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

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0304270A I Electronic Warfare Development

Date: March 2014

Development & Demonstration (SDD)

Appropriation/Budget Activity

,	,											
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	-	12.828	10.801	8.961	-	8.961	12.693	12.733	11.103	14.157	Continuing	Continuing
EW5: Electronic Warfare Development - MIP	-	9.605	6.079	4.426	-	4.426	7.406	7.351	5.624	5.221	Continuing	Continuing
EW6: ARAT-TSS - MIP	-	3.223	4.722	4.535	-	4.535	5.287	5.382	5.479	8.936	Continuing	Continuing

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

A. Mission Description and Budget Item Justification

PE 0304270A: Electronic Warfare Development

FY 2015 budget request funds Electronic Warfare Development. This program element (PE) encompasses engineering and manufacturing development for tactical electronic warfare (EW). EW encompasses the development of tactical EW equipment and systems mounted in both ground and air vehicles. The systems under this program provides the Army with the capability to degrade or deny hostile forces the effective use of their communications, countermortar/counterbattery radars, surveillance radars, infrared/optical battlefield surveillance systems and electronically fused munitions. Existing Army EW systems must be replaced or upgraded to maintain their capability in the face of threats. Prophet Enhanced (PE) is the current system under the Prophet Ground acquisition program. Its primary mission is to provide 24-hour Situation Development and Information Superiority to the supported maneuver brigade to enable the most effective engagement of enemy forces. PE provides a modular, scalable, open architecture-based system solution optimized for ease of use in a variety of configurations (Stationary-Fixed, Mobile and Manpack). The Army Reprogramming Analysis Team (ARAT) Project will develop, test and equip an Army-wide infrastructure capable of rapidly reprogramming electronic combat software embedded in offensive and defensive weapon systems.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	13.942	10.806	16.989	-	16.989
Current President's Budget	12.828	10.801	8.961	-	8.961
Total Adjustments	-1.114	-0.005	-8.028	-	-8.028
Congressional General Reductions	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
 Adjustments to Budget Years 	-	-	-8.028	-	-8.028
Other Adjustments 1	-1.114	-0.005	-	-	-

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Exhibit R-2A, RDT&E Project J	hibit R-2A, RDT&E Project Justification: PB 2015 Army												
Appropriation/Budget Activity 2040 / 5				_	70A I Electro	t (Number/ onic Warfar	Project (N EW5 / Elec MIP		ne) are Develop	oment -			
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	
EW5: Electronic Warfare Development - MIP	-	9.605	6.079	4.426	-	4.426	7.406	7.351	5.624	5.221	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Prophet Enhanced (PE) is the current system under the Prophet Ground acquisition program. Funds provide for development and integration of Pre-Planned Product Improvement (P3I) upgrades for Next Generation Signals and state-of-the-art Signals Intelligence (SIGINT) exploitation Techniques to increase the capabilities of the PE and maintain operational relevance. The PE is the tactical commander's sole organic ground-based SIGINT/Electronic Warfare system for the Brigade Combat Team (BCT), Stryker Brigade Combat Team (SBCT), and Battlefield Surveillance Brigade (BfSB). Its primary mission is to provide 24-hour Situation Development and Information Superiority to the supported maneuver brigade to enable the most effective engagement of enemy forces. PE provides a modular, scalable, open architecture-based system solution optimized for ease of use in a variety of configurations (Stationary-Fixed, Mobile and Manpack). It also incorporates productization, integration, and test of equipment for rapid integration of Tech Insertions and product development to ensure operational relevance.

Justification:

Army

FY2015 Base dollars in the amount of \$4.426 million supports the following activities: develops product upgrades for Next Generation Signals and SIGINT exploitation to increase the capabilities of the PE and maintain operational relevance.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
Title: Real-time Signal Processing architectural framework (software defined capabilities)		4.301	-	-
	Articles:	-	-	-
Description: Develop Real-time Signal Processing architectural framework (software defined capabilities).				
FY 2013 Accomplishments:				
Develop Real-time Signal Processing architectural framework (software defined capabilities).				
Title: System Integration Lab (SIL)		1.000	-	-
	Articles:	-	-	-
Description: Stand Up SIL				
FY 2013 Accomplishments:				

