Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 6: *RDT&E Management Support*				R-1 ITEM NOMENCLATURE PE 0604759A: *Major T&E Investment*							
COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	40.671	49.359	37.394	-	37.394	39.178	43.601	47.027	44.194	Continuing	Continuing
983: *Reagan Test Site (RTS) T&E Investments*	8.491	8.757	8.823	-	8.823	7.762	7.526	7.261	7.383	Continuing	Continuing
984: *Major Developmental Testing Instrumentation*	25.064	31.551	21.615	-	21.615	23.990	28.161	29.980	26.493	Continuing	Continuing
986: *Major Operational Test Instrumentation*	7.116	9.051	6.956	-	6.956	7.426	7.914	9.786	10.318	Continuing	Continuing

Note

Change Summary Explanation: Realigned to higher priority requirements.

A. Mission Description and Budget Item Justification

This program funds the development and acquisition of major developmental test instrumentation for the U.S. Army Test and Evaluation Command's (ATEC) test activities: White Sands Test Center (WSTC), NM; Yuma Test Center, (YTC), AZ; Aberdeen Test Center (ATC), MD; Electronic Proving Ground (EPG), AZ; Redstone Test Center (RTC), AL; and for the Reagan Test Site (RTS) at the U.S. Army Kwajalein Atoll (USAKA), which is managed by the Space and Missile Defense Command. The program also funds development and acquisition of Operational Test Command's (OTC) major field instrumentation. Requirements for instrumentation are identified through a long range survey of project managers, Research Development and Engineering Centers (RDECs), and Battle Laboratories developing future weapon systems and the test programs that support these systems. Army testing facilities are also surveyed to determine major testing capability shortfalls.

B. Program Change Summary ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	42.102	49.437	53.933	-	53.933
Current President's Budget	40.671	49.359	37.394	-	37.394
Total Adjustments	-1.431	-0.078	-16.539	-	-16.539
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.129	-			
• Adjustments to Budget Years	-	-	-16.539	-	-16.539
• Other Adjustments 1	-0.302	-0.078	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army			DATE: February 2012
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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
983: *Reagan Test Site (RTS) T&E Investments*	8.491	8.757	8.823	-	8.823	7.762	7.526	7.261	7.383	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This activity funds improvement and modernization (I&M) for the Ronald Reagan Ballistic Missile Defense Test Site (RTS). Funding upgrades and combats parts obsolescence of the radars, telemetry, optics, range safety, communications, command/control and other equipment essential to meet requirements of the Services and DoD agencies and crucial for investment protection of the sensor suite. These upgrades are critical both to maintain a state of the art instrumentation suite and to the successful collection of data supporting test and evaluation assessments and operational decisions for the Army; Navy; Air Force; U.S. Strategic Command (STRATCOM); Missile Defense Agency (MDA); Defense Advanced Research Projects Agency (DARPA); National Aeronautics and Space Administration (NASA); and other customers. Reagan Test Site (RTS) located in the Republic of the Marshall Islands, is a remote, secure activity of the Major Range and Test Facility Base (MRTFB).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: RTS Distributed Operations (RDO)	2.000	-	-
Articles:	0		
Description: RTS Distributed Operations			
FY 2011 Accomplishments: Continued to provide for distributed operation of the Range instrumentation from Continental U.S. Command and Control (C2) sites.			
Title: RTS Optics Modernization Program (ROMP)	1.286	1.630	1.250
Articles:	0	0	
Description: Funding is provided for the following effort			
FY 2011 Accomplishments: Continued to modernize RTS optics sensor suite, fixed deficiencies and enabled remote operations of the equipment.			
FY 2012 Plans: Modernize RTS optics sensor suite, fixing deficiencies and enabling remote operations of the equipment.			
FY 2013 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Will continue modernization RTS optics sensor suite, fixing deficiencies and enabling remote operations of the equipment.			
Title: Radar Reliability Improvement Program (RRI). ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2011 Accomplishments:*** Addressed technology refresh, obsolescence and sustainment issues for critical radar system operation. ***FY 2012 Plans:*** Continue to address technology refresh, obsolescence and sustainment issues for critical radar system operation. ***FY 2013 Plans:*** Will continue to address technology refresh, obsolescence and sustainment issues for critical radar system and L-Band Modulator operation.	0.550 0	0.424 0	0.750
Title: Radar Computer and Software Refresh ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2011 Accomplishments:*** Continued to replace obsolete main radar computer for all RTS radars and refreshed software to run on new hardware. ***FY 2012 Plans:*** Replace obsolete main radar computer for all RTS radars and refresh software to run on new hardware. ***FY 2013 Plans:*** Will continue to upgrade the system to a more common and widely available hardware platform with multiple vendor support and software.	1.705 0	2.255 0	0.650
Title: Radar Open System Architecture (ROSA) Refresh. ***Articles:*** ***Description:*** ROSA Refresh ***FY 2011 Accomplishments:*** Continued to implement technology refresh in the RTS radars, replaced obsolete components.	0.350 0	-	-
Title: MMW Limited Bandwidth (BW) Expansion Program.	0.400	0.494	-

