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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Date: May 2017

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

Operational Systems Development

PE 1160434BB I Unmanned ISR

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	0.000	0.000	22.117	31.766	3.000	34.766	28.060	28.552	28.964	29.534	Continuing	Continuing
S855: Unmanned ISR	0.000	0.000	22.117	31.766	3.000	34.766	28.060	28.552	28.964	29.534	Continuing	Continuing

A. Mission Description and Budget Item Justification

NOTE: Beginning in FY 2017 Unmanned ISR represents the approved consolidation of Special Applications for Contingencies Program Element (PE) 0304210BB; MQ-1 Unmanned Aerial Vehicle (UAV), PE 0305219BB; MQ-8, PE 0305231BB; RQ-11, UAV PE 1105232BB; and RQ-7 UAV, PE 1105233BB.

This program element is part of the Military Intelligence Program (MIP). Develops and deploys special capabilities to perform Intelligence, Surveillance, and Reconnaissance (ISR) for deployed Special Operations Forces (SOF) using non-traditional means. USSOCOM has been designated as the DOD lead for planning, synchronizing, and as directed, executing global operations against terrorist networks and targets. USSOCOM requires the capability to find, fix, and finish timesensitive high-value fixed and fleeting targets at the unit and team level without placing personnel and units in harm's way. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This PE addresses the primary areas of Intelligence, Surveillance, Reconnaissance, and Targeting (ISR&T) capabilities for SOF.

Group 1, 2, 3 and 4, Unmanned Aerial Systems (UAS) developmental efforts are to identify, develop, integrate, and test SOF-unique mission kits, mission payloads, air vehicle enhancements, and modifications to ground control stations. SAFC develops and integrates UAS payloads to advance ISR capabilities that address dynamic and emergent operational needs of the SOF user. Efforts include improving imagery intelligence and electronic warfare payloads, capitalizing on developing technologies to reduce size, weight and power while addressing processing and data management challenges. This program provides a mechanism for SOF user combat evaluation of emerging sensor technologies.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	22.117	24.766	0.000	24.766
Current President's Budget	0.000	22.117	31.766	3.000	34.766
Total Adjustments	0.000	0.000	7.000	3.000	10.000
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
• Other	-	-	7.000	3.000	10.000

PE 1160434BB: Unmanned ISR

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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 1160434BB / Unmanned ISR	
Change Summary Explanation Funding:		
FY 2016: None.		
FY 2017: None.		
FY 2018: Increase of \$10.000 million is for SOF user combat evaluation), and an increase for Overseas Contingency Operations for S		sor testing and evaluation (\$3.000
Schedule: None.		
Technical: None.		

PE 1160434BB: *Unmanned ISR*United States Special Operations Command

Exhibit R-2A, RDT&E Project Justification: FY 2018 United States Special Operations Command												
Appropriation/Budget Activity 0400 / 7					, , , , , ,					lumber/Name) manned ISR		
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
S855: Unmanned ISR	0.000	0.000	22.117	31.766	3.000	34.766	28.060	28.552	28.964	29.534	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

NOTE: Beginning in FY 2017, Unmanned ISR represents the approved consolidation of Special Applications for Contingencies Program Element (PE) 0304210BB; MQ-1 Unmanned Aerial Vehicle (UAV), PE 0305219BB; MQ-8 PE 0305231BB; RQ-11 UAV PE 1105232BB; and RQ-7 UAV, PE 1105233BB.

This project is part of the Military Intelligence Program (MIP). Develops and deploys special capabilities to perform intelligence, surveillance, and reconnaissance (ISR) for deployed Special Operations Forces (SOF) using non-traditional means.

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 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.

Group 1 UAS. Group 1 UAS are small tactical systems, less than 20 pounds in weight. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits.

Group 2 UAS. Group 2 UAS are medium tactical systems, between 21 pounds and 55 pounds in weight. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits.

Group 3 UAS. Group 3 UAS are large tactical systems that weigh less than 1,320 pounds and fly less than flight level 180.