PE 0304270A: Electronic Warfare Development

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				UNCLA5										
Exhibit R-2A, RDT&E Project Justin	fication: PB	2015 Army							Date: Ma	arch 2014				
Appropriation/Budget Activity 2040 / 5				PE 03		nent (Numb ectronic War		Project (Number/Name) EW5 / Electronic Warfare Development MIP						
B. Accomplishments/Planned Prog	ırams (\$ in I	Millions, Art	icle Quantit	ies in Each))				FY 2013	FY 2014	FY 2015			
Software and Hardware Integration														
Title: Next Generation Signals							А	rticles:	4.304	3.008	2.173			
Description: Prophet P3I effort														
FY 2013 Accomplishments: Prophet P31 effort														
FY 2014 Plans: Prophet P3I effort														
FY 2015 Plans: Prophet P3I effort														
Title: Enhanced SIGINT Exploitation							A	rticles:	-	3.071	2.25			
Description: Prophet P3I effort.								20.01001						
FY 2014 Plans: Prophet P3I effort.														
FY 2015 Plans: Prophet P3I effort.														
				Accon	nplishment	s/Planned P	rograms Su	btotals	9.605	6.079	4.426			
C. Other Program Funding Summa	ry (\$ in Milli	ons)												
			FY 2015	FY 2015	FY 2015					Cost To				
<u>Line Item</u> • SSN BZ7326: <i>Prophet Ground (OPA) - BZ7326</i>	FY 2013 48.732	FY 2014 55.398	Base 55.896	<u>000</u>	<u>Total</u> 55.896	FY 2016 57.323	FY 2017 0.652	FY 201 17.87		Complete Continuing				
• SSN 9751: Special Purpose Systems (MIP OPA) (Prophet Only) - BZ9751	2.409	1.927	3.901	-	3.901	4.011	4.120	4.24	4 4.520	Continuing	Continuin			

PE 0304270A: *Electronic Warfare Development* Army

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army	Date: March 2014		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 5	PE 0304270A I Electronic Warfare	EW5 / Elec	ctronic Warfare Development -
	Development	MIP	

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

			FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013	FY 2014	Base	<u>oco</u>	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost

Remarks

Enhanced SIGINT Exploitation: H/W and/or S/W upgrades to increase system performance, to include but not limited to: Tuner upgrade, Processor upgrade, increase in memory, antenna upgrade and operating system upgrade.

D. Acquisition Strategy

PE entered production in 2QFY09 via Full and Open competition. The Prophet R&D Acquisition Strategy is structured to maintain operational relevancy of PE systems in a dynamic threat environment while reducing risk and streamlining business and engineering processes. The PE Pre-Planned Product Improvement (P3I) contract supports R&D and other developmental work, it also provides production and sustainment under the Indefinite-Delivery Indefinite-Quantity Contract.

E. Performance Metrics

N/A

Army

PE 0304270A: Electronic Warfare Development

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

Date: March 2014

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0304270A I Electronic Warfare Development

Project (Number/Name)

EW5 I Electronic Warfare Development -

MIP

Management Service	lanagement Services (\$ in Millions)			FY 2	2013	FY 2	014	FY 2 Ba		FY 2	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
Program Management	Various	PM Electronic Warfare : APG, MD	0.181	0.200		0.200		0.200		-		0.200	Continuing	Continuing	Continuing
		Subtotal	0.181	0.200		0.200		0.200		-		0.200	-	-	-

roduct Development (\$ in Millions)			FY 2	013	FY 2	2014		2015 ise		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
Software SIL	C/CPFF	GD C4 Systems : Scottsdale, AZ	0.889	-		-		-		-		-	-	0.889	-
Radio/Receiver Inegration (integrate software defined receiver)	C/CPFF	GD C4 Systems : Scottsdale, AZ	4.037	-		-		-		-		-	Continuing	Continuing	Continuing
Integrate Electronic Warfare Systems	C/CPFF	TRAC : Ft. Leavenworth, KS	4.900	-		-		-		-		-	Continuing	Continuing	Continuing
Next Generation Signals (TOS)	C/CPFF	GD C4 Systems : Scottsdale, AZ	1.200	-		-		-		-		-	Continuing	Continuing	Continuing
Precision Geo-Location	C/CPFF	GD C4 Systems : Scottsdale, AZ	4.200	1		-		-		-		-	Continuing	Continuing	Continuing
Real-time Signal Processing architectural framework (software defined capabilities)	C/CPFF	GD C4 Systems : Scottsdale, AZ	3.291	3.415	Jul 2013	-		-		-		-	Continuing	Continuing	Continuing
Next Generation Signals	C/CPFF	GD C4 Systems : Scottsdale, AZ	0.000	3.400	Jul 2013	2.768	Mar 2014	2.070	Mar 2015	-		2.070	Continuing	Continuing	Continuing
Enhance SIGINT Exploitation	C/CPFF	GD C4 Systems : Scottsdale, AZ	0.000	-		2.811	Mar 2014	2.156	Mar 2015	-		2.156	Continuing	Continuing	-
		Subtotal	18.517	6.815		5.579		4.226		-		4.226	-	-	-