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Articles:	0	0	
Description: Funding is provided for the following effort ***FY 2011 Accomplishments:*** Funded the Upgrade of MMW bandwidth to 4 Gigahertz (GHz). ***FY 2012 Plans:*** Continues the Upgrade of MMW bandwidth to 4 Gigahertz (GHz).			
Title: Telemetry (TM) Modernization Study.	1.200	0.101	0.500
Articles:	0	0	
Description: Funding is provided for the following effort ***FY 2011 Accomplishments:*** Replaced outdated TM equipment with modern digital systems and enabled remote operation. ***FY 2012 Plans:*** Continues to replace outdated TM equipment with modern digital systems and enable remote operation. ***FY 2013 Plans:*** Will continue to replace outdated TM equipment with modern digital systems and enable remote operation.			
Title: Multiple Simultaneous Engagement (MSE) Flight Safety.	0.500	0.203	1.050
Articles:	0	0	
Description: Funding is provided for the following effort ***FY 2011 Accomplishments:*** Modernized and upgraded flight safety systems to accommodate customer requirements. ***FY 2012 Plans:*** Continues to Modernize and upgrade flight safety systems to accommodate customer requirements. ***FY 2013 Plans:*** Will continue to modernize and upgrade flight safety systems to accomodate customer requirements.			
Title: Legacy Servo Upgrade Program.	0.500	0.686	0.950
Articles:	0	0	

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Description: Funding is provided for the following effort ***FY 2011 Accomplishments:*** Replaced and upgraded obsolete antenna servos and interlock systems at the RTS radars. ***FY 2012 Plans:*** Continue to replace and upgrade obsolete antenna servos and interlock systems at the RTS radars. ***FY 2013 Plans:*** Will continue to replace and upgrade obsolete antenna serves and interlock systems at the RTS radars.			
Title: Mission Data Network (MDN) Modernization. ***Articles:*** ***Description:*** MDN Modernization. ***FY 2012 Plans:*** Replace outdated network equipment and improve on-atoll bandwidth to support increasing mission critical customer requirements. ***FY 2013 Plans:*** Will continue replacing outdated network equipment and will improve on-atoll bandwidth to support increasing mission critical customer requirements.	-	2.142 0	2.395
Title: RTS Automation and Decision Support. ***Articles:*** ***Description:*** Funding is provided for the following effort ***FY 2012 Plans:*** Addition of automation measures and more sophisticated algorithms to improve operator efficiency. ***FY 2013 Plans:*** Will continue addition of automation measures and more sophisticated algorithms to improve operator efficiency.	-	0.822 0	1.278
Accomplishments/Planned Programs Subtotals	8.491	8.757	8.823

C. Other Program Funding Summary ($ in Millions)

N/A

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D. Acquisition Strategy

N/A

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.

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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
984: *Major Developmental Testing Instrumentation*	25.064	31.551	21.615	-	21.615	23.990	28.161	29.980	26.493	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project develops and acquires major test instrumentation to perform developmental testing of weapon systems at U. S. Army Test and Evaluation Command's (ATEC) activities which include: Yuma Test Center (YTC), AZ; Aberdeen Test Center (ATC), MD; Electronic Proving Ground (EPG), AZ; White Sands Test Center (WSTC), NM; Redstone Test Center (RTC), AL.

Projects are designated as a major test program based on their visibility, assessed relative technical risk (medium-high), schedule risk, cost (generally greater than $1 Million per year or $5 Million for the total project) and applicability to other mission areas or services. These projects are technically demanding, state-of-the-art, unique instrumentation assets or suites to meet the technology shortfalls, and generally result from development programs managed by a professional project management team.

