

**UNCLASSIFIED**

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

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604445F / <i>Wide Area Surveillance</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	0.000	0.000	8.018	21.443	0.000	21.443	0.000	0.000	0.000	0.000	0.000	29.461
675899: <i>Wide Area Surveillance</i>	0.000	0.000	8.018	21.443	0.000	21.443	0.000	0.000	0.000	0.000	0.000	29.461

**Program MDAP/MAIS Code:** 519

**A. Mission Description and Budget Item Justification**

Wide Area Surveillance (WAS) consists of two advanced sensor systems, the Stateside Affordable Radar System (STARS) and Scorpion. Based on existing technological capabilities, WAS detects/tracks low, slow and other asymmetrical threats in the airspace and meets the user needs by sensing stressing airborne targets in complex environments with affordable sensors. The sensor outputs will be incorporated into the Battle Control Systems-Fixed (BCS-F) air picture and utilized as the North American Aerospace Defense Command/ Northern Command (NORAD/NORTHCOM) Command and Control (C2) air surveillance system of record.

Some aspects of the WAS program are classified. These will be provided on a need-to-know basis.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Wide Area Surveillance 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 \$0.000M was expended for civilian pay expenses in this program element, and in FY24 \$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.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Previous President's Budget	0.000	8.018	0.000	0.000	0.000
Current President's Budget	0.000	8.018	21.443	0.000	21.443
Total Adjustments	0.000	0.000	21.443	0.000	21.443
• 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	21.443	0.000	21.443

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3600 / 7					<b>R-1 Program Element (Number/Name)</b> PE 0604445F / <i>Wide Area Surveillance</i>				<b>Project (Number/Name)</b> 675899 / <i>Wide Area Surveillance</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
675899: <i>Wide Area Surveillance</i>	0.000	0.000	8.018	21.443	0.000	21.443	0.000	0.000	0.000	0.000	0.000	29.461
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

Wide Area Surveillance (WAS) consists of two complementary advanced sensor systems, the Stateside Affordable Radar System (STARS) and Scorpion. Based on existing technological capabilities, WAS detects/tracks low, slow and other asymmetrical threats in the airspace and meets the user needs by sensing stressing airborne targets in complex environments with affordable sensors. The sensor outputs are incorporated into the Battle Control Systems-Fixed (BCS-F) air picture and utilized as the North American Aerospace Defense Command/ Northern Command (NORAD/NORTHCOM) Command and Control (C2) air surveillance system of record. This effort is for a S1 Block 2 for the STARS system.

FY25 funds will support development, integration, and test to upgrade from the S1 Block 1 to the S1 Block 2 system. These funds will upgrade the S1 Block 2 Minimum Viable Product (MVP) to complete the required scope for a full S1 Block 2 system, which will enable production upgrades of the remaining four (4) S1 sites. Funding will also support new software development required to integrate with new Command and Control system of record, new hardware to align current service architectures, and test and evaluate new sensor capabilities for automatic combat identification that increase compatibility with existing systems. Lastly, funding will support testing to validate both S1 and S2 sensor coverage to inform the program's Full Operational Capability (FOC) decision and provide program management office support to include, labor, training, travel, supplies, and equipment to effectively manage the program.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> STARS (S1) Block 2 Modernization	0.000	8.018	21.443
<b>Description:</b> Development, Testing & Fielding			
<b>FY 2024 Plans:</b> Activities include, but are not limited to: - Continue S1 Block 2 MVP engineering and development. - Support S1 Block 2 MVP integration and testing. - Conduct engineering, development, and testing to upgrade MVP to full S1 Block 2 system.			
<b>FY 2025 Plans:</b> Activities include, but are not limited to: - Complete engineering, development, and testing to upgrade MVP to full S1 Block 2 system - Conduct S1 Block 2 and S2 testing to inform program FOC decision			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b>			

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0604445F / <i>Wide Area Surveillance</i>	<b>Project (Number/Name)</b> 675899 / <i>Wide Area Surveillance</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
Funding increased to develop and test S1 Block 2 MVP into a production-ready design.			
<b>Accomplishments/Planned Programs Subtotals</b>	0.000	8.018	21.443

**C. Other Program Funding Summary (\$ in Millions)**

<b>Line Item</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• OPAF 03 Line Item 834240: <i>Wide Area Surveillance</i>	33.181	11.594	13.945	-	13.945	18.972	17.175	18.104	17.221	0.000	130.192
• OPAF 05 861900: <i>Spares and repair parts</i>	0.000	5.456	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.456

