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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 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604288F / <i>Survivable Airborne Operations Center (SAOC)</i>
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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	-	94.740	888.829	1,687.500	0.000	1,687.500	1,841.765	1,804.840	1,636.012	1,116.009	0.000	9,069.695
646507: <i>Survivable Airborne Operations Center (SAOC)</i>	-	94.740	888.829	1,687.500	0.000	1,687.500	1,841.765	1,804.840	1,636.012	1,116.009	0.000	9,069.695
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The Survivable Airborne Operations Center (SAOC) will replace the aging E-4B fleet, which faces capability gaps, diminishing manufacturing sources, increased maintenance costs, and parts obsolescence as it approaches the end of its serviceable life. SAOC will provide the President of the United States (POTUS), the Secretary of Defense (SECDEF), and the Joint Chiefs of Staff (JCS) a worldwide, survivable, and enduring node of the National Military Command System (NMCS) to fulfill national security requirements throughout all stages of conflict. As a command, control and communications center directing US forces, executing emergency war orders and coordinating the activities of civil authorities including national contingency plans, this capability ensures continuity of operations and continuity of government as required in a national emergency or after negation/destruction of ground command and control centers. SAOC will fulfill the requirements of the AF Nuclear Mission by providing Nuclear Command, Control and Communications (NC3) capabilities to enable the exercise of authority and direction by the President to command-and-control US military nuclear weapons operations.

Program funding supports all activities required to execute development of the SAOC Weapon System to include system development, integration of NC3 and other DoD/AF programs into the SAOC weapon system, test activities, and product support. Funds also support program office operations, management services (Federally Funded Research and Development Centers [FFRDC], Advisory and Assistance Services [A&AS], etc.), Program Management Support (PMS), security, facilities, prototyping, equipment, and to integrate Digital Engineering and other required program office capabilities.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY23, \$1.142M will be expended for civilian pay expenses in this program element, and in FY24, \$4.368M is forecasted for civilian pay expenses in this program element.

This effort is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

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B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	98.213	888.829	1,883.971	0.000	1,883.971
Current President's Budget	94.740	888.829	1,687.500	0.000	1,687.500
Total Adjustments	-3.473	0.000	-196.471	0.000	-196.471
• 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	-3.164	0.000			
• Other Adjustments	-0.309	0.000	-196.471	0.000	-196.471

Change Summary Explanation

FY 2023 adjustment for Small Business Innovative Research (SBIR)
 FY 2025 decrease of 196.471M was adjusted to better align funding execution.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
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Title: SAOC	94.740	888.829	1,687.500
Description: The SAOC weapon system will be comprised of a Commercial Derivative Aircraft (CDA), mission system, and ground support systems. The CDA will be hardened to protect against nuclear and electromagnetic effects and modified with an aerial refueling capability to enable sustained airborne operations. The mission system will integrate secure communications and planning capabilities on modern information technology (IT) infrastructure based on a Modular Open System Approach (MOSA). The ground systems include aircrew trainers, mission crew trainers, maintenance training devices, ground support equipment, test and sustainment system integration laboratories, and other ground systems to enable the operations, sustainment, and future modifications of the SAOC weapon system across the lifecycle.			
FY 2024 Plans:			
-Conclude Source Selection activities, complete Milestone requirements in anticipation of favorable Milestone B decision, and award the SAOC contract(s) to begin executing Engineering and Manufacturing Development (EMD) activities, including system engineering analysis, trade studies, system/subsystem requirement decomposition and functional analysis, and weapon system design.			
-Continue supporting development and modernization of required NC3, C3, Cryptographic, Open Architecture (OA)/Open Mission System (OMS), and other capabilities to ensure systems are sustainable and available to integrate into the SAOC Weapon System			

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
<p>-Continue to develop and implement the infrastructure, tools, and training necessary for the SAOC Integrated Digital Environment, which will enable the SAOC Program Office to execute and support the development and lifecycle sustainment of the SAOC Weapon System</p> <p>-Continue test and evaluation (T&E) planning and preparation activities, including manning, procurement of long-lead test equipment, training, and facility modifications</p> <p>-Continue program office manning growth-path required to support the SAOC system development</p> <p>FY 2025 Plans:</p> <p>-Continue executing Engineering and Manufacturing Development (EMD) activities to include system engineering analysis, trade studies, system/subsystem requirement decomposition and functional analysis, and weapon system design.</p> <p>-Continue supporting development, modernization, and delivery of required NC3, C3, Cryptographic, OA/OMS, and other capabilities to ensure systems are sustainable and available to integrate into the EMD design and overall SAOC Weapon System</p> <p>-Continue to develop and implement the infrastructure, tools, and training necessary for the SAOC Integrated Digital Environment and program execution, which will enable the SAOC Program Office to execute and support the development and lifecycle sustainment of the SAOC Weapon System</p> <p>-Continue T&E planning and preparation activities including manning, procurement of test equipment, training, and facility modifications; begin early functional testing at the component and LRU levels; begin development of the T&E SIL</p> <p>-Continue program office manning growth-path required to support the SAOC system development</p> <p>-Initiate Product Support Business Case Analysis (PS-BCA) to support Product Support strategies to achieve SAOC capabilities and affordability</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Significant investment increase from FY 2024 to FY 2025 is due to the continuation of EMD activities for a full fiscal year in FY25 compared to only 7 months of EMD execution in FY24.</p>			
Accomplishments/Planned Programs Subtotals	94.740	888.829	1,687.500

D. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

E. Acquisition Strategy
Based on the Acquisition Strategy approved by Under Secretary of Defense for Acquisition and Sustainment on 30 June 2022, SAOC will enter the acquisition pathway at Milestone B and award a competitive Development contract with Production and Interim Contractor Support (ICS) Options. This contract requires the Prime contractor

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Appropriation/Budget Activity	R-1 Program Element (Number/Name)
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to buy the required aircraft, bring each aircraft to a common configuration, make required modifications, develop and integrate the mission system into each aircraft, provide required ground support systems and conduct contract support operations for fielded systems until the Operations and Support Phase.