Fiber Optic Network II (FON II) is the installation of digital fiber optic cable and transmission electronics to modernize secure and expand the backbone telecommunication and data transmission network in support of Aberdeen Test Center. Systems Test and Integration Laboratory (STIL) is the development of a systems integration and test lab for use in developmental testing and integration engineering, including a virtual test environment to support integration testing of aviation electronic systems as a part of modernization of army aircraft. Advanced Distributed Modular Acquisition System (ADMAS) Product Improvement Program (PIP) develops very small and low power pocket sized ADMAS systems which will extend the Versatile Information Systems Integrated Online system's (VISION) capabilities to support dismounted and small robotic platforms. Range Radar Replacement Program (RRRP) will replace obsolete tracking radars at Redstone Test Center (RTC), Aberdeen Test Center (ATC), Electronic Proving Ground (EPG), White Sands Missile Range (WSMR) and Yuma Proving Ground (YPG) with modern instrumentation radars. CRIIS Objective Program provides precision location instrumentation which will significantly increase the T&E ranges' capability to meet the test instrumentation needs of the tri-service range users. Electromagnetic Environmental Effects (E3) Electromagnetic Radiation Effects (EMRE) Systems Modernization will upgrade equipment at the WSMR EMRE site where E3 testing is performed to evaluate survivability and vulnerability of military systems. Project will upgrade and replace signal transmitters, refurbish an anechoic test chamber, replace data acquisition equipment and install a new turntable to support test items.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Fiber Optic Network II (FON II) - Aberdeen Test Center (ATC)	6.813	2.370	-
Articles:	0	0	
Description: Continue EMD phase contract activities for the Fiber Optic Network II (FON II) - Aberdeen Test Center (ATC).			
FY 2011 Accomplishments:			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continued EMD for the Fiber Optic Network II (FON II) - Aberdeen Test Center (ATC). Continued installation of digital fiber optic cable and transmission electronics to modernize, secure and expand the backbone telecommunication and data transmission network in support of Aberdeen Test Center. ***FY 2012 Plans:*** Completes EMD for the Fiber Optic Network II (FON II) - Aberdeen Test Center (ATC). Completes installation of digital fiber optic cable and transmission electronics to modernize, secure and expand the backbone telecommunication and data transmission network in support of Aberdeen Test Center.			
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Systems Test and Integration Laboratory (STIL). ***Articles:*** ***Description:*** Continue EMD phase contract activities for the Systems Test and Integration Laboratory (STIL). ***FY 2011 Accomplishments:*** Continued EMD for the Systems Test and Integration Laboratory (STIL) for use in developmental testing and integration engineering, including a virtual test environment to support integration testing of aviation electronic systems as a part of modernization of army aircraft. ***FY 2012 Plans:*** Continues EMD for the Systems Test and Integration Laboratory (STIL) for use in developmental testing and integration engineering, including a virtual test environment to support integration testing of aviation electronic systems as a part of modernization of army aircraft. ***FY 2013 Plans:*** Will continue EMD for the Systems Test and Integration Laboratory (STIL) for use in developmental testing and integration engineering, including a virtual test environment to support integration testing of aviation electronic systems as a part of modernization of army aircraft.	3.883 0	3.966 0	5.940
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Advanced Distributed Modular Acquisition System (ADMAS). ***Articles:*** ***Description:*** EMD phase contract activities for the Advanced Distributed Modular Acquisition System (ADMAS) Product Improvement Program (PIP). ***FY 2011 Accomplishments:***	3.530 0	1.715 0	-

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continued EMD for the Advanced Distributed Modular Acquisition System (ADMAS) Product Improvement Program (PIP). Continued the development of very small and low power pocket sized ADMAS systems. ADMAS PIP continued expansion of the current ADMAS Instrumentation Suite, comprised of the Macro and Micro ADMAS. The expansion included updates to the existing hardware and software of current suite, plus the development of two new devices (Nano and Pico ADMAS). ***FY 2012 Plans:*** Completes EMD for the Advanced Distributed Modular Acquisition System (ADMAS) Product Improvement Program (PIP). Completes the development of very small and low power pocket sized ADMAS systems. ADMAS PIP completes expansion of the current ADMAS Instrumentation Suite, comprised of the Macro and Micro ADMAS. The expansion includes updates to the existing hardware and software of current suite, plus the development of two new devices (Nano and Pico ADMAS).			
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Range Radar Replacement Program. ***Articles:*** ***Description:*** EMD phase contract activities for the Range Radar Replacement Program. ***FY 2011 Accomplishments:*** Continued EMD for the Range Radar Replacement Program. Continued the upgrade or replacement of obsolete tracking and surveillance radars at EPG, WSMR and YPG with modern digital equipment. ***FY 2012 Plans:*** Continues Engineering Manufacturing Development (EMD) for the Range Radar Replacement Program for the Fly-out and Close-in Radars systems in preparation for replacement of equipment at Aberdeen Test Center (ATC), Redstone Test Center (RTC), White Sands Test Center (WSTC) and Yuma Test Center (YTC). ***FY 2013 Plans:*** Will continue Engineering Manufacturing Development (EMD) for the Range Radar Replacement Program for the Fly-out and Close-in Radars systems in preparation for replacement of equipment at Aberdeen Test Center (ATC), Redstone Test Center (RTC), White Sands Test Center (WSTC) and Yuma Test Center (YTC).	10.838 0	17.428 0	15.675
Title: Engineering and Manufacturing Development (EMD) phase contract activity of the Common Range Integrated Instrumentation System (CRIIS) Objective Program. ***Articles:*** ***Description:*** Starts EMD phase contract activities of the Common Range Integrated Instrumentation System (CRIIS) Objective Program. ***FY 2012 Plans:***	- -	0.280 0	-