Group 4 UAS. Group 4 UAS are large systems that weigh greater than 1,320 pounds and fly higher than flight level 180. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: SAFC	-	17.875	26.499	3.000	29.499
FY 2017 Plans:					

PE 1160434BB: Unmanned ISR

Exhibit R-2A, RDT&E Project Justification: FY 2018 United States Special Op	perations Command			Date: May	2017		
	R-1 Program Element (Number/I PE 1160434BB <i>I Unmanned ISR</i>	Name)	Project (Number/Name) S855 I Unmanned ISR				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
Continue development and combat evaluation of selected sensor delivery platfo ISR capabilities for global contingencies including short-notice requirements. Cosensor technologies, persistent stare and quick reaction systems.							
FY 2018 Base Plans: Continues development and combat evaluation of selected sensor delivery platfolistic sensor technologies, persistent stare and quick reaction systems.							
FY 2018 OCO Plans: Develops various advanced payloads to support ISR payload requirements in desupport of counterterrorism execution order missions. Service payloads insufficiently SOF mission sets.							
Title: Group 1 UAS (Previously justified as Small Unmanned Aerial System)		-	0.124	0.355	-	0.35	
FY 2017 Plans: Continue to integrate, and test SOF-unique mission kits, mission payloads, and UAS and ground control station, to include but not limited to: improved capabilitipush-to-talk, communications, specialized tagging, tracking, and locating, and end work to miniaturize previously developed payloads.	es for geo-location, collection of						
FY 2018 Base Plans: Continues to integrate, and test SOF-unique mission kits, mission payloads, and tactical UAS and ground control station, to include but not limited to: improved collection of push-to-talk, communications, specialized tagging, tracking, and loc communications relay and work to miniaturize previously developed payloads.	apabilities for geo-location,						
Title: Group 2 UAS (Previously justified as Multi-mission Tactical Unmanned Ae	rial System)	-	4.118	4.912	-	4.91	
FY 2017 Plans: Continue to integrate, and test SOF-unique mission capabilities to the medium to limited to: signals intelligence gathering, full motion video, and geo-location.	actical UAS, to include but not						
FY 2018 Base Plans: Continues to integrate, and test SOF-unique mission capabilities to the medium limited to: signals intelligence gathering, full motion video, and geo-location.	tactical UAS, to include but not						
Accomplishment	s/Planned Programs Subtotals	-	22.117	31.766	3.000	34.76	

PE 1160434BB: *Unmanned ISR*United States Special Operations Command

Exhibit R-2A, RDT&E Project Justi	fication: FY	2018 United	States Spec	cial Operatio	ns Comman	d			Date: Ma	y 2017			
Appropriation/Budget Activity 0400 / 7				I	r ogram Ele n 60434BB / <i>U</i>	•	•		Project (Number/Name) S855 <i>I Unmanned ISR</i>				
C. Other Program Funding Summa	ry (\$ in Milli	ons)											
			FY 2018	FY 2018	FY 2018					Cost To			
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost		
PROC/0201UMNISR:	-	80.820	13.295	38.933	52.228	6.103	5.343	10.940	11.163	Continuing	Continuing		
Unmanned ISR													
• PROC/0809RQ11: <i>RQ-11</i>	21.298	-	-	-	-	-	-	-	-	0.000	21.984		
Unmanned Aerial Vehicle													
• PROC/1108MQ1: <i>MQ-1</i>	1.934	-	-	-	-	-	-	-	-	0.000	1.934		
Unmanned Aerial Vehicle													
PROC/1108STU: Small Tactical	1.392	-	-	-	-	-	-	-	-	0.000	3.014		
Unmanned Aerial System													

D. Acquisition Strategy

Remarks

SAFC acquisition strategy is evolutionary and spiral-based for technology insertion and low volume procurement. Utilizes existing competed contract vehicles for minor development and integration and modification of Government-Off-The-Shelf/Commercial-Off-The-Shelf equipment. It utilizes limited/full and open competition contracts for major developments.