PE 0304270A: *Electronic Warfare Development* Army

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2015 Army	y								Date:	March 20)14			
Appropriation/Budg 2040 / 5								R-1 Program Element (Number/Name) PE 0304270A / Electronic Warfare Development									
Support (\$ in Million	ns)			FY 2	2013	FY 2	2014		2015 ase		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 Complete	Total Cost	Target Value of Contract		
Matrix Support	Various	I2WD : APG, MD	0.314	0.350		0.300		-		-		-	-	0.964	-		
System Integration Lab	Various	I2WD : APG, MD	1.500	1.000		-		-		-		-	-	2.500	-		
		Subtotal	1.814	1.350		0.300		-		-		-	-	3.464	-		
Test and Evaluation	ı (\$ in Milli	ons)		FY 2	2013	FY 2	2014		2015 ase		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		
Prepare and Conduct Delta Testing	MIPR	EPG/AEC : Huachuca, AZ	0.000	1.240		-		-		-		-	Continuing	Continuing	Continuing		
		Subtotal	0.000	1.240		-		-		-		-	-	-	-		
			Prior Years	FY 2	2013	FY 2	2014	В	2015 ase		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract		
		Project Cost Totals	20.512	9.605		6.079		4.426		-		4.426	-	-	-		

Remarks

PE 0304270A: *Electronic Warfare Development* Army

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xhibit R-4, RDT&E Schedule Profile: PB 201	5 Army								4.0			•	1 /	N 1		-/ \ 1 -			_	•			e: M			14		
ppropriation/Budget Activity 040 / 5								Р)42	am E 70A / ent						ime)		15 I E			er/N ic W			eve.	opm	ent
	F	Y 2	2013	3		FY	201	14		F	Y 201	5		FY 2	201	6		FY	2017	7		FY	2018	3		FY	2019)
	1	2	3	4	1	2	3	3	4 1	1	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Prophet Control/Prophet Analytic Cell Production																												
Production - Prophet Enhanced																												-
Fielding - Prophet Enhanced																												
Prophet P3I and TI																												
Delta Testing - P3I (2013)																												
Delta Testing - P3I (2016)																												
Delta Testing - P3I (2018)																												
Contract Award																												
Prophet Modernization																												
Prophet Modernization - Fielding																												

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army	,								
11	PE 0304270A / Electronic Warfare	EW5 / Elec	umber/Name) ctronic Warfare Development -						
	Development	MIP							

Schedule Details

	Start		En	ıd
Events	Quarter	Year	Quarter	Year
Prophet Control/Prophet Analytic Cell Production	4	2011	1	2014
Production - Prophet Enhanced	2	2009	2	2016
Fielding - Prophet Enhanced	2	2010	2	2017
Prophet P3I and TI	4	2008	4	2020
Delta Testing - P3I (2013)	2	2013	2	2013
Delta Testing - P3I (2016)	2	2016	2	2016
Delta Testing - P3I (2018)	2	2018	2	2018
Contract Award	1	2016	1	2016
Prophet Modernization	1	2016	4	2020
Prophet Modernization - Fielding	1	2017	4	2021

Exhibit R-2A, RDT&E Project Ju	stification	PB 2015 A	rmy							Date: Marc	ch 2014	
Appropriation/Budget Activity 2040 / 5				Project (N EW6 / ARA		,						
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
EW6: ARAT-TSS - MIP	-	3.223	4.722	4.535	-	4.535	5.287	5.382	5.479	8.936	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Note