**Remarks**

**D. Acquisition Strategy**

The Wide Area Surveillance (WAS) strategy is a single step acquisition approach for full capability to develop, produce, and field highly capable and sustainable advanced sensors in the National Capital Region. Science & technology contracts were let prior to the Engineering and Manufacturing Development phase for both subsystems. The Cost Plus Fixed-Fee (CPFF) contract for Stateside Affordable Radar System (STARS) was awarded to a single developer to design, build, integrate, and test the STARS system. A subsequent task order was awarded (July 2017) to include pre-operational site support. The CPFF contract for Scorpion was awarded (August 2017) to a single developer to complete the design, build, integration, and testing of the Scorpion system, and conduct pre-operational site support. The pre-operational portion of the contract for the Scorpion system transitioned to Interim Contract Support (ICS) in December 2018 and, STARS system transitioned to ICS in June 2019. The ICS portion of both the Scorpion system and the STARS system contracts transitioned to Contractor Logistics Support (CLS) in July 2021. This strategy includes a single delivery approach with 5 STARS and 84 Scorpion systems for a total of 89 sub-systems delivered to achieve FOC. RDT&E funds support a Block 2 version of the fielded STARS system and software and hardware development.

Air Force Program Executive Officer (PEO) DIGITAL (AFPEO DIGITAL) is the PEO for WAS. Air Force Life Cycle Management Center (AFLCMC) is the Contracting Authority for the WAS program and provides contracts, legal, and comptroller support. AFPEO DIGITAL is the program's Milestone Decision Authority (MDA).

**UNCLASSIFIED**

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

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0604445F / <i>Wide Area Surveillance</i>	<b>Project (Number/Name)</b> 675899 / <i>Wide Area Surveillance</i>
--	---	--

<b>Product Development (\$ in Millions)</b>				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			
Wide Area Surveillance (WAS) S1 Block 2 MVP NRE	SS/CPFF	Raytheon : El Segundo, CA	0.000	-		0.288	Jan 2024	-		-		-	0.000	0.288	0.000
Wide Area Surveillance (WAS) S1 Block 2 MVP Development	SS/CPFF	Raytheon : El Segundo, CA	0.000	-		5.619	Mar 2024	-		-		-	0.000	5.619	-
Wide Area Surveillance (WAS) S1 Full Block 2 Development	SS/CPFF	Raytheon : El Segundo, CA	0.000	-		2.061	Jun 2024	18.661	Oct 2024	-		18.661	0.000	20.722	-
<b>Subtotal</b>			0.000	-		7.968		18.661		-		18.661	0.000	26.629	N/A

<b>Test and Evaluation (\$ in Millions)</b>				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			
Test Support	Various	46 Test Squadron : Eglin AFB, FL	0.000	-		0.050	Jan 2024	1.074	Nov 2024	-		1.074	0.000	1.124	-
<b>Subtotal</b>			0.000	-		0.050		1.074		-		1.074	0.000	1.124	N/A

<b>Management Services (\$ in Millions)</b>				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			
Program Support Cost	Various	AFLCMC/HBDB : Hanscom AFB, MA	0.000	-		-		1.708	Jul 2025	-		1.708	0.000	1.708	-
<b>Subtotal</b>			0.000	-		-		1.708		-		1.708	0.000	1.708	N/A

	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract	
<b>Project Cost Totals</b>		0.000	-	8.018	21.443	-	21.443	0.000	29.461	N/A

**Remarks**

**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile: PB 2025 Air Force** **Date:** March 2024

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0604445F / <i>Wide Area Surveillance</i>	<b>Project (Number/Name)</b> 675899 / <i>Wide Area Surveillance</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

<b>Wide Area Surveillance</b>	
STARS Block 2 Development Effort	
STARS Block 2 MVP Development Test	
STARS Block 2 Development Test	

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Air Force		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0604445F / <i>Wide Area Surveillance</i>	<b>Project (Number/Name)</b> 675899 / <i>Wide Area Surveillance</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Wide Area Surveillance</i></b>				
STARS Block 2 Development Effort	1	2023	4	2025
STARS Block 2 MVP Development Test	2	2025	2	2025
STARS Block 2 Development Test	1	2026	1	2026