The Group 1 UAS are evolutionary acquisition programs that deliver, integrate, and qualify SOF-unique mission kits, mission payloads, weapons, air vehicle enhancements, and ground control station upgrades. Contracting methods depend on the type of development effort. Competitive source selection will be conducted as much as possible. Proprietary considerations may direct some effort to the Original Equipment Manufacturer (OEM).

Group 2 UAS are evolutionary acquisition programs that deliver, integrate, and qualify SOF-unique mission kits, mission payloads, weapons, air vehicle enhancements, and ground control station upgrades. Contracting methods depend on the type of development effort. Competitive source selection will be conducted as much as possible. Proprietary considerations may direct some effort to the OEM.

E. Performance Metrics

N/A

PE 1160434BB: *Unmanned ISR*United States Special Operations Command

Exhibit R-3, RDT&E I	Proiect C	ost Analysis: FY 2	2018 Unite	ed States	Special (Operation	ns Comma	ınd				Date:	May 201	7			
Appropriation/Budge		_			` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `								Project (Number/Name) S855 / Unmanned ISR				
Product Developme	nt (\$ in M	illions)		FY 2016		FY 2017			2018 ise	FY 2018 OCO		FY 2018 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	Total Cost	Target Value of Contrac		
SAFC Platform/Payload Development and Integration	MIPR	Various : Various	-	-		8.911	Mar 2017	10.790	Mar 2018	3.000	Mar 2018	13.790	Continuing	Continuing	-		
Group 1 Unmanned Aerial System (UAS) Payloads	C/IDIQ	Various : Various	-	-		0.124	Mar 2017	0.355	Mar 2018	-		0.355	Continuing	Continuing	-		
Group 2 UAS Platform/ Payloads Development	C/TBD	Various : Various	-	-		2.059	Mar 2017	2.456	Mar 2018	-		2.456	Continuing	Continuing	-		
		Subtotal	-	-		11.094		13.601		3.000		16.601	-	-	-		
Support (\$ in Million	s)			FY	2016	FY 2	2017		2018 ise		2018 CO	FY 2018 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	Total Cost	Target Value of Contract		
SAFC Platform/Payload Integration	MIPR	Various : Various	-	-			Jan 2017	0.682		-		0.682	-	-	-		
Group 2 UAS Platform/ Payload Support	C/TBD	Various : Various	-	-		0.617	Mar 2017	0.736	Mar 2018	-		0.736	-	-	-		
		Subtotal	-	-		1.217		1.418		-		1.418	-	-	-		
Test and Evaluation	(\$ in Milli	ons)		FY	2016	FY :	2017		2018 ise		2018 CO	FY 2018 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	Total Cost	Target Value of Contrac		
SAFC Sensor Testing, Evaluation and Demonstration	MIPR	Various : Various	-	-		7.291	Mar 2017	12.978	Mar 2018	-		12.978	-	-	-		
								0.004	M== 2040			0.004			_		
Group 2 UAS Platform/ Payload Test and Evaluation	C/TBD	Various : Various	-	-		0.825	Mar 2017	0.984	Mar 2018	-		0.984	-	-	-		

PE 1160434BB: *Unmanned ISR*United States Special Operations Command

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R-1 Line #256

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 United States Special Operations Command Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)								
Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)								
0400 / 7	PE 1160434BB I Unmanned ISR	S855 / Unr	manned ISR					

Management Services (\$ in Millions)			FY 2016		FY 2	FY 2017		2018 Ise	FY 2018 OCO		FY 2018 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
SAFC Sensor Testing, Evaluation and Demonstration Management	MIPR	Various : Various	-	-		1.073	Mar 2017	2.049	Mar 2018	-		2.049	-	-	-
Group 2 UAS Platform/ Payload Management	C/TBD	Various : Various	-	-		0.617	Mar 2017	0.736	Mar 2018	-		0.736	-	-	-
		Subtotal	-	-		1.690		2.785		-		2.785	-	-	-
			<u> </u>					<u> </u>	· ·						Target

