

**UNCLASSIFIED**

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

<b>Appropriation/Budget Activity</b> 3620F: <i>Research, Development, Test &amp; Evaluation, Space Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / <i>Joint Tactical Ground System</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	14.568	6.937	0.000	6.937	6.941	7.020	7.098	7.238	0.000	49.802
676760: <i>Joint Tactical Ground Station</i>	-	0.000	14.568	6.937	0.000	6.937	6.941	7.020	7.098	7.238	0.000	49.802
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

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

The Joint Tactical Ground Station (JTAGS) is a post-production, Acquisition Category (ACAT) III program. JTAGS provides missile warning message data for the Air and Missile Defense (AMD) architecture and improves performance for Integrated Air and Missile Defense Fire Control Systems/Composite Army Air and Missile Defense Brigades. JTAGS disseminates near real time warning, alerting, and cueing information on ballistic missile launches and other tactical events of interest throughout the theater using existing communication networks, providing critical support to Combatant Commanders in their Areas of Responsibility (AOR). JTAGS consist of two sheltered operation rooms, one equipment room, and three antennas. Four outside contiguous United States (OCONUS) deployed JTAGS units, which are deployed in three theaters (United States Pacific Command (PACOM), United States Central Command (CENTCOM), United States European Command (EUCOM)), constitute DoD's in-theater system providing space-based missile warning. The fifth contiguous United States (CONUS) system is used as an institutional trainer but is available as a deployable asset. JTAGS is designated as the in-theater element of the United States Strategic Command's Theater Event System (TES), supporting all Theater Missile Defense pillars, affording the shortest sensor-to-shooter connectivity. On 14 January 2016, the Army Acquisition Executive designated the JTAGS Pre-Planned Product Improvement (JTAGS P3I) program as a separate ACAT III modification program.

The JTAGS Program Element (PE) supports development and testing of the JTAGS Block II Preplanned Product Improvements (P3I) program based on the JTAGS Operational Requirements Document (ORD), additive Joint Requirements Oversight Council - Memorandum (JROC-M) requirements, and the formal JTAGS Block II Capability Development Document (CDD) thresholds. P3I upgraded JTAGS to a Block II configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, and improved warning tactical parameters and timeliness. The JTAGS Block II P3I program based on the 2009 JTAGS ORD is on contract as a two-phase development effort. JTAGS Block II Phase 2 activities seek to develop and test capabilities identified in 2009 JTAGS Operational Requirements Document (ORD). Joint Requirements Oversight Council (JROC) Memos 197-12, 113-13, and 042-19 and PL 111-383(Ike Skelton National Defense Authorization Act for FY 2011) support the requirements to develop and field JTAGS Block II capabilities as soon as possible.

JTAGS Block II P3I Phase 1 is complete. The final developmental efforts of JTAGS Block II P3I Phase 2 to achieve 2009 ORD requirements completed in FY 2022. Follow-on Test and Evaluation (FOTE) completed in FY 2022 with Materiel Release efforts to be conducted in FY 2023. JTAGS Block II Phase 2 Spiral 3 fielding is planned for FY 2024 and FY 2025. The JTAGS Block II CDD addresses evolving User-driven needs such as emerging threats and interface efforts that were not known at the time the JTAGS ORD was validated. Developmental efforts to achieve JTAGS Block II CDD threshold requirements continue through FY28.

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Air Force	<b>Date:</b> March 2024
--	-------------------------

<b>Appropriation/Budget Activity</b> 3620F: <i>Research, Development, Test &amp; Evaluation, Space Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / <i>Joint Tactical Ground System</i>
---	--

FY 2025 requests funds to continue development for cyber compliance, defense against emerging threats, Assured Positioning, Navigation and Timing (APNT) and M-code GPS compliance, addresses obsolescence mitigation with Commercial Off The Shelf (COTS) hardware/software upgrades, and research and develop prototypes for various system modifications for Red Hat Linux, the next generation Joint Tactical Terminals.

The Joint Tactical Ground Station (JTAGS) transitioned to US Space Force (USSF) in FY 2024.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver the JTAGS system capability. The sue of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392SF and 1206398SF.

