Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*					R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*							
COST ($ in Millions)	**All Prior Years**	**FY 2012**	**FY 2013#**	**FY 2014 Base**	**FY 2014 OCO ##**	**FY 2014 Total**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**Cost To Complete**	**Total Cost**
Total Program Element	-	13.807	13.942	10.806	-	10.806	16.989	16.333	15.018	15.274	Continuing	Continuing
EW5: *Electronic Warfare Development - MIP*	-	10.422	10.441	6.082	-	6.082	11.571	10.965	9.559	9.722	Continuing	Continuing
EW6: *ARAT-TSS - MIP*	-	3.385	3.501	4.724	-	4.724	5.418	5.368	5.459	5.552	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

FY 2014 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 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	13.807	13.942	13.820	-	13.820
Current President's Budget	13.807	13.942	10.806	-	10.806
Total Adjustments	0.000	0.000	-3.014	-	-3.014
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	-	-	-3.014	-	-3.014

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW5: *Electronic Warfare Development - MIP*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
EW5: *Electronic Warfare Development - MIP*	-	10.422	10.441	6.082	-	6.082	11.571	10.965	9.559	9.722	Continuing	Continuing
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 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 Pre-Planned Product Improvement (P3I) upgrades for Next Generation Signals to increase the capabilities of the PE and maintain operational relevance; and develop Multipath/Co-Site Mitigation. The PE is the tactical commander's sole organic ground-based Signals Intelligence (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 the ability for rapid integration of Technical Insertions and P3I to ensure operational relevance.

Justification:
FY2014 Base dollars in the amount of $6.082 million supports the following activities: develops product upgrades for Next Generation Signals to increase the capabilities of the PE and maintain operational relevance; and develop Multipath/Co-Site Mitigation.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Next Generation Signals (TOS)	1.232	0.000	0.000
Articles:	0		
Description: Develop next generation signals (TOS)			
FY 2012 Accomplishments: Develop next generation signals (TOS)			
Title: Precision Geo-Location	4.312	0.000	0.000
Articles:	0		
Description: Develop Geo-location capability for the Prophet Enhanced system under P3I requirements.			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW5: *Electronic Warfare Development - MIP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Develop Geo-location capability for the Prophet Enhanced system under P3I requirements.			
Title: Real-time Signal Processing architectural framework (software defined capabilities) ***Articles:*** ***Description:*** Develop Real-time Signal Processing architectural framework (software defined capabilities). ***FY 2012 Accomplishments:*** Develop Real-time Signal Processing architectural framework (software defined capabilities). ***FY 2013 Plans:*** Develop Real-time Signal Processing architectural framework (software defined capabilities).	3.378 0	4.707 0	0.000
Title: System Integration Lab (SIL) ***Articles:*** ***Description:*** Stand Up SIL ***FY 2012 Accomplishments:*** Stand Up SIL ***FY 2013 Plans:*** System Integration Lab	1.500 0	1.000 0	0.000
Title: Next Generation Signals ***Articles:*** ***Description:*** Prophet P3I effort ***FY 2013 Plans:*** Prophet P31 effort ***FY 2014 Plans:*** Prophet P3I effort	0.000	4.734 0	3.011
Title: Multipath/Co-Site Mitigation ***Description:*** Prophet P3I effort. ***FY 2014 Plans:***	0.000	0.000	3.071

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW5: *Electronic Warfare Development - MIP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Prophet P3I effort.			
Accomplishments/Planned Programs Subtotals	10.422	10.441	6.082

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• SSN BZ7326: *Prophet Ground (OPA) - BZ7326*	72.041	48.797	59.198		59.198	53.259	52.778	18.050	15.384	Continuing	Continuing
• SSN 9751: *Special Purpose Systems (MIP OPA) (Prophet Only) - BZ9751*	9.163	2.412				1.231	1.153	2.152	2.189	Continuing	Continuing
• PE 305288G: *Defense Cryptological Program for Prophet (MIP) (RDT&E)*	3.864	0.754	1.316		1.316					Continuing	Continuing