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	-	22.117	31.766	3.000	34.766	-	-	_

Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 United States Special Operations Command

Appropriation/Budget Activity

0400 / 7

R-1 Program Element (Number/Name)
PE 1160434BB / Unmanned ISR

PE 1160434BB / Unmanned ISR

SAFC Schedule

Activity	FY16	FY17	FY18	FY19	FY20	FY21	FY22
RDT&E Payload Development/Integration Sensor Testing, Evaluation and Demonstration							
Procurement Puma II UAS Scan Eagle UAS	3	0 2	2	3	3	3	3
O&M Flight Support/Program Management							

Planned FY18 RD&TE Period of Performance Range

Exhibit R-4, RDT&E Schedule Profile: FY 2018 United States Special Operations Command Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)			
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
0400 / 7	PE 1160434BB I Unmanned ISR	S855 I Unr	manned ISR

Group 1 Unmanned ISR Schedule

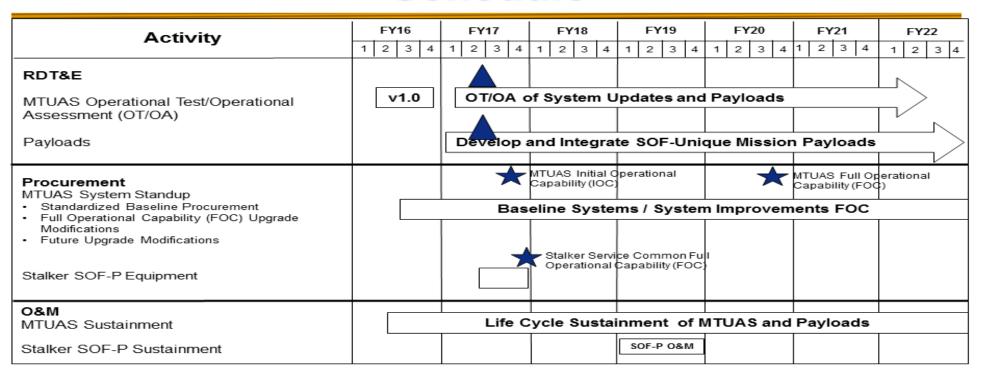
Activity	FY16 1 2 3 4	FY17 1 2 3 4	FY18 1 2 3 4	FY19 1 2 3 4	FY20 1 2 3 4	FY21 1 2 3 4	FY22 1 2 3 4
RDT&E – Group 1 identifies, integrates, and tests SOF – unique mission kits, mission payloads, air vehicle announcements and mods on the Group 1	Payload Integration						
UAS and related ground control stations.							
PROC – Puma II System Delivery	14	54					
PROC – Group 1 UAS	Various						
Silent Echo 10.6 Integration/Fielding	Various						
O&M - Sustainment	Life Cycle Sustainment of Group 1 UAS and Payloads						

Actual Period of Performance \triangle Planned POP date \triangle Planned or funded purchase \triangle Delivered purchase (POP) date passed



Exhibit R-4, RDT&E Schedule Profile: FY 2018 United States Special Operati	ions Command		Date: May 2017
• • • • • • • • • • • • • • • • • • • •	,	, ,	umber/Name) manned ISR

Group 2 Unmanned ISR Schedule



Previously Reported

Exhibit R-4A, RDT&E Schedule Details: FY 2018 United States Special Oper	Date : May 2017	
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
0400 / 7	PE 1160434BB I Unmanned ISR	S855 I Unmanned ISR

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
SAFC					
Platform/Payload Development and Integration	1	2016	4	2022	
Sensor Testing, Evaluation and Demonstration	1	2016	4	2022	
Group 1 Unmanned Aerial System (UAS)					
Payload Integration	2	2016	4	2022	
Group 2 UAS			,		
Operational Test/Operational Assessment (OT/OA)	2	2016	2	2022	
Payload Integration	1	2017	4	2022	