	-	11.150
<b>Description:</b> Specific efforts include but are not limited to: GMV 1.1 effort which provides for a medium vehicle variant capable of meeting specific requirements of internal aircraft transport on the C/MH-47, engineering costs related to performance, endurance, safety testing, integration and logistical analysis of product samples, and ECPs associated with the NSCV, GMV 1.1, and the LTATV. These ECPs will address any identified safety, reliability, and performance concerns. Finally, funding will be used to support vehicle signature reduction and survivability improvement/lightweight efforts.					
<b>FY 2019 Plans:</b> Continue design/development and integration of ECPs that implement incremental upgrades and improve the design of the LTATV, GMV 1.1, and NSCV. Efforts will include next-generation cards based radio integration design and testing on the GMV 1.1 and NSCV. Complete safety, reliability, performance, and operational testing of multiple variants of NSCV from the new contract.					
<b>FY 2020 Base Plans:</b> Continues design/development and integration of ECPs that implement incremental upgrades and improve the design of the LTATV, GMV1.1, and NSCV. Continues efforts to design and test next generation hand-held & manpack radio (replaces card based radios) integration on the GMV1.1 and NSCV. Designs and tests an electric version of the GMV1.1 allowing a reduced audible signature on future missions with an additional goal of reducing the logistical footprint (less moving parts, no fuel and oils required, etc.). Develops a purpose built NSCV and move the design into testing. This effort will reduce future lifecycle costs and improve capability for SOF operators. Furthermore, FSOV will integrate and test designated Counter-UAS/Precision Strike systems on					

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
vehicle platforms to ensure performance of both systems with minimal adverse impacts. Additional technology insertion efforts will be addressed such as ECPs, armor upgrades, and lightweight vehicle/armor efforts.					
<b><i>FY 2019 to FY 2020 Increase/Decrease Statement:</i></b> Increase of \$9.304M is due to new technology insertion into the GMV 1.1 and NSCV programs. Specifically, funding increase in FY20 will allow for the integration and testing of designated Counter-UAS/Precision Strike systems onto SOF tactical vehicles; Hybrid/Electric GMV 1.1 design to include ECPs and testing; Purpose Built NSCV development from design into testing; and additional Technology Insertion Roadmap (TIR) efforts such as vehicle performance ECPs, armor upgrades, and lightweight vehicle/armor efforts.					
<b>Accomplishments/Planned Programs Subtotals</b>	2.483	1.846	11.150	-	11.150

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

<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020 Base</u>	<u>FY 2020 OCO</u>	<u>FY 2020 Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• PROC/0204TACVEH: <i>Tactical Vehicles</i>	110.271	145.499	77.832	2.990	80.822	42.496	33.566	34.159	34.845	Continuing	Continuing

**Remarks**

**D. Acquisition Strategy**

Apply SOF-Peculiar modifications to service common or Commercial Off The Shelf (COTS) vehicles whenever possible. Otherwise, incorporate purpose-built, Non-Developmental Item, or modified COTS vehicles if/when service solution is unavailable.

**E. Performance Metrics**

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 United States Special Operations Command												Date: March 2019			
Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 1160480BB / SOF Tactical Vehicles				Project (Number/Name) S910 / SOF Tactical Vehicles					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
FSOV GMV 1.1 Capability Enhancements / ECP Development	Various	Various : Various	12.285	0.833	Sep 2018	0.336	Feb 2019	2.000	Mar 2020	-		2.000	Continuing	Continuing	-
FSOV NSCV Capability Enhancements / ECP Development	Various	Various : Various	0.867	0.289	Jul 2018	0.335	Apr 2019	3.250	Jan 2020	-		3.250	Continuing	Continuing	-
FSOV LTATV Capability Enhancements / ECP Development	Various	Various : Various	0.920	-		-		0.500	Nov 2019	-		0.500	Continuing	Continuing	-
FSOV GMV 1.1 and NSCV Survivability Enhancement/ Improvement Efforts	Various	Various : Various	0.033	0.938	Nov 2017	0.200	Jun 2019	1.250	Nov 2019	-		1.250	Continuing	Continuing	-
FSOV GMV 1.1 Capability Enhancements / ECP Development Overseas Contingency Operations (OCO)	Various	Various : Various	-	-		0.725	Jun 2019	-		-		-	0.000	0.725	-
Prior Year Funding	Various	Various : Various	0.385	-		-		-		-		-	0.000	0.385	-
Subtotal			14.490	2.060		1.596		7.000		-		7.000	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Year Funding	Various	Various : Various	5.522	-		-		-		-		-	0.000	5.522	-
Subtotal			5.522	-		-		-		-		-	0.000	5.522	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
GMV 1.1 Test and Evaluation Validation	Various	Various : Various	0.339	-		-		2.000	Jun 2020	-		2.000	Continuing	Continuing	-