The Army Reprogramming Analysis Team (ARAT) is a Department of the Army established program to develop techniques, methods, tools and architecture to reprogram mission software embedded in Army Electronic Warfare (EW) systems, Force Protection Systems (FPS), and Target Sensing Systems (TSS) in response to changes in threat signatures. The regulatory guidance directing this mission is contained in AR 525-15, AR 525-22, and AR 95-1. Current military operations are conducted in a rapidly changing threat environment, where Improvised Explosive Devices (IEDs), Infra Red (IR) man-portable air defense systems (MANPADS) seekers, radar-quided surface-to-air-missiles (SAM), laser guided weapons, anti helicopter mines, and targeting sensors are proliferating and evolving. Integrated solutions are required to counter increasingly sophisticated EW threats, and the ARAT reprogramming infrastructure supports the tactical Commander by providing timely rapid-reprogramming of mission software and information dissemination for Army supported. Joint, allied service, EW integrated reprogramming of target acquisition, target engagement, vehicle survivability, and Aircraft Survivability Equipment (ASE). The ARAT rapid-reprogramming infrastructure supports tactical requirements for deployed aircraft and ground-based (e.g. CREW) survivability systems including those deployed in the CENTCOM area of responsibility (AOR). ARAT identifies and analyzes threat signature changes which affect EW, FPS and TSS; determines the impact of observed signature changes; creates new mission data software to adapt the system to changes; disseminates the mission software changes; and provides methods to upload new mission software into the affected EW, FPS and TSS. Each element within the ARAT infrastructure plays a specific role with in the program's rapid reprogramming process, providing the Soldier with the capability to install mission and target identification software at the lowest possible level- maximizing flexibility for tactical commanders. ARAT participates in the operational and developmental test design of Army EW, FPS and TSS, and supports Service and JCS reprogramming Exercises in all theaters. ARAT Research and Development enables continuous development of: 1)automated threat analysis tools to rapidly detect (flag) threat changes within intelligence systems, 2)tools to minimize the time to develop Aviation Mission Data Sets (MDS) and Ground loadsets, 3)tools and technology to minimize the time required to test and validate MDSs and loadsets, 4)improved communications conduits to transmit mission software changes to field users, and 5)enhanced mission-software uploading tools. These efforts allow for rapid threat analysis, simulation, mission software development, distribution and uploading of mission software changes directly to the supported Soldier in the field.

A. Mission Description and Budget Item Justification

PE 0304270A: Electronic Warfare Development

Mission Description and Budget Item Justification: The Army Reprogramming Analysis Team (ARAT) is a Department of the Army established program to develop techniques, methods, tools and architecture to

reprogram mission software embedded in Army Electronic Warfare (EW) systems, Force Protection Systems (FPS), and Target Sensing Systems (TSS) in response to changes in threat signatures. The regulatory guidance directing this mission is contained in AR 525-15, AR 525-22, and AR 95-1. Current military operations are conducted in a rapidly changing threat environment, where Improvised Explosive Devices (IEDs), Infra Red (IR) man-portable air defense systems (MANPADS) seekers, radar guided surface-to-air-missiles (SAM), laser guided weapons, anti-helicopter mines, and targeting sensors are proliferating and evolving. Integrated solutions are

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 5	PE 0304270A I Electronic Warfare	EW6 / ARA	AT-TSS - MIP
	Development		
required to counter increasingly conhictionted EW threats, and the ADAT re-	programming infractructure augments the testical	Commondo	r by providing timely

required to counter increasingly sophisticated EW threats, and the ARAT reprogramming infrastructure supports the tactical Commander by providing timely rapidreprogramming

of mission software and information dissemination for Army supported, Joint, allied service, EW integrated reprogramming of target acquisition, target engagement, vehicle survivability, and Aircraft Survivability Equipment (ASE). The ARAT rapid-reprogramming infrastructure supports tactical requirements for deployed aircraft and ground-based (e.g. CREW) survivability systems including those deployed in the CENTCOM area of responsibility (AOR). ARAT identifies and analyzes threat signature changes which affect EW, FPS and TSS; determines the impact of observed signature changes; creates new mission data software to adapt the system to the changes; disseminates the mission software changes; and provides methods to upload the new mission software into the affected EW, FPS and TSS. Each element within the ARAT infrastructure plays a specific role within the program's rapid reprogramming process, providing the Soldier with the capability to install mission and target identification software at the lowest possible level - maximizing flexibility for tactical commanders. ARAT participates in the operational and developmental test design of Army EW, FPS and TSS, and supports Service and JCS Reprogramming Exercises in all theaters. ARAT Research and Development enables continuous development of: 1) automated threat analysis tools to rapidly detect (flag) threat changes within the intelligence system, 2) tools to minimize the time to develop Aviation Mission Data Sets (MDS) and Ground loadsets, 3) tools and technology to minimize the time required to test and validate MDSs and loadsets, 4) improved communications conduits to transmit mission software changes to field users, and 5) enhanced mission-software uploading tools. These efforts allow for rapid threat analysis, simulation, mission software development, distribution and uploading of mission software changes directly to the supported Soldier in the field.

