Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 7: Operational

PE 0208053A I Joint Tactical Ground System

Systems Development

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	28.015	12.649	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	40.664
635: Joint Tact Grd Station- P3I(MIP)	-	28.015	12.649	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	40.664

Note

Army

Funding moved from PE 0208053A to PE 1208053A as directed by OSD to track Space Programs

A. Mission Description and Budget Item Justification

The Joint Tactical Ground Station (JTAGS) is a post-production, ACAT III program and is designated as a DoD Space 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 Block I system is a transportable information processing system, receiving and processing in-theater, direct down-linked data from Defense Support Program (DSP) and other Infrared (IR) satellites. 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). Four OCONUS deployed JTAGS units constitute DoD's only in-theater system providing space-based missile warning. The fifth CONUS system is being 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.

The JTAGS Program Element (PE) supports development and test to meet JTAGS ORD thresholds using improved sensors and algorithms as Pre-Planned Product Improvements (P3I). The P3I Improvements will upgrade JTAGS to a new Block II configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, and will improve warning tactical parameters and timeliness. JTAGS Block II is on contract for a two-Phase development effort. JTAGS Block II Phase 2 activities are broken into three spirals to expedite getting critical capabilities fielded sooner. JTAGS P3I Block II Phase 1 and Block II Phase 2 Spiral 1 efforts are included under PE 0208053A. JROC-Memos 197-12 and 113-13 supports the need to develop and field JTAGS Block II capabilities as soon as possible

PE 0208053A: Joint Tactical Ground System

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)
PE 0208053A / Joint Tactical Ground System

2040: Research, Development, Test & Evaluation, Army I BA 7: Operational

Systems Development

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	20.515	12.649	10.130	<u>-</u>	10.130
Current President's Budget	28.015	12.649	0.000	-	0.000
Total Adjustments	7.500	0.000	-10.130	-	-10.130
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
Congressional Directed Transfers	-	-			
Reprogrammings	7.500	-			
SBIR/STTR Transfer	-	-			
 Adjustments to Budget Years 	0.000	0.000	-10.130	-	-10.130

Change Summary Explanation

FY18 funding was realigned from PE 0208053A to PE 1208053A to provide greater transparency of OSD Space Programs.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army									Date: May	2017		
Appropriation/Budget Activity 2040 / 7					` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `				lumber/Name) Tact Grd Station-P3I(MIP)			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
635: Joint Tact Grd Station- P3I(MIP)	-	28.015	12.649	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	40.664
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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JTAGS Block I system is a transportable information processing system, receiving and processing in-theater, direct down-linked data from Defense Support Program (DSP) and other Infrared (IR) satellites. 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). Four OCONUS deployed JTAGS units constitute DoD's only in-theater system providing space-based missile warning. The fifth CONUS system is being 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.

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: JTAGS Test and Evaluation Support	1.413	1.778	-
Description: Funding is provided for the following effort			
FY 2016 Accomplishments: JTAGS P3I Block II Phase 1 Testing			
FY 2017 Plans: JTAGS Block 2 Phase 2 Testing			
Title: JTAGS P3I Block II Phase 1 Development	15.502	-	-

PE 0208053A: Joint Tactical Ground System

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Appropriation/Budget Activity 2040 / 7	_	oject (Number/Name) 5 I Joint Tact Grd Station-P3I(MIP)			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
Description: Funding is provided for the completion of development in meeting Information Assurance compliance requirements.	de-sheltering systems, upgrading hardware/softwa	re and			
FY 2016 Accomplishments: Completion of JTAGS Block II Phase 1 Development					
Title: JTAGS P3I Block II Phase 2 Development		11.100	10.871	-	
Description: JTAGS Block II Phase 2 activities include a three spiral a sensor data and Net Centric capabilities, per JROC Memos 197-12 and					
FY 2016 Accomplishments: Begin Development of JTAGS Block II Phase 2 Spiral 1 (stereo SBIRS)					
FY 2017 Plans: Development of Phase 2 Spiral 1 (Stereo SBIRS GEO starer)/Spiral 2 of					
	Accomplishments/Planned Programs Su	btotals	28.015	12.649	-

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
 SSN BZ8420000: SSN 	9.325	4.417	-	-	-	5.434	-	-	-	Continuing	Continuing
BZ8401, Joint Tactical											
Ground Station (JTAGS)											
 OSDPE 1208053A: Joint 	-	-	10.228	-	10.228	11.594	10.851	11.131	12.843	Continuing	Continuing
Tact Grd Station - P3I (MIP)											

Remarks

Army

D. Acquisition Strategy

Under this program element, critical improvements will be developed making maximum use of Non-Developmental Items (NDI)/Commercial Off-The-Shelf (COTS) components. After design and integration, the system will be subject to thorough developmental and validation/verification testing to verify performance, operational effectiveness and suitability. P3I Improvements will upgrade JTAGS to a new Block II configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, improving warning tactical parameters and timeliness. JTAGS Block II is on contract for a two-Phase development effort. JTAGS Block II Phase 2, is further divided into three spirals to facilitate delivering critical capabilities to the fielded units faster. JTAGS Block II Phase 1 and JTAGS Block II Phase 2 Spiral 1 efforts will be completed under PE 0208053A. JROC-Memos 197-12 and 113-13 direct fielding of JTAGS Block II capabilities as soon as possible.

PE 0208053A: Joint Tactical Ground System

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Date: May 2017

Exhibit R-2A, RDT&E Project Justification: FY 2018 Arm	Date : May 2017	
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0208053A I Joint Tactical Ground System	Project (Number/Name) 635 I Joint Tact Grd Station-P3I(MIP)
E. Performance Metrics N/A		

PE 0208053A: *Joint Tactical Ground System* Army