

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force **Date:** March 2024

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>
--	---

COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	-	17.894	24.653	13.690	0.000	13.690	24.161	14.503	8.047	8.206	0.000	111.154
671820: <i>Strategic Automated Command and Control System</i>	-	17.894	24.653	13.690	0.000	13.690	24.161	14.503	8.047	8.206	0.000	111.154
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

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) 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 to include Minuteman III (MM III) and Sentinel.

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 Chiefs 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 (SACCS-R). SACCS-R is currently pursuing Technology Maturation and Risk Reduction (TMRR) efforts to transition from Time-Division Multiplexing (TDM) to Internet Protocol (IP) architecture, monitor and secure the new IP-based network, and provide requisite support to Sentinel fielding plans.

The FY2025 funding request was reduced by \$4.111 million to account for the availability of prior year execution balances.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver SACCS capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY 2023 0.321M was expended for civilian pay expenses in this program element, and in FY 2024 0.000M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 7, 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 year.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force	Date: March 2024
--	-------------------------

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>
--	---

B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	22.708	24.653	22.779	0.000	22.779
Current President's Budget	17.894	24.653	13.690	0.000	13.690
Total Adjustments	-4.814	0.000	-9.089	0.000	-9.089
• 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	-4.115	0.000			
• SBIR/STTR Transfer	-0.699	0.000			
• Other Adjustments	0.000	0.000	-9.089	0.000	-9.089

Change Summary Explanation

FY 2023: adjustments consist of reprogrammings of -\$2.1M to NC3 Integration and -\$2.015M for ABADS. Also, -\$0.699M for Small Business Innovative Research (SBIR)

FY 2025: Adjustment decrease of \$9.089M due to Air Force priorities, and to support program execution

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
Title: SACCS Replacement	17.894	24.653	13.690
Description: Design and develop replacement Strategic Automated Command Control System (SACCS-R). Transition architecture from Time Division Multiplexing to Internet Protocol (TDM-IP). Replace legacy components with supportable networking and information system hardware. The new system mitigates cybersecurity risks; improves Mean Time Between Failure rates; improves reliability and availability; improves user interface; decreases annual sustainment costs; addresses Diminishing Manufacturing Sources and Material Shortages and obsolescence challenges; supports a bridge connection to Sentinel through Sentinel NC3 Terrestrial Integration (SNTI); and supports meeting the Chairman Joint Chiefs of Staff Nuclear Technical Performance Criteria and Operational Standards (CJCSI 6811.01).			
FY 2024 Plans:			
1.2 Program			
-Continue TMRR efforts to facilitate 1.2 program to include a temporary modification to address near term obsolescence issues.			
-Continue transition of TDM circuits to IP circuits through the System Program Office (SPO)/Defense Information Systems Agency (DISA) process.			
-Continue prototype development for 1.2 Program.			
-Continue development of the SACCS Cybersecurity Operations Cells (SCOC) and Test Readiness Review (TRR).			

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force	Date: March 2024
--	-------------------------

