Exhibit R-2, RDT&E Budget Item Justification: FY 2018 United States Special Operations Command

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0304210BB / Special Applications for Contingencies

Date: May 2017

Operational Systems Development

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	244.715	65.420	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	310.135
9999: Special Applications for Contingencies	244.715	65.420	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	310.135

A. Mission Description and Budget Item Justification

NOTE: Beginning in FY 2017, this Program Element has been consolidated into SOCOM Program Element 1160434BB, Unmanned ISR.

This program element is part of the Military Intelligence Program (MIP). Special Applications for Contingencies (SAFC) provides for efforts to develop and integrate Unmanned Aerial Systems (UAS) payloads to advance ISR capabilities to address dynamic and emergent operational needs of the SOF user. Efforts include improving imagery/signals intelligence and electronic warfare payloads, capitalizing on developing technologies to reduce size, weight and power while addressing processing and data management challenges. It provides a mechanism for SOF user combat evaluation of emerging sensor technologies. SAFC applies focused Research & Development (R&D) for relatively low cost solutions to provide short lead-time contingency planning requirements where focused R&D will allow for test and evaluation of leading edge solutions to emergent problem sets.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	65.060	0.000	0.000	-	0.000
Current President's Budget	65.420	0.000	0.000	-	0.000
Total Adjustments	0.360	0.000	0.000	-	0.000
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	0.360	-			
SBIR/STTR Transfer	-	-			

Change Summary Explanation

Funding:

FY 2016: Increase of \$0.360 million supported development of an Open System Auto-Pilot integration of virtual and physical user interfaces.

FY 2017: None.

PE 0304210BB: Special Applications for Contingencies United States Special Operations Command

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 United States Sp	pecial Operations Command	Date: May 2017
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0304210BB / Special Applications for Contingencies	
FY 2018: None.		
Schedule: None.		
Technical: None.		

PE 0304210BB: Special Applications for Contingencies United States Special Operations Command

Exhibit R-2A, RDT&E Project Justification: FY 2018 United States Special Operations Command											Date: May 2017			
Appropriation/Budget Activity 0400 / 7						PE 0304210BB / Special Applications for				Project (Number/Name) 9999 I Special Applications for Contingencies				
COST (\$ in Millions)	T (\$ in Millions) Prior Years FY 2018 FY 2018 FY 2018 OCO					FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost		
9999: Special Applications for Contingencies	244.715	65.420	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	310.135		
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-				

A. Mission Description and Budget Item Justification

This Military Intelligence Program (MIP) sub-project develops and deploys special capabilities to perform intelligence, surveillance, and reconnaissance (ISR) for deployed Special Operations Forces (SOF) using non-traditional means. It provides a mechanism for SOF user combat evaluation of emerging sensor technologies. This program also specifically addresses short lead-time contingency planning requirements where focused R&D will allow for test and evaluation of leading edge solutions to emergent problem sets.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2018	FY 2018	FY 2018
	FY 2016	FY 2017	Base	oco	Total
Title: SAFC	19.820	-	-	-	-
FY 2016 Accomplishments: • Airborne Electronic Warfare (AEW) system providing unique situational awareness on signal sets are of great interest to SOF: Validated and updated kit configuration, moving the hardware out of the fuselage and into the transit bay. New AEW kit incorporates waterproofed hardware, multiple signal sets, and can be flown aboard a Puma I or Puma II UAS air vehicle.					
• Open System Auto-Pilot: Successfully replaced proprietary Puma I auto-pilot with low cost, commercial, non-proprietary device; aircraft flew well with no observed anomalous flight characteristics. Began effort to replace Scan Eagle auto-pilot with the same commercial auto-pilot used in Puma I; expected to fly in FY17.					
• Wi-Fi Exploitation Capability: Flew down-sized space, weight and power (SWAP) LANShark© hardware in Puma I UAS. Demonstrated initial capabilities including the ability to turn the payload off to conserve battery power.					
Title: Classified Program	45.600	-	-	-	_
FY 2016 Accomplishments: Additional details can be provided under separate cover.					
Accomplishments/Planned Programs Subtotals	65.420	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 United States Special Operations Command												
Appropriation/Budget Activity 0400 / 7					rogram Eler 304210BB / S ngencies	•	•	9999 / Sp	Project (Number/Name) 9999 I Special Applications for Contingencies			
C. Other Program Funding Summa	ıry (\$ in Milli	ons)		·								
		-	FY 2018	FY 2018	FY 2018					Cost To		
Line Item	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost	
PROC/1108STU: Small Tactical Unmanned Aerial Systems	1.392	-	-	-	-	-	-	-	-	0.000	2.892	

52.228

6.103

5.343

10.940

11.163 Continuing Continuing

Remarks

D. Acquisition Strategy

• PROC/0201UMNISR:

Unmanned ISR

SAFC acquisition strategy is evolutionary and spiral-based for technology insertion and low volume procurement. As a non-standard DOD acquisition program, it allows sensor capability for maximum flexibility to respond to quickly emerging, short lead time, contingency based requirements.

38.933

80.820

13.295

E. Performance Metrics

N/A