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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 / 4				PE 0604288F / Survivable Airborne Operations Center (SAOC)				646507 / Survivable Airborne Operations Center (SAOC)								
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	
Pre-Development Contract Activities/Studies	C/Various	TBD : TBD	-	17.362	Oct 2022	-		-		-		-	Continuing	Continuing	-	
Mission Systems/Subsystems Development	C/Various	Various : TBD	-	32.955	Jan 2023	29.600	Jan 2024	124.400	Jan 2025	-		124.400	Continuing	Continuing	-	
Prime - EMD	C/TBD	TBD : TBD	-	0.038		806.778	Feb 2024	1,503.075	Oct 2024	-		1,503.075	Continuing	Continuing	-	
Subtotal			-	50.355		836.378		1,627.475		-		1,627.475	Continuing	Continuing	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	
Direct Mission Support	C/Various	Various : Bedford, MA : TBD	-	15.789	Oct 2022	16.130	Oct 2023	12.841	Oct 2024	-		12.841	Continuing	Continuing	-	
Direct Cite Civilian Pay	TBD	Not specified. : Hanscom AFB, MA	-	1.142	Oct 2022	4.368	Oct 2023	4.586	Oct 2024	-		4.586	Continuing	Continuing	-	
Subtotal			-	16.931		20.498		17.427		-		17.427	Continuing	Continuing	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	
Test and Evaluation	C/CPIF	Not specified. : TBD	-	0.000	Oct 2022	4.000	Oct 2023	8.500	Oct 2024	-		8.500	Continuing	Continuing	-	
Subtotal			-	0.000		4.000		8.500		-		8.500	Continuing	Continuing	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	
FFRDC	SS/CPFF	Various : Bedford, MA : Hanscom AFB, MA	-	13.199	Oct 2022	8.500	Oct 2023	13.650	Oct 2024	-		13.650	Continuing	Continuing	-	

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

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604288F / <i>Survivable Airborne Operations Center (SAOC)</i>	Project (Number/Name) 646507 / <i>Survivable Airborne Operations Center (SAOC)</i>
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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			
A&AS	C/CPFF	Various : Bedford, MA : Hanscom AFB, MA	-	11.140	Jul 2023	15.193	Jul 2024	15.497	Oct 2024	-		15.497	Continuing	Continuing	-
PMA - Other	Various	Various : Bedford, MA : Hanscom AFB, MA	-	3.115	Oct 2022	4.260	Oct 2023	4.951	Oct 2024	-		4.951	Continuing	Continuing	-
Subtotal			-	27.454		27.953		34.098		-		34.098	Continuing	Continuing	N/A
Project Cost Totals			-	94.740		888.829		1,687.500		-		1,687.500	Continuing	Continuing	N/A

Remarks

Product Development:
 -FY24 decrease in Pre-Development Contract Activity/Studies and Mission Systems/Subsystems Development due to award and execution of EMD contract
 -FY24 increase in Prime Contract due to the award and execution of the SAOC EMD Contract
 -FY25 increase in Prime Contract due to the continued execution of the SAOC EMD Contract for a full year

Support:
 -FY24 decrease in Direct Mission Support is due to finalizing deployment of digital engineering infrastructure
 -FY24 increase in DCA continues office manning growth path required to support SAOC EMD execution
 -FY25 increase in Direct Mission Support is due to increasing costs for software licenses in support of digital engineering infrastructure

Test and Evaluation (T&E):
 -FY24 and FY25 increase in T&E is due to continuing T&E planning and preparation activities including manning, procurement of test equipment, training, and facility modifications; begin early functional testing at the component and LRU levels; begin development of the T&E SIL.

Management Services:
 -FY24 and FY25 increases in FFRDC and EPASS (A&AS) attributed to continuing program office ramp-up to support concurrent air vehicle, mission system, training systems, and ground support facility design, development and early test activities.

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force		Date: March 2024
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604288F / <i>Survivable Airborne Operations Center (SAOC)</i>	Project (Number/Name) 646507 / <i>Survivable Airborne Operations Center (SAOC)</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

<i>Survivable Airborne Operations Center Development</i>																												
Acquisition Strategy Refinement and RFP Development	■																											
Pre-EMD Contract Activities, Studies & Prototyping	■	■	■	■																								
Source Selection	■	■	■	■	■																							
Milestone B							■																					
EMD							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Air Force		Date: March 2024
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604288F / <i>Survivable Airborne Operations Center (SAOC)</i>	Project (Number/Name) 646507 / <i>Survivable Airborne Operations Center (SAOC)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Survivable Airborne Operations Center Development</i>				
Acquisition Strategy Refinement and RFP Development	1	2023	1	2023
Pre-EMD Contract Activities, Studies & Prototyping	1	2023	4	2023
Source Selection	1	2023	2	2024
Milestone B	2	2024	2	2024
EMD	2	2024	4	2029