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Starts EMD of the Common Range Integrated Instrumentation System (CRIIS) Objective Program. This is a replacement system for the Advanced Range Data System (ARDS). This system will meet the critical need for measuring the precision location of units under test within the Time-Space domain. It provides a significant increase to the Test & Evaluation ranges' capability to meet the test instrumentation needs of the tri-service range users. The improvements are data link, TSPI accuracy, miniaturization, standard interfaces, and system encryption.			
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the E3 Systems Modernization (EMRE) project. ***Articles:*** ***Description:*** EMD phase contract activities for the E3 Systems Modernization (EMRE) project. ***FY 2012 Plans:*** Starts EMD for the E3 Systems Modernization (EMRE). Project will upgrade and replace signal transmitters, refurbish an anechoic test chamber, replace data acquisition equipment and install a new turntable to support test items.	-	5.792 0	-
Accomplishments/Planned Programs Subtotals	25.064	31.551	21.615

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

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.

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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
986: *Major Operational Test Instrumentation*	7.116	9.051	6.956	-	6.956	7.426	7.914	9.786	10.318	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Major Instrumentation and Modeling and Simulation (M&S) in Support of Network Integration Test will develop Major Instrumentation and M&S efforts in support of Network Integration Test related to limited fiber upgrade for White Sands Missile Range (WSMR), additional common data collection devices, and updated, Army Test and Evaluation Command (ATEC)-wide, distributed data storage, analyses software, and tools. In addition, develop and field a Real-Time, Hardware-in-the-Loop, M&S Federation, which can be accredited and portray Blue and Threat Computer Network Device (CND) and Controller Area Network (CAN) will begin in FY12.

Test and Training Common Technology Initiative, Network, Real Time Casualty Assessment (RTCA), Data Collection and After Action Review (AAR) will develop and sustain Army Test and Training Instrumentation Test Bed, support Trade-Off Studies, Development of Common Standards, Analysis of Alternatives, Cost Benefit Analyses, Test Technology Demonstrations and/or Technology Readiness Events. This capability will also provide risk reduction to future developed assets required to meet test and training needs. These tools will collect, store and analyze data from this new dimension of digital battlefield warfare. This effort responds to the current Operations Tempo (OPTEMPO) and Personnel Tempo (PERSTEMPO) demands to force the U.S. Army to conduct more realistic, more accurate, and comprehensive evaluations at reduced costs by virtually replicating a greater number of troop resources in force-on-force testing and training exercises.

