Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

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 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	29.187	7.104	10.209	-	10.209	20.662	11.671	8.755	10.680	Continuing	Continuing
635: Joint Tact Grd Station- P3I(MIP)	-	29.187	7.104	10.209	-	10.209	20.662	11.671	8.755	10.680	Continuing	Continuing

[#] The FY 2015 OCO Request will be submitted at a later date.

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. 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). Presently, JTAGS Block 1 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 then 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 a deployable asset. JTAGS is designated as the in-theater element of the United States Strategic Command's Theater Event System (TES). JTAGS supports all Theater Missile Defense pillars and by being located in-theater, affords the shortest sensor to shooter connectivity. P3I Improvements will upgrade JTAGS to a new Block 2 configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, and will improve warning tactical parameters and timeliness. JTAGS Block 2 P3I is on contract for a two-Phase development effort. Phase 1 deshelters five systems, adds SBIRS Geosynchronous (GEO) scanner capability (FY 2012-15) and updates hardware/software/communication systems. Phase 2 activities include stereo SBIRS GEO starer sensor data and Net Centric capabilities (FY 2016-19). JROC-Memos 197-

PE 0208053A: Joint Tactical Ground System

Army

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

Date: March 2014

Appropriation/Budget Activity

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

Systems Development

R-1 Program Element (Number/Name)

PE 0208053A I Joint Tactical Ground System

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	31.738	7.108	20.762	-	20.762
Current President's Budget	29.187	7.104	10.209	-	10.209
Total Adjustments	-2.551	-0.004	-10.553	-	-10.553
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	_			
 Adjustments to Budget Years 	-2.551	-0.004	-10.553	-	-10.553

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2015 A	rmy							Date: Marc	ch 2014	
Appropriation/Budget Activity 2040 / 7					_	am Elemen 53A / Joint 7	•	•	Project (N 635 / Joint		,	IIP)
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
635: Joint Tact Grd Station- P3I(MIP)	-	29.187	7.104	10.209	-	10.209	20.662	11.671	8.755	10.680	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

[#] The FY 2015 OCO Request will be submitted at a later date.

Note

Army

Not applicable for this item.

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. 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). Presently, JTAGS Block 1 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 then 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 a deployable asset. JTAGS is designated as the in-theater element of the United States Strategic Command's Theater Event System (TES). JTAGS supports all Theater Missile Defense pillars and by being located in-theater, affords the shortest sensor to shooter connectivity. P3I Improvements will upgrade JTAGS to a new Block 2 configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, and will improve warning tactical parameters and timeliness. JTAGS Block 2 P3I is on contract for a two-Phase development effort. Phase 1 deshelters five systems, adds SBIRS Geosynchronous (GEO) scanner capability (FY 2012-15) and updates hardware/software/communication systems. Phase 2 activities include stereo SBIRS GEO starer sensor data and Net Centric capabilities (FY 2016-19). JROC-Memos 197-

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Execute Block 1 Upgrades	0.200	0.200	-
Articles:	-	-	-
Description: Funding is to be provided for the following effort			
FY 2013 Accomplishments: Information Assurance (IA) Testing and Software Upgrades			
FY 2014 Plans:			

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Exhibit R-2A, RDT&E Project Justific	ation: PB	2015 Army							Date: N	larch 2014	
Appropriation/Budget Activity 2040 / 7					08053A <i>I Jo</i>	nent (Numb int Tactical G			ct (Number/N loint Tact Gro	lame) I Station-P3I(i	MIP)
B. Accomplishments/Planned Progra	ıms (\$ in N	//illions, Art	icle Quantit	ies in Each)	1				FY 2013	FY 2014	FY 2015
Information Assurance (IA) Testing and	Software	Upgrades		·							
Title: JTAGS Test and Evaluation Supp	oort						A	rticles:	0.885	0.898	1.74 -
Description: Funding is provided for the	e following	geffort									
FY 2013 Accomplishments: JTAGS Block 1 and Block 2 Phase 1 Te	esting										
FY 2014 Plans: JTAGS Block 2 Phase 1 Test											
FY 2015 Plans: JTAGS Block 2 Phase 1 and Phase 2 T	est										
Title: JTAGS P3I Block 2 Phase 1 Deve	elopment (Deshelteriza	ation; Hardw	are/Software	Upgrades).			4:-1-	28.102	6.006	8.46
Description: Funding is provided for th	e following	g effort					A	rticles:	-	-	-
FY 2013 Accomplishments: Continue P3I Phase 1 Development											
FY 2014 Plans: Continue P3I Phase 1 Development											
FY 2015 Plans: Complete P3I Phase 1 Development											
				Accon	nplishments	s/Planned P	rograms Sul	btotals	29.187	7.104	10.20
C. Other Program Funding Summary	(\$ in Milli	ons)									
			FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013 2.676	FY 2014 9.899	Base 5.286	<u>000</u>	<u>Total</u> 5.286	FY 2016 3.939	FY 2017 8.491	FY 201		CompleteContinuing	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
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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 2 configuration for operation with the next generation of Space Based Infrared System (SBIRS) satellites, and will improve warning tactical parameters and timeliness. JTAGS Block 2 P3I is on contract for a two-Phase development effort. Phase 1 deshelters five systems, adds SBIRS Geosynchronous (GEO) scanner capability (FY 2012-15) and updates hardware/software/communication systems. Phase 2 activities include stereo SBIRS GEO starer sensor data and Net Centric capabilities (FY 2016-19). JROC-Memos 197-12 and 113-13 directs fielding of JTAGS P3I Block 2 Phase 1 by FY15 and Phase 2 by FY 2017.