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	14.568	6.925	0.000	6.925
Current President's Budget	0.000	14.568	6.937	0.000	6.937
Total Adjustments	0.000	0.000	0.012	0.000	0.012
• 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	0.012	0.000	0.012

<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Development and Test of Block II CDD requirements	0.000	14.276	6.850
<b>Description:</b> JTAGS Block II program continues to focus on development/integration of evolving cyber hardening advances, defense against emerging threats, and JTAGS Capability Development Document (CDD) threshold requirements. JROC-Memos 197-12, 113-13, and 042-19 and PL 111-383 (Ike Skelton National Defense Authorization Act for FY2011) require fielding of these capabilities as soon as possible.			
<b>FY 2024 Plans:</b> Continue development, testing and fielding of software and hardware (Spiral 3) upgrades to comply with the Joint Staff (J-6) granted Net-Ready Key Performance Parameter (NR KPP) certification in support of the Joint Tactical Ground Station (JTAGS)			

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Air Force		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 3620F: <i>Research, Development, Test &amp; Evaluation, Space Force I BA 7: Operational Systems Development</i>		<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / <i>Joint Tactical Ground System</i>		
<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>Pre-Planned Product Improvement (P3I) Block II Capability Development Document (CDD) requirements to deter near-peer competitors' threats.</p> <p><b>FY 2025 Plans:</b> Complete development, testing and fielding of software and hardware (Spiral 3) upgrades to comply with the Joint Staff (J-6) granted Net-Ready Key Performance Parameter (NR KPP) certification in support of the Joint Tactical Ground Station (JTAGS) Pre-Planned Product Improvement (P3I) Block II Capability Development Document (CDD) requirements to deter near-peer competitors' threats. Complete development and deployment of cyber security tools to be achieve compliance with Risk Management Framework (RMF) requirements. Continue to address obsolescence mitigation with Commercial Off the Shelf (COTS) hardware/software upgrades, and research and develop prototypes for various system modifications for Red Hat Linux, the next generation Joint Tactical Terminals and capability integration across missile warning architecture.</p> <p>Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, experimentation, prototyping, and activities that may leverage commercial and international opportunities.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Reduction due to Block II Phase II Spiral III development nearing completion.</p>				
<p><b>Title:</b> JTAGS Test and Evaluation Support</p> <p><b>Description:</b> Test and evaluation support for the JTAGS program.</p> <p><b>FY 2024 Plans:</b> Funding provides for Technical Manual Delta Validation and Verification Certification of the JTAGS Block II system.</p> <p><b>FY 2025 Plans:</b> Funding provides for Technical Manual Delta Validation and Verification Certification of the JTAGS Block II system.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> FY 2025 increased due to continuing test and evaluation activities and inflation.</p>		0.000	0.292	0.087
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	14.568	6.937

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Air Force	<b>Date:</b> March 2024
--	-------------------------

<b>Appropriation/Budget Activity</b> 3620F: <i>Research, Development, Test &amp; Evaluation, Space Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / <i>Joint Tactical Ground System</i>
---	--

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• SPSF 01 JTAGS0: <i>Joint Tactical Ground Station</i>	0.349	0.576	-	-	-	-	-	-	-	0.000	0.925

**Remarks**

The Joint Tactical Ground Station (JTAGS) transitioned to US Space Force in FY2024.

**E. Acquisition Strategy**

This program element develops critical software intensive improvements, while continuing to make maximum use of Non-Developmental Items (NDI)/Commercial Off-The-Shelf (COTS) components and Government Furnished Equipment (GFE). After design and integration, the system will be subject to thorough developmental and validation/verification testing to verify performance, operational effectiveness and suitability. The JTAGS Block II Pre-planned Product Improvement (P3I) program was initiated based on a 2009 JTAGS Operational Requirements Document (ORD) and upgrades JTAGS to a Block II configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, improving warning tactical parameters and timeliness. The JTAGS Block II P3I contract was a full and open competition, but only the incumbent JTAGS contractor submitted a proposal, resulting in a sole-source contract on 26 Aug 2012. The contract's development options are Cost Plus Incentive Fee; its production options are Firm Fixed Price, and its Sustainment options are Cost Plus Fixed Fee. The JTAGS Block II contract's period of performance is from 1 October 2012 through 30 September 2021 with a contract extension to March 2022. As threats continue to evolve and change as well as new satellite sensors become available, the JTAGS Users in conjunction with the Army Capabilities Manager have developed a JTAGS Block II Capability Development Document (CDD), requiring JTAGS to address new/changing threats that were not addressed in the 2009 JTAGS ORD. The acquisition of the continued JTAGS Block II efforts based on the JTAGS Block II CDD was performed under a sole source follow-on contract awarded May 2022 to the current JTAGS contractor.