Remarks

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

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW5: *Electronic Warfare Development - MIP*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	Various	PM Electronic Warfare:APG, MD	0.000	0.181	Dec 2011	0.181		0.200	Jan 2014	-		0.200	Continuing	Continuing	Continuing
		Subtotal	0.000	0.181		0.181		0.200		0.000		0.200			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software SIL	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.889	-		-		-		-		-	0.000	0.889	0.000
Radio/Receiver Inegration (integrate software defined receiver)	C/CPIF	GD C4 Systems:Scottsdale, AZ	4.037	-		-		-		-		-	Continuing	Continuing	Continuing
Integrate Electronic Warfare Systems	C/CPIF	TBD:TBD	4.900	-		-		-		-		-	Continuing	Continuing	Continuing
Next Generation Signals (TOS)	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.000	1.200		-		-		-		-	Continuing	Continuing	Continuing
Precision Geo-Location	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.000	4.200		-		-		-		-	Continuing	Continuing	Continuing
Real-time Signal Processing architectural framework (software defined capabilities)	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.000	3.291	Feb 2012	3.412		-		-		-	Continuing	Continuing	Continuing
Next Generation Signals	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.000	-		3.400		2.768	Feb 2014	-		2.768	Continuing	Continuing	Continuing
Multipath/Co-Site Mitigation	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.000	-		-		2.814	Feb 2014	-		2.814	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW5: *Electronic Warfare Development - MIP*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Sensor Hardware Upgrade	C/CPIF	GD C4 Systems:Scottsdale, AZ	0.000	-		-		-		-		-	Continuing	Continuing	0.000
		Subtotal	9.826	8.691		6.812		5.582		0.000		5.582			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	Various	I2WD:APG, MD	0.264	0.050	Dec 2011	0.448		0.300	Dec 2013	-		0.300	Continuing	Continuing	Continuing
System Integration Lab	Various	I2WD:APG, MD	0.000	1.500		1.000		-		-		-	Continuing	Continuing	Continuing
		Subtotal	0.264	1.550		1.448		0.300		0.000		0.300			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prepare and Conduct Delta Testing	MIPR	EPG/AEC:Huachuca, AZ	0.000	-		2.000		-		-		-	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		2.000		0.000		0.000		0.000			

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	10.090	10.422		10.441		6.082		0.000		6.082			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW5: *Electronic Warfare Development - MIP*

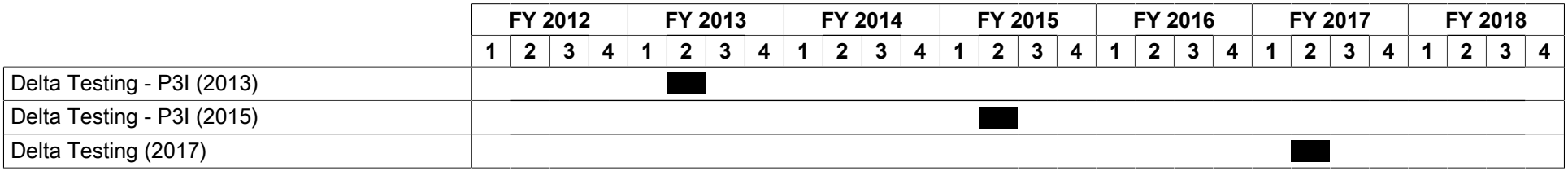

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0304270A: *Electronic Warfare Development*	**PROJECT** EW5: *Electronic Warfare Development - MIP*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Delta Testing - P3I (2013)	2	2013	2	2013
Delta Testing - P3I (2015)	2	2015	2	2015
Delta Testing (2017)	2	2017	2	2017

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW6: *ARAT-TSS - MIP*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
EW6: *ARAT-TSS - MIP*	-	3.385	3.501	4.724	-	4.724	5.418	5.368	5.459	5.552	Continuing	Continuing
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. 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 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 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Keeping Pace with the Enemy and Technology	2.013	2.206	3.423
Articles:	0	0	
Description: Funding is provided for the following effort			
FY 2012 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW6: *ARAT-TSS - MIP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
This effort: 1) studied the intelligence data requirements to support MDS development for Electro Optics, Ultra Violet, and Infra Red, (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 2013 Plans:*** This effort: 1) studies 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) Develops government organic knowledge and application-base enabling reprogramming of future systems, 3) Performs requirements analysis and concept development for the reprogramming of multi-spectral EW systems. ***FY 2014 Plans:*** This effort will: 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.			
Title: Infrastructure Improvements Multispectral	0.605	0.607	0.646
Articles:	0	0	
Description: Funding is provided for the following effort ***FY 2012 Accomplishments:*** Infrastructure improvements for Operational Flight Program (OFP) sustainment environment to enable the USG to develop and deploy OFP environment for Missile Warning Systems (MWS). Determined data and analysis requirements for MANPADS characterization and established an organic government analysis and sustainment process to support OFPs and subsequently adapt MWSs to new threats. No government organic capability existed, increasing the risk that systems could not be readily adapted to changing threats. ***FY 2013 Plans:*** Infrastructure improvements for OFP sustainment environment to enable the USG to develop and deploy OFP environment for MWS. Determine data and analysis requirements for MANPADS characterization and establish an organic government analysis and sustainment process to support OFPs and subsequently adapt MWSs to new threats. Currently, no government organic capability exists, increasing the risk that systems cannot be readily adapted to changing threats. ***FY 2014 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW6: *ARAT-TSS - MIP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Infrastructure improvements for OFP sustainment environment to enable the USG to develop and deploy OFP environment for MWS. Will determine data and analysis requirements for MANPADS characterization and establish an organic government analysis and sustainment process to support OFPs and subsequently adapt MWSs to new threats. Will establish initial government organic capability, decreasing the risk that systems cannot be readily adapted to changing threats.			
Title: Infrastructure Improvement Radio Frequency General ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2012 Accomplishments:*** Infrastructure improvements (general) - Enhanced the ARAT communications architecture to facilitate the rapid secure transmission of mission software changes to EWS, FPS and TSS users, with emphasis on remote user and highly mobile Soldier connectivity. Developed and implemented an integrated ASE development and test environment to ensure MDS and threat counter-measure (CM) Integration on the respective airborne platform. ***FY 2013 Plans:*** Infrastructure improvements (general) - Enhance the ARAT communications architecture to facilitate the rapid secure transmission of mission software changes to EWS, FPS and TSS users, with emphasis on remote user and highly mobile Soldier connectivity. Develop and implement an integrated ASE development and test environment to ensure MDS and threat CM Integration on the respective airborne platform. ***FY 2014 Plans:*** Infrastructure improvements (general)-Will enhance the ARAT communications architecture to facilitate the rapid secure transmission of mission software changes to EWS, FPS and TSS users, with emphasis on remote user and highly mobile Soldier connectivity. Will develop and implement an integrated ASE development and test environment to ensure MDS and threat CM Integration on the respective airborne platform.	0.540 0	0.478 0	0.463
Title: Threat Flagging and Mission Data Set Reprogramming Tool Development ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2012 Accomplishments:*** Threat Flagging and MDS Reprogramming Tool Development - Developed applications for ARAT internal system-specific threat flagging, threat analysis, MDS generation, and MDS testing processes. Enhanced threat flagging (threat performance change detection) and intelligence analytical tools, based on supported systems performance criteria, to rapidly identify and counter emerging and changing threats that adversely affect the performance of the EW, FPS and TSS. Created MDS development,	0.227 0	0.210 0	0.192