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Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 1160480BB / SOF Tactical Vehicles				Project (Number/Name) S910 / SOF Tactical Vehicles					
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Efforts (Automotive, C4I, Ballistics, Operator Events)															
NSCV Test and Evaluation Validation Efforts (Automotive, C4I, Ballistics, Operator Events)	Various	Various : Various	1.695	0.423	Mar 2018	0.250	Dec 2018	2.000	Jun 2020	-		2.000	Continuing	Continuing	-
LTATV Test and Evaluation Efforts	C/Various	Various : Various	-	-		-		0.150	Jun 2020	-		0.150	Continuing	Continuing	-
Prior Year Funding	Various	Various : Various	15.689	-		-		-		-		-	0.000	15.689	-
Subtotal			17.723	0.423		0.250		4.150		-		4.150	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			37.735	2.483		1.846		11.150		-		11.150	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 United States Special Operations Command

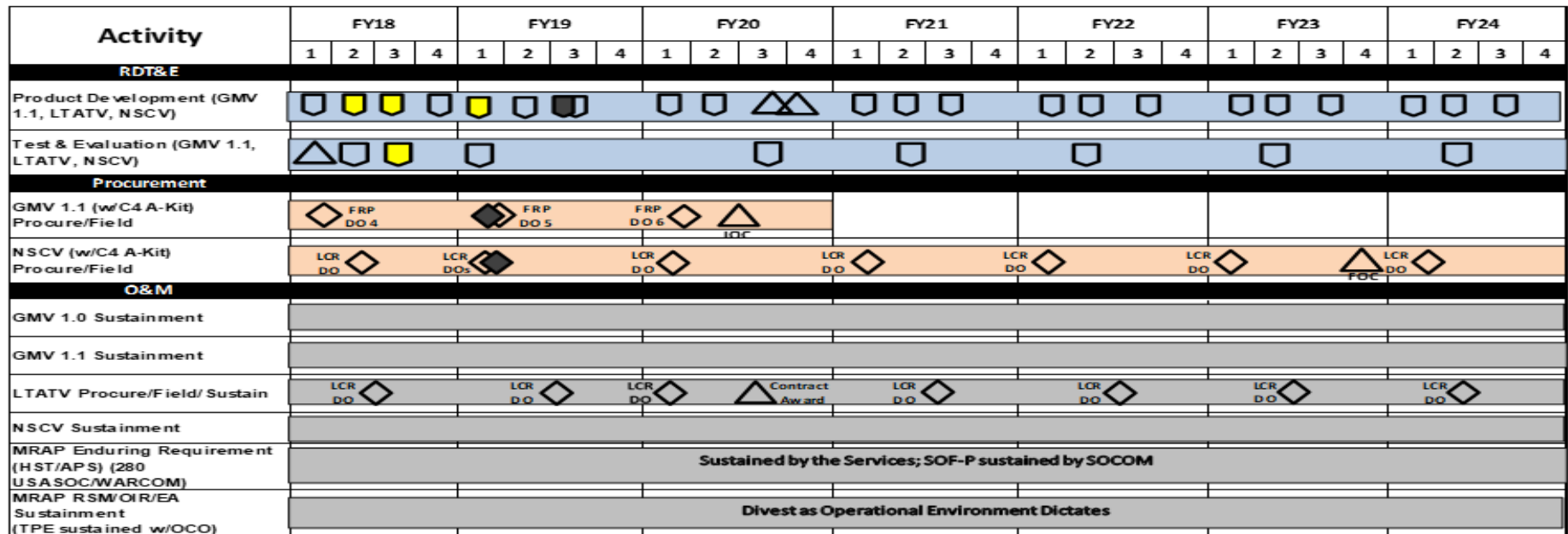
Date: March 2019

Appropriation/Budget Activity  
0400 / 7

R-1 Program Element (Number/Name)  
PE 1160480BB / SOF Tactical Vehicles

Project (Number/Name)  
S910 / SOF Tactical Vehicles

# FSOV Schedule



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

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 United States Special Operations Command			Date: March 2019
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160480BB / SOF Tactical Vehicles	Project (Number/Name) S910 / SOF Tactical Vehicles	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Family of Special Operations Vehicles (FSOV)				
Product Development (GMV 1.1, LTATV, NSCV)	1	2018	4	2024
Test & Evaluation (GMV 1.1, LTATV, NSCV)	1	2018	4	2024