**UNCLASSIFIED**

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

<b>Appropriation/Budget Activity</b> 3620F / 7	<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / Joint Tactical Ground System	<b>Project (Number/Name)</b> 676760 / Joint Tactical Ground Station
---	---	--

<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			
Development and Test Block II CDD requirements	SS/ Various	Northrup-Grumman : Colorado springs, CO	-	0.000	Nov 2023	7.829	Nov 2023	2.067	Jan 2025	-		2.067	Continuing	Continuing	-
System Engineering Support	C/CPFF	Intrepid : Huntsville, AL	-	0.000	Jan 2023	1.949	Jan 2024	0.000	Jan 2025	-		0.000	0.000	1.949	-
<b>Subtotal</b>			-	0.000		9.778		2.067		-		2.067	Continuing	Continuing	N/A

**Remarks**  
Continues development of the JTAGS Block II capabilities based on the JTAGS Block II Capability Development Document (CDD)

<b>Support (\$ 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			
System Engineering Technical Assistance	C/CPFF	Intrepid : Huntsville, AL	-	0.000	Jan 2023	2.253	Jan 2024	2.312	Jan 2025	-		2.312	0.000	4.565	-
<b>Subtotal</b>			-	0.000		2.253		2.312		-		2.312	0.000	4.565	N/A

**Remarks**  
Provides technical assistance in implementing the JTAGS Block II CDD

<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			
JTAGS Test Support (17TES/JITC)	Allot	Various (17TES/JITC) : : Various	-	0.000	Oct 2022	0.426	Oct 2023	0.087	Oct 2024	-		0.087	Continuing	Continuing	-
<b>Subtotal</b>			-	0.000		0.426		0.087		-		0.087	Continuing	Continuing	N/A

**Remarks**  
Supports testing of JTAGS Block II development efforts based on the JTAGS Block II CDD.

**UNCLASSIFIED**

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

<b>Appropriation/Budget Activity</b> 3620F / 7	<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / Joint Tactical Ground System	<b>Project (Number/Name)</b> 676760 / Joint Tactical Ground Station
---	---	--

<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			
Government Program Management	Allot	Various(AMC,AMCOM,CDDC): : Redstone Arsenal, AL	-	0.000	Oct 2022	2.111	Oct 2023	2.471	Oct 2024	-		2.471	Continuing	Continuing	-
<b>Subtotal</b>			-	0.000		2.111		2.471		-		2.471	Continuing	Continuing	N/A

**Remarks**  
Provides Other Government Agency (OGA) support to the JTAGS acquisition program

	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	14.568	6.937	-	6.937	Continuing	Continuing	N/A

**Remarks**  
The Joint Tactical Ground Station (JTAGS) transitioned to USSF in FY 2024.



**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> 3620F / 7	<b>R-1 Program Element (Number/Name)</b> PE 1208053SF / <i>Joint Tactical Ground System</i>	<b>Project (Number/Name)</b> 676760 / <i>Joint Tactical Ground Station</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Joint Tactical Ground Station (JTAGS) - P3I</i></b>				
JTAGS Block II Engineering Service Follow on Contract	1	2024	2	2025
Continued Block II CDD Emerging Threats and future sensors	1	2024	1	2025
JTAGS Block II Phase 2 Spiral 3 fielding	1	2024	4	2024
Limited User Test of Block II CDD Emerging Threat Capabilities	1	2025	1	2025
JTAGS Block II Engineering Services Contract Extension	2	2025	4	2028

**Note**  
The Joint Tactical Ground Station (JTAGS) transitioned to US Space Force in FY 2024.