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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0101316F / <i>Worldwide Joint Strategic Communications</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	-	0.000	5.315	6.042	0.000	6.042	6.286	0.983	2.457	2.501	Continuing	Continuing
671820: <i>Strategic Automated Command and Control System</i>	-	0.000	5.315	6.042	0.000	6.042	6.286	0.983	2.457	2.501	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note
 FY15 funding received \$3.5M (not reflected above) through approved Above Threshold Reprogramming to initiate the SACCS program.

A. Mission Description and Budget Item Justification

Worldwide Joint Strategic Communication efforts include Nuclear Command, Control, and Communications (NC3) systems to include the Defense Injection Reception Emergency Action Message (EAM) C2 Terminals (DIRECT), Aircrew Alerting Communications Electromagnetic Pulse (AACE), the Strategic Emergency Action Transmission System (SEATS), the Defense Red Switch Network (DRSN), and the Strategic Automated Command and Control System (SACCS). Funding may be used to modernize these, and other, NC3 systems. Funding may also be used for research, testing, validation, certification, configuration management, and assessment of the Air Force NC3 Weapon System.

SACCS is a dedicated, high speed, multi-level secure, data transmission, processing, and display system. SACCS provides the primary non-survivable command and control capability for receiving and disseminating secure Emergency Action Messages (EAM), Force Direction Messages (FDM), Force Status Reporting (FSR), and exchanging information type messages from USSTRATCOM. SACCS provides messages for effective deployment of strategic bombers, reconnaissance aircraft, mobilization aircraft, tanker support aircraft, and the Intercontinental Ballistic Missile (ICBM) force.

SACCS has equipment that has reached its end of life and is no longer repairable due to diminished manufacturing sources and parts obsolescence. This jeopardizes Air Force Global Strike Command's (AFGSC) ability to meet mission requirements as required by Chairman Joint Chief of Staff Nuclear Technical Performance Criteria and Operational Standards (CJCSI 6811.01). In order to mitigate the risk of SACCS inability to operate once the current spares are completely diminished, and ensure the system remains secure against modern/future threats, the Air Force is developing a replacement system.

This program is in Budget Activity 07, Operational System Development, because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal years.

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B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	0.000	5.315	6.102	0.000	6.102
Current President's Budget	0.000	5.315	6.042	0.000	6.042
Total Adjustments	0.000	0.000	-0.060	0.000	-0.060
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	-0.060	0.000	-0.060

Change Summary Explanation

No Significant Program Changes

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: SACCS Replacement	0.000	5.315	6.042	0.000	6.042
Description: Design and develop replacement Strategic Automated Command Control System (SACCS). Replaces all SACCS network components (e.g. Subnet Communications Processor (SCP), Base Communication Processor (BCP), Port Expansion Processor (PEP), and end user terminals). New equipment resolves cybersecurity issues, improves Mean Time Between Failure rates, reliability, availability, improves user interface, decreases annual sustainment costs, addresses Diminishing Manufacturing Sources and Material Shortages and obsolescence challenges, and meets Chairman Joint Chiefs of Staff Nuclear Technical Performance Criteria and Operational Standards (CJCSI 6811.01).					
FY 2015 Accomplishments: N/A					
FY 2016 Plans: - Enter into Technology Maturation and Risk Reduction (TMRR) phase to complete design for a full system modernization - Prepare for System Design Review (SDR) - Develop robust cybersecurity controls					

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
- Fund Program Office support (A&AS, FFRDC) required for SACCS risk reduction and Engineering and Manufacturing Development (EMD) efforts <i>FY 2017 Base Plans:</i> - Manage TMRR phase through successful SDR, System Functional Review (SFR), and Preliminary Design Review (PDR) - Complete Milestone B documentation to support a Milestone B decision - Enter EMD and manage effort and prepare for Critical Design Review (CDR) in FY18 - Fund necessary A&AS and FFRDC to successfully manage the contract, complete Milestone B, and support EMD <i>FY 2017 OCO Plans:</i> N/A					
Accomplishments/Planned Programs Subtotals	0.000	5.315	6.042	0.000	6.042