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>
--	---

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<ul style="list-style-type: none"> -Continue to facilitate Cross Domain Solution (CDS). -Continue to update the SACCS core to facilitate 1.2 program. -Document and maintain the CM for all designs, drawings, and publications. -Purchase hardware in support of 1.2 program. -Initiate fielding of all aspects of the the SACCS Cybersecurity Operations Cells (SCOC) Cybersecurity Operations Cell. -Perform site modifications in support of 1.2 program. -Develop designs for the SACCS Cybersecurity Operations Cells (SCOC). -Support Defensive Cyber Operations (DCO) technical capabilities and user Standard Operation Procedures (SOPs). -Perform site modifications in support of 1.2 program. -Continue design of Black IP Transport (Storm Cloud) for implementation in SACCS. -Support development and implementation of documentation for Risk Management Framework (RMF) policies and procedures. -Continue transition of TDM circuits to IP circuits through DISA process for establishing new circuits. -Conduct 1.2 initial design Integration Testing. <p>SNTI Program</p> <ul style="list-style-type: none"> -Continue TMRR efforts to include a temporary modification to address near term obsolescence issues. -Support preliminary design for the modifications to the Sentinel Trainer. -Continue to update the SACCS core to facilitate SNTI program. -Purchase hardware in support of SNTI program. <p>2.0 Program</p> <ul style="list-style-type: none"> -Continue to develop requirement documents to support design and development efforts. -Continue to go through the competitive bid contract process to get contractor on contract for 2.0 Program work. -Develop documentation in support of Acquisition Decision Memorandum. -Evaluate needs of the SACCS Cybersecurity Operations Cell (SCOC) design to include all SACCS 2.0 equipment/sites. -Update Cyber documentation for additional Defensive Cyber Operations (DCO) and cyber needs based on 2.0 requirements. -Develop/implement two-factor authentication requirement for all SACCS end users. <p>FY 2025 Plans:</p> <p>1.2 Program</p> <ul style="list-style-type: none"> -Continue TMRR efforts to facilitate 1.2 program to include a temporary modification to address near term obsolescence issues. -Continue development of the SACCS Cybersecurity Operations Cells (SCOC) and Test Readiness Review (TRR). -Continue to facilitate CDS solution. -Document and maintain the CM for all designs, drawings, and publications. 			

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force		Date: March 2024		
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>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
<ul style="list-style-type: none"> -Continue to update the SACCS core to facilitate 1.2 program. -Complete 1.2 Integration Testing. -Begin fielding the SACCS Cybersecurity Operations Cells (SCOC). -Facilitate cybersecurity penetration testing of the SACCS Cybersecurity Operations Cells (SCOC). -Complete all site modifications for 1.2 Program gearing up for fielding. -Initiate fielding for the 1.2 Program. -Purchase production hardware in support of 1.2 Program. -Continue transition of TDM circuits to IP circuits through DISA process for establishing new circuits. -Finalize Defensive Cyber Operations (DCO) technical capabilities and user Standard Operation Procedures (SOPs). -Finalize and publish documentation for Risk Management Framework (RMF) policies and procedures. -Initial fielding preparation steps including Functional Configuration Audit, Physical Configuration Audit, and fielding decision. <p>SNTI Program</p> <ul style="list-style-type: none"> -Continue TMRR efforts to include a temporary modification to address near term obsolescence issues. -Support fielding of SACCS-R SNTI efforts as a bridge to Sentinel to facilitate 2.0 program solution. -Support preliminary design for the modifications to the Sentinel Trainer. -Continue to update the SACCS core to facilitate SNTI program. -Purchase hardware in support of SNTI program. -Complete Integration Testing. <p>2.0 Program</p> <ul style="list-style-type: none"> -Award Contract for 2.0 Program -Complete Middle Tier Acquisition (MTA) documentation and transition to the rapid prototyping -Order circuits through DISA storefront. -Complete last mile installation of new circuits from DISA point of presence to the SACCS terminal. -Continue design of updated Navy Modernized Hybrid Solution (NMHS) interface changes. -Continue design of Black IP Transport (Storm Cloud) for implementation in SACCS. -Start design of software to modernize core message processing. -Document and maintain the configuration management for all designs, drawing, and publications associated with SACCS-R. -Outline and design the 2.0 SACCS Cybersecurity Operations Cells (SCOC) to include all SACCS 2.0 equipment/sites. -Start development of 2.0 SACCS Cybersecurity Operations Cells (SCOC). -Update SACCS core to modernize message processing and SACCS Cybersecurity Operations Cells (SCOC). -Develop/implement two-factor authentication for all SACCS end users. 				