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW6: *ARAT-TSS - MIP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
testing and validation tools to decrease time from threat-change detection to the distribution of MDS products in order to increase the accuracy and fidelity of threat identification, and reduced the engineering involvement/workload associated with the manually intensive analysis and MDS development processes. Defined requirements and developed tools to migrate to a data support infrastructure that employed Next Generation EWIR System (NGES) when the NGES was deployed and the current EWIR system was decommissioned. ***FY 2013 Plans:*** Threat Flagging and MDS Reprogramming Tool Development - Develop applications for ARAT internal system-specific threat flagging, threat analysis, MDS generation, and MDS testing processes. Enhance threat flagging (threat performance change detection) and intelligence analytical tools, based on supported systems performance criteria, to rapidly identify and counter emerging and changing threats that adversely affect the performance of the EW, FPS and TSS. Create MDS development, testing and validation tools to decrease time from threat-change detection to the distribution of MDS products in order to increase the accuracy and fidelity of threat identification, and reduce the engineering involvement/workload associated with the manually intensive analysis and MDS development processes. Define requirements and develop tools to migrate to a data support infrastructure that employs NGES when the NGES is deployed and the current EWIR system is decommissioned. ***FY 2014 Plans:*** Threat Flagging and MDS Reprogramming Tool Development-Will develop applications for ARAT internal system-specific threat flagging, threat analysis, MDS generation, and MDS testing processes. Will enhance threat flagging (threat performance change detection) and intelligence analytical tools, based on supported systems performance criteria, to rapidly identify and counter emerging and changing threats that adversely affect the performance of the EW, FPS and TSS. Will create MDS development, testing and validation tools to decrease time from threat-change detection to the distribution of MDS products in order to increase the accuracy and fidelity of threat identification, and reduce the engineering involvement/workload associated with the manually intensive analysis and MDS development processes. Will define requirements and develop tools to migrate to a data support infrastructure that employs NGES when the NGES is deployed and the current EWIR system is decommissioned.			
Accomplishments/Planned Programs Subtotals	3.385	3.501	4.724

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW6: *ARAT-TSS - MIP*

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

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0304270A: *Electronic Warfare Development*	PROJECT EW6: *ARAT-TSS - MIP*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Various	Various locations:various	0.205	0.147		0.165		0.175		-		0.175	Continuing	Continuing	Continuing
USG Labor	Various	ARAT Research and Development element Various locations:APG, MD	0.550	0.750		0.680		0.710		-		0.710	Continuing	Continuing	Continuing
		Subtotal	0.755	0.897		0.845		0.885		0.000		0.885			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support (CECOM RDEC Test and Evaluation CECOM SEC Omnibus)	Various	Various:various	4.884	2.488		2.656		3.839		-		3.839	Continuing	Continuing	Continuing
		Subtotal	4.884	2.488		2.656		3.839		0.000		3.839			

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	5.639	3.385		3.501		4.724		0.000		4.724			

Remarks