Operational Test Command (OTC) Advanced Simulation & Instrumentation Systems (OASIS) Enterprise Integration System (EIS) supports the OTC simulation and test support capabilities. Operational testing of enterprise/systems of systems (SoS) capabilities requires an integrated test technology tools enterprise: 1) Test Planning & Control systems / networks, 2) Live-virtual-constructive (LVC) simulations, 3) Data Collection, Reduction, Analysis (DCRA), and visualization tools and 4) tactical systems and networks. The OASIS-EIS will support test tool integration in three major areas: 1) harmonize OT test technology integration with other acquisition efforts (RTCA, networks, data collection) at the ATEC level, 2) transition Battle Command Network Integration Simulation (BCNIS) program management to PEO-STRI (PM-ITTS) to support leverage by other PEO STRI and ATEC offices (initially TSMO, EPG and RTC), and 3) develop an ATEC and PEO-STRI program to achieve efficiencies and cost savings through shared development and enhancement of key simulation (primarily gaming, virtual, and constructive), and LVC integration capabilities. Initial focus for shared simulation/LVC enablers will be in the area of network, fires and ISR simulations and LVC architecture planning, engineering and integration tools.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Operational Test-Tactical Engagement System (OT-TES).	6.400	-	-
Articles:	0		
Description: Complete EMD phase contract activities for OT-TES.			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: Completed EMD for the development of hardware, software, interfaces, and new capabilities to ensure the Real-Time Casualty Assessment (RTCA) requirements for upcoming operational tests are supported. Developed efforts that will initially be directed toward OT-TES; Development efforts include: Integration with New Tactical Systems Under Test, Integration with Live, Virtual, and Constructive Simulation environments, RTCA Capabilities for Active Protection Systems and Countermeasures, RTCA Capabilities for Communications/Sensor Kills and Degradations.			
Title: Engineering and Manufacturing Development (EMD) phase contract activity for the Operational Test Command (OTC) Analytic Simulation and Instrumentation Suite (OASIS) Enterprise Integration Solution.	0.716	0.761	0.786
Articles:	0	0	
Description: EMD phase contract activities for the Operational Test Command (OTC) Analytic Simulation and Instrumentation Suite (OASIS) Enterprise Integration System (EIS).			
FY 2011 Accomplishments: Continued EMD for the Operational Test Command (OTC) Analytic Simulation and Instrumentation Suite (OASIS) Enterprise Integration System (EIS).			
FY 2012 Plans: Continues EMD by developing Operational Test Command (OTC) Analytic Simulation and Instrumentation Suite (OASIS) Enterprise Integration System (EIS). Funding provides the connecting infrastructure within the enterprise to create a comprehensive operational testing Live-Virtual-Constructive (LVC) environment which also enables and supports test control, and data collection, reduction and analysis (DCRA). Developing and delivering capabilities that are necessary to adequately support evaluation of emerging systems. Systems will lack the capabilities needed to collect test data during operational tests to provide an adequate level of confidence. Without the necessary data, evaluations of Army systems will be inaccurate and incomplete. Testing of complex systems is too expensive, and augmentation of system under test and ensuring confidence in the test is the only cost effective method. Systems may include, Network Integration Event (NIE) (13.1, 13.2), Defense Common Ground Station-Army (DGCS-A), Warfighter Information Network (WIN-T), Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS).			
FY 2013 Plans: Continues EMD by developing Operational Test Command (OTC) Analytic Simulation and Instrumentation Suite (OASIS) Enterprise Integration System (EIS). Funding supports integration of Federation members by OASIS EIS into a LVC environment to support OTC's operational testing support requirements for Network Integration Event (NIE) (13.1, 13.2), Defense Common			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Ground Station-Army (DGCS-A), Warfighter Information Network (WIN-T), Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS).			
Title: Major Instrumentation and Modeling and Simulation (M&S) in Support of Network Integration Test ***Articles:*** ***Description:*** Develop Major Instrumentation and Modeling and Simulation (M&S) efforts in support of Network Integration Test. In addition, develop and field a Real-Time, Hardware-in-the-Loop, M&S Federation, which can be accredited and portray Blue and Threat Computer Network Device (CND) and Controller Area Network (CAN) ***FY 2012 Plans:*** Begin development of Major Instrumentation and Modeling and Simulation (M&S) efforts in support of Network Integration Test related to limited fiber upgrade for White Sands Missile Range (WSMR). ***FY 2013 Plans:*** Will continue to fund critical Major Instrumentation and M&S efforts in support of Network Integration Test related to limited fiber upgrade for WSMR, additional NetADMAS Production, and will update, Army Test and Evaluation Command (ATEC)-wide, will distribute data storage, analyses software and tools.	-	5.000 0	5.000
Title: Test and Training Common Technology Initiative; Network, Real Time Casualty Assessment (RTCA), Data Collection and After Action Review (AAR) ***Articles:*** ***Description:*** Develop and sustain Army Test and Training Instrumentation Test Bed. This capability will also provide risk reduction to future developed assets required to meet test and training needs. These tools will collect, store and analyze data from this new dimension of digital battlefield warfare. ***FY 2012 Plans:*** Begin to develop and sustain Army Test and Training Instrumentation Test Bed, support Trade-Off Studies, development of Common Standards, Analysis of Alternatives, Cost Benefit Analyses, and Test Technology Demonstrations or Technology Readiness Events. ***FY 2013 Plans:*** Will continue to support Trade-Off Studies, Analysis of Trade-Off Studies, Analysis of Alternatives, Cost Benefit Analyses, Test Technology Demonstrations or Technology Readiness Events to ensure the requirements and performance specifications for emerging/future instrumentation and tactical engagement simulation systems meet the needs of the operational test and	-	3.290 0	1.170

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
evaluation community. The initiative will also help develop and sustain an Army Test and Training Instrumentation Test Bed, as well as increase the rigor of testing, to ensure that proposed solutions fulfill those requirements and thus will reduce risk.			
Accomplishments/Planned Programs Subtotals	7.116	9.051	6.956

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

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.