D. 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>
• OPAF: BA03: Line Item #833140:: <i>Strategic Command and Control</i>	0.000	0.248	0.246	0.000	0.246	0.492	1.377	1.279	1.302	Continuing	Continuing
• OPAF: BA05: Line Item <i>#861900: Spares and Repair Parts</i>	0.610	1.047	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Remarks

E. Acquisition Strategy

Programmed funds will leverage technology development and architecture analysis conducted by AF Research Labs to execute a SACCS Replacement Program and conduct pre-Milestone B activities leading to a future Milestone B decision and Engineering and Manufacturing Development contract award.

F. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101316F / <i>Worldwide Joint Strategic Communications</i>	Project (Number/Name) 671820 / <i>Strategic Automated Command and Control System</i>
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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			
TMRR	C/CPFF	TBD : TBD	-	0.000		3.624	Jun 2016	3.181	Jun 2017	0.000		3.181	Continuing	Continuing	TBD
EMD	SS/T&M	309th Mnx Wing : Hill AFB, UT	-	0.000		0.000		1.000	Jun 2017	0.000		1.000	Continuing	Continuing	TBD
Subtotal			-	0.000		3.624		4.181		0.000		4.181	-	-	-

Remarks
 \$3.5M FY15 ATR approved in September 2015; funding received in November 2015. \$3.031M allocated for SACCS development. \$0.469M allocated for A/AS.
 EMD work will be conducted internally by the 309th Maintenance Wing at Hill AFB. Funds will be transferred as required.

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			
Subtotal			-	-		-		-		-		-	-	-	-

Test and Evaluation (\$ 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			
Subtotal			-	-		-		-		-		-	-	-	-

Management Services (\$ 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			
SACCS Development FFRDC Support	SS/FFP	Hill AFB : TBD	-	0.000		0.399	Dec 2015	0.444	Dec 2016	0.000		0.444	Continuing	Continuing	TBD
SACCS Development A/ AS Support	SS/FFP	TBD : TBD	-	0.000		0.494	Jun 2016	0.550	Dec 2016	0.000		0.550	Continuing	Continuing	TBD

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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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
SACCS Development OGC	TBD	Hill AFB : TBD	-	0.000		0.798	Jan 2016	0.867	Jan 2017	0.000		0.867	Continuing	Continuing	TBD
Subtotal			-	0.000		1.691		1.861		0.000		1.861	-	-	-
			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract				
Project Cost Totals			-	0.000	5.315	6.042	0.000	6.042	-	-	-				
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101316F / <i>Worldwide Joint Strategic Communications</i>	Project (Number/Name) 671820 / <i>Strategic Automated Command and Control System</i>

	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
SACCS Materiel Development Decision			■																									
SACCS Technology Maturation/Risk Reduction					■	■	■	■																				
SACCS PDR											■																	
SACCS Milestone B											■																	
SACCS Engineering and Manufacturing Development											■	■	■	■	■	■												
SACCS CDR													■															
SACCS Milestone C																							■					
SACCS Production and Deployment																									■	■	■	■

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101316F / <i>Worldwide Joint Strategic Communications</i>	Project (Number/Name) 671820 / <i>Strategic Automated Command and Control System</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SACCS Materiel Development Decision	3	2015	3	2015
SACCS Technology Maturation/Risk Reduction	1	2016	3	2017
SACCS PDR	3	2017	3	2017
SACCS Milestone B	3	2017	3	2017
SACCS Engineering and Manufacturing Development	3	2017	2	2019
SACCS CDR	2	2018	2	2018
SACCS Milestone C	2	2019	2	2019
SACCS Production and Deployment	2	2019	4	2020

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