EV 2012

EV 2014

EV 2015

b. Accomplishments/Flanned Frograms (\$ in Millions, Article Quantities in Each)	F1 2013	F1 2014	F1 2015
Title: Keeping Pace with the Enemy and Technology	2.028	3.423	3.258
Articles:	-	-	-
Description: Funding is provided for the following effort			
FY 2013 Accomplishments: This effort: 1) studied the intelligence data requirements to support MDS development for EO/UV/IR spectrums and other multi-spectral sensors for aviation and non-aviation EW systems, 2)Developed government organic knowledge and application-base enabling reprogramming of future systems, 3)Performed requirements analysis and concept development for the reprogramming of multi-spectral EW systems.			
FY 2014 Plans: This effort continues to: 1)study the intelligence data requirements to support MDS development for EO/UV/IR spectrums and other multi-spectral sensors for aviation and non-aviation EW systems, 2) Develop government organic knowledge and application-base enabling reprogramming of future systems, 3)Perform requirements analysis and concept development for the reprogramming of multi-spectral EW systems.			
FY 2015 Plans: This effort will continue to 1)study the intelligence date requirements to support MDS development for EO/UV/IR spectrums and other multi-spectral sensors for aviation and non-aviation EW systems, 2) Develop government organic knowledge and			

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B Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

PE 0304270A: Electronic Warfare Development

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		,	Date: N	larch 2014	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0304270A I Electronic Warfare Development		ject (Number/Name) 6 / ARAT-TSS - MIP		
B. Accomplishments/Planned Programs (\$ in Millions, Article (Quantities in Each)		FY 2013	FY 2014	FY 2015
application-base enabling reprogramming of future systems, 3)Per reprogramming of multi-spectral EW systems.	form requirements analysis and concept development for	the			
Title: Infrastructure Improvements Multispectral	A	rticles:	0.507	0.646	0.746
Description: Funding is provided for the following effort					
Infrastructure improvements for OFP sustainment environment to e for MWS. Determined data and analysis requirements for MANPAI analysis and sustainment process to support OFPs and subsequer capability exists, increasing the risk that systems cannot be readily FY 2014 Plans: Infrastructure improvements for OFP sustainment environment to example to the substainment of the sustainment environment to example the sustainment environment environment to example the sustainment environment enviro	OS characterization and established initial organic governatly adapt MWSs to new threats. No government organic adapted to changing threats. The enable the USG to develop and deploy the OFP environments.	ment			
MWS. Determine data and analysis requirements for MANPADS of and sustainment process to support OFPs and subsequently adap capability, decreasing the risk that systems cannot be readily adap capability exists, increasing the risk that systems cannot be readily	haracterization and establish an organic government ana t MWSs to new threats. Establish initial government orga ted to changing threats. Currently, no government organi	lysis nic			
FY 2015 Plans: Infrastructure improvements for OFP sustainment environment to effor MWS. Will determine data and analysis requirements for MANF analysis and sustainment process to support OFPs and subsequer government organic capability, decreasing the risk that systems cagovernment organic capability exists, increasing the risk that systems.	PADS characterization and establish an organic governmently adapt MWSs to new threats. Will establish initial unnot be readily adapted to changing threats. Currently, n	ent			
Title: Infrastructure Improvement Radio Frequency General	4	rticles:	0.478	0.463	0.419
Description: Funding is provided for the following effort	A	ucies:	-	-	-