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Air Force	Date: March 2024
--	-------------------------

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>
--	---

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
-Design and develop full Defensive Cyber Operations (DCO) technical capabilities solution for 2.0 Program.			
<i>FY 2024 to FY 2025 Increase/Decrease Statement:</i> -Decrease funding scope for SNTI because Sentinel Program is funding the Sentinel Connectivity effort.			
Accomplishments/Planned Programs Subtotals	17.894	24.653	13.690

D. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• OPAF 03 PE 0101316F: <i>Strategic Command and Control (833140)</i>	31.993	25.096	26.859	-	26.859	27.912	28.317	28.925	29.497	0.000	198.599

Remarks

E. Acquisition Strategy
 Programmed funds continue to support TMRR efforts including a temporary modification to address near-term obsolescence issues (TDM-IP). The program is using a task order under the ICBM Ground Subsystems Support Contract and organic support from the 595 SCS and the 309 SWEG to conduct TMRR efforts.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 7				PE 0101316F / Worldwide Joint Strategic Communications				671820 / Strategic Automated Command and Control System							
Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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-R TMRR	SS/CPFF	Northrop Grumman : Layton, UT	-	12.732	Nov 2022	16.173	Nov 2023	8.271	Dec 2024	0.000		8.271	0.000	37.176	0.000
Subtotal			-	12.732		16.173		8.271		0.000		8.271	0.000	37.176	N/A
Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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-R Engineering Development	Various	Various : Various	-	0.670	Nov 2022	2.786	Nov 2023	0.660	Nov 2024	-		0.660	0.000	4.116	0.000
Subtotal			-	0.670		2.786		0.660		-		0.660	0.000	4.116	N/A
Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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-R Development Test & Evaluation	Various	Various : Various	-	0.645	Nov 2022	0.936	Nov 2023	1.341	Nov 2024	0.000		1.341	0.000	2.922	0.000
Subtotal			-	0.645		0.936		1.341		0.000		1.341	0.000	2.922	N/A
Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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-R Other Program Support Costs (PSC)	Various	Various : Various	-	2.273	Nov 2022	3.343	Nov 2023	1.686	Nov 2024	-		1.686	0.000	7.302	0.000
SACCS-R Integration Support	C/FFP	BAE Systems, Inc. : Hill AFB, UT	-	1.574	Nov 2022	1.415	Nov 2023	1.732	Nov 2024	-		1.732	0.000	4.721	-
Subtotal			-	3.847		4.758		3.418		-		3.418	0.000	12.023	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Air Force **Date:** March 2024

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>
--	---	--

Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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			

Remarks
Costs and services in support of program office management and administration processes such as: program oversight, resource justification, budget and programming, milestone and scheduling--PMA costs.

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	17.894	24.653	13.690	0.000	13.690	0.000	56.237	N/A

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force		Date: March 2024
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 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
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

Strategic Automated Command and Control System	
SACCS-R Technology Maturation/Risk Reduction	[Redacted]
SACCS-R TDM-IP 1.1	[Redacted]
SACCS-R PEP Refresh	[Redacted]
SACCS-R TDM-IP 1.2	[Redacted]
SNTI	[Redacted]
Acquisition Decision Memorandum (ADM)	[Redacted]
SACCS-R 2.0 Program	[Redacted]
2.0 Program PDR	[Redacted]
2.0 Program CDR	[Redacted]

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force		Date: March 2024
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 by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Strategic Automated Command and Control System</i>				
SACCS-R Technology Maturation/Risk Reduction	1	2023	4	2025
SACCS-R TDM-IP 1.1	1	2023	1	2023
SACCS-R PEP Refresh	1	2023	2	2023
SACCS-R TDM-IP 1.2	1	2023	4	2026
SNTI	1	2023	4	2026
Acquisition Decision Memorandum (ADM)	1	2024	4	2024
SACCS-R 2.0 Program	3	2025	4	2029
2.0 Program PDR	4	2026	4	2026
2.0 Program CDR	4	2027	4	2027

Note

Delay in GSSC 2.0 TO award for SACCS-R pushed 1.2 into FY26. Additionally, the 2.0 Program has been determined to follow a Middle Tier Acquisition (MTA) pathway which does not follow the typical MS B or EMD phases. These events have been removed from the expected schedule and replaced with corresponding MTA milestones and events.