E. Performance Metrics

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	.015 Army	/								Date:	March 20	014	
Appropriation/Budge 2040 / 7	et Activity	1					8053A / J	ement (N loint Tacti				(Number		n-P3I(MIF	P)
Management Service	es (\$ in M	illions)		FY 2	2013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 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	Total Cost	Target Value of Contract
Government Program Management	Various	various : various	47.347	3.449		3.279		2.599		-		2.599	Continuing	Continuing	Continuin
		Subtotal	47.347	3.449		3.279		2.599		-		2.599	-	-	-
Product Developmen	nt (\$ in M	illions)		FY 2	2013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 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	Total Cost	Target Value of Contract
JTAGS Block 1 Engineering Services Hardware/Software	SS/CPFF	Northrop Grumman : Colorado Springs, CO/Various	39.482	0.200		0.200		-		-		-	Continuing	Continuing	Continuing
P3I Phase 1 Development	SS/CPIF	Northrop Grumman : Colorado Springs, CO/Various	18.038	22.232		0.627		4.598		-		4.598	Continuing	Continuing	Continuin
P3I Phase 2 Development SSCPIF	SS/CPIF	Northrop Grumman : Colorado Springs, CO/Various	0.000	-		-		-		-		-	Continuing	Continuing	Continuin
Government Furnished Equipment	TBD	Various : Various	1.510	-		-		-		-		-	Continuing	Continuing	Continuin
		Subtotal	59.030	22.432		0.827		4.598		-		4.598	-	-	-
Support (\$ in Million	s)			FY 2	2013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 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	Total Cost	Target Value of Contract
Contractor Engineering Support	Various	various : various	25.245	2.421		2.100		1.269		-		1.269	Continuing	Continuing	Continuin
		Subtotal	25.245	2.421		2.100		1.269		-		1.269	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army

Date: March 2014

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

2040 / 7

PE 0208053A / Joint Tactical Ground

System

635 I Joint Tact Grd Station-P3I(MIP)

Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	014	FY 2 Ba	2015 se	FY 2		FY 2015 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	Total Cost	Target Value of Contract
Test Support (ATEC/JITC/ ETC)	Various	various : various	6.177	0.885		0.898		1.743		-		1.743	Continuing	Continuing	Continuing
		Subtotal	6.177	0.885		0.898		1.743		-		1.743	-	-	-

Remarks

N/A-Not Applicable

	Prior Years	FY 2013	FY 2	014	FY 2 Ba	FY 2	2015 CO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	137.799	29.187	7.104		10.209	-		10.209	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 A	rmy																					Date	e: Ma	arch	201	4		
Appropriation/Budget Activity 2040 / 7	R-1 Pro PE 0208 System						208	_				•									er/N Grd			P3I(I	ΛIP)) 		
		FY 2	2013		I	FY 2	2014			FY 2	2015			FY	201	6		FY	2017	7		FY 2	2018	;		FY 20)19	
	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
P3I JTAGS Block 2																												
P3I H/W & S/W Block 2 Phase 1 Deshelterization and Geosynchronous (GEO) Scanner																												
P3I GEO Starer and Net Centric Upgrade (P3I Block 2 Phase 2 Upgrade)																												
Future Sensor Integration and Technology Refresh																												

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 7	,	, ,	umber/Name) Tact Grd Station-P3I(MIP)

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
P3I JTAGS Block 2	3	2012	3	2019
P3I H/W & S/W Block 2 Phase 1 Deshelterization and Geosynchronous (GEO) Scanner	4	2012	3	2015
P3I GEO Starer and Net Centric Upgrade (P3I Block 2 Phase 2 Upgrade)	1	2016	3	2019
Future Sensor Integration and Technology Refresh	2	2019	4	2019