PE 0304270A: *Electronic Warfare Development* Army

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: M	larch 2014	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0304270A I Electronic Warfare Development		roject (Number/Name) W6 / ARAT-TSS - MIP		
B. Accomplishments/Planned Programs (\$ in Millions, Article (Quantities in Each)		FY 2013	FY 2014	FY 2015
Enhanced the ARAT communications architecture to facilitate the r FPS and TSS users, with emphasis on remote user and highly mol integrated ASE development and test environment to ensure MDS	bile Soldier connectivity. Developed and implement an ini	tial			
FY 2014 Plans: Enhance the ARAT communications architecture to facilitate the ra FPS and TSS users, with emphasis on remote user and highly mol integrated ASE development and test environment to ensure MDS	bile Soldier connectivity. Develop and implement an initia	I			
FY 2015 Plans: Will enhance the ARAT communications architecture to facilitate the EWS, FPS and TSS users, with emphasis on remote user and high initial integrated ASE development and test environment to ensure platform.	nly mobile Soldier connectivity. Will develop and impleme	nt an			
<i>Title:</i> Threat Flagging and Mission Data Set Reprogramming Tool		rticles:	0.210	0.190	0.11
Description: Funding is provided for the following effort					
FY 2013 Accomplishments: Threat Flagging and MDS Reprogramming Tool Development- Development- System-specific threat flagging, threat analysis, MDS generation, a performance change detection) and intelligence analytical tools, be identify and counter emerging and changing threats that adversely MDS development, testing and validation tools to decrease time from order to increase the accuracy and fidelity of threat identification with the manually intensive analysis and MDS development process data support infrastructure that employs NGES when the NGES is	and MDS testing process. Enhanced threat flagging (threat seed on supported systems performance criteria, to rapidly affect the performance of the EW, FPS and TSS. Create from threat-change detection to the distribution of MDS property, and reduce the engineering involvement/workload associates. Defined requirements and develop tools to migrate	at y d initial ducts ciated to a			
FY 2014 Plans: Threat Flagging and MDS Reprogramming Tool Development- Development specific threat flagging, threat analysis, MDS generation, and MDS change detection) and intelligence analytical tools, based on support counter emerging and changing threats that adversely affect the perfect development, testing and validation tools to decrease time from threat order to increase the accuracy and fidelity of threat identification, a	testing process. Enhance threat flagging (threat perform orted systems performance criteria, to rapidly identify and erformance of the EW, FPS and TSS. Create initial MDS reat-change detection to the distribution of MDS products	in			

PE 0304270A: *Electronic Warfare Development* Army

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
· · · · · · · · · · · · · · · · · · ·	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 3 (umber/Name) AT-TSS - MIP

•	• • • • • • • • • • • • • • • • • • • •			1 1
	alysis and MDS development processes. Define requirements and develop tools to migrate to a employs NGES when the NGES is deployed and the current EWIR system is decommissioned.			
system- specific threat flagging performance change detection identify and counter emerging initial MDS development, testin products in order to increase the associated with the manually in	rogramming Tool Development- Will develop initial application requirements for ARAT internal g, threat analysis, MDS generation, and MDS testing process. Will enhance threat flagging (threat) and intelligence analytical tools, based on supported systems performance criteria, to rapidly and changing threats that adversely affect the performance of the EW, FPS and TSS. Will create an and validation tools to decrease time from threat-change detection to the distribution of MDS are accuracy and fidelity of threat identification, and reduce the engineering involvement/workload intensive analysis and MDS development processes. Will define requirements and develop tools trastructure that employs NGES when the NGES is deployed and the current EWIR system is			
	Accomplishments/Planned Programs Subtotals	3.223	4.722	4.535

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

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

N/A

Remarks

D. Acquisition Strategy

The efforts to be funded in this project will require a combination of systems specific and high-tech knowledge. The contractual services portion for the project will be obtained from both the Communications-Electronics Command (CECOM) Software Engineering Center (SEC) competitive omnibus and the Research, Development and Engineering Command (RDECOM) high tech contracts.

E. Performance Metrics

N/A

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FY 2013 FY 2014

FY 2015

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army Date: March 2014 R-1 Program Element (Number/Name) Project (Number/Name) Appropriation/Budget Activity PE 0304270A I Electronic Warfare EW6 I ARAT-TSS - MIP 2040 / 5 Development FY 2015 FY 2015 FY 2015 **Product Development (\$ in Millions)** FY 2013 FY 2014 Base oco Total Contract Target Method Performing Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location **Years** Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost Various locations: Travel Various 0.352 0.129 0.173 0.184 0.184 Continuing Continuing Continuing various ARAT Research and Development Various **USG** Labor element 1.300 0.438 0.710 0.663 0.663 Continuing Continuing Continuing Various locations : APG, MD 0.847 Subtotal 1.652 0.567 0.883 0.847 FY 2015 FY 2015 FY 2015 Support (\$ in Millions) FY 2014 oco FY 2013 Base Total Contract Target Method Performing Prior Award Award Award **Cost To** Value of Award Total **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract **Development Support** (CECOM RDEC Test and Various Various: various 7.372 2.656 3.839 3.688 3.688 Continuing Continuing Continuing **Evaluation CECOM SEC** Omnibus) Subtotal 7.372 2.656 3.839 3.688 3.688 Target

Remarks

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FY 2014

4.722

Prior

Years

9.024

Project Cost Totals

FY 2013

3.223

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FY 2015

oco

FY 2015

Total

4.535

Cost To

Complete

Value of

Contract

Total

Cost

FY 2015

Base

4.535