Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	8.453	9.892	22.922	-	22.922	10.023	10.254	6.835	6.915	Continuing	Continuing
586: *AIR TRAFFIC CONTROL*	8.453	9.892	22.922	-	22.922	10.023	10.254	6.835	6.915	Continuing	Continuing

Note

FY 12 - Funding increased $9577K for ATNAVICS Modernization and $1344 for Advanced Surveillance
FY 10 - Reflects +304K OMNIBUS reprogramming for Afghanistan Mission Network; +835K below threshold reprogramming

A. Mission Description and Budget Item Justification

This program element (PE) funds continuous efforts in the development of modernized tactical and fixed base Air Traffic Control (ATC) systems that will enable safety of aircraft landings in both the tactical and strategic ATC domains. ATC systems are required to achieve or maintain compliance with civil, military, domestic and international air traffic control and combat identification requirements and mandates. Funding will be utilized to develop, evaluate and integrate candidate technology mandates. Funded in this program element is the development of the Tactical Airspace Integration System (TAIS) Web Based Architecture and Airspace Improvements Initiative, Advanced Surveillance, Air Traffic Navigation Integration and Coordination System (ATNAVICS) modernization, Mobile Tower System (MOTS), Tactical Terminal Control System (TTCS) Pre-Planned Product Improvements (P3I), Fixed Base Precision Approach Radar (FBPAR) P3I, and maintenance monitoring. ATNAVICS provides all weather instrument flight capabilities to include terminal, radar precision approach and landing services to all Army, Joint, and allied aircraft. The MOTS is a tactical mobile tower designed to meet the deployability and communication requirements of the current to future force. TAIS develops software and required hardware for airspace management web services, to operate effectively in a dynamic net-centric interconnected environment. TAIS also integrates advanced surveillance interfaces to further enhance airspace integration and dynamic management capabilities. FBPAR is the Army's primary ground controlled precision approach capability to provide recovery operations for aircraft to fixed base airfields during adverse weather conditions. TTCS provides enhanced Air Traffic Services (ATS) communications support to aviation assets conducting reconnaissance, maneuver, medical evacuation, logistics, and intelligence operations across the battlefield. Maintenance monitoring is a remote maintenance capability for ATC systems.

Funded project improvements to ATC systems, including the TAIS and ATNAVICS, will align these programs with advanced networking, communications and interoperability goals, and provide compatibility with the Army Aviation aircraft and avionics upgrade programs including military (Global Air Traffic Management) and civil initiatives (Next Gen). In a networked battlefield, joint service systems and radars provide operational data to ATC missions assuming a communications infrastructure and data processing capability is embedded in ATC systems. ATC systems control and maintain information relevant to higher level organizations or other external systems; advanced networks and communications allow such information to be transmitted, to include aircraft positional information, weather data, landing surface conditions, airspace density, airspace control orders, restricted airspace, and flight plan data. As the Department of Defense transitions military aircraft to positional self-reporting technologies, these various technologies will be demonstrated and tested prior to integration into the ATC systems. Advanced surveillance relies on aircraft self-reporting technologies which include Automatic Dependent Surveillance Broadcast (ADS-B), Mode 5 and Mode S. Initial testing and integration of these systems are foundational to Advanced Surveillance to increase ATC systems availability to detect, manage, and disseminate aircraft information. ATNAVICS will network its advanced surveillance data (Mode 5 and Mode S) to aviation and joint network nodes. TAIS, the Airspace Management System of the Army Battle Command System (ABCS), requires the development and testing of web-based services for Airspace Command and Control (AC2) and ATS, and integration of these

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*

new web-based services into a common Army Battle Command hardware, ATS and Airspace Integration Improvement Initiatives (AI3) through advanced surveillance interfaces, mission planning interfaces, and providing TAIS dynamic airspace updates to the cockpit. TAIS RDTE also includes separate TAIS P3I efforts in FY12/13, FY 15 and FY 17. TAIS P3I include developing and testing improvements to the air picture adding unmanned aircraft positions cooperative self-reporting aircraft . To facilitate increased maintenance and system support, a remote maintenance capability will be developed for robust maintenance and troubleshooting. FBPAR includes upgrading computer capability. TTCS P3I includes enhanced survivability and capability for situational awareness through Force XXI Battle Command, Brigade-and-Below (FBCB2) and interoperability with TAIS.

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	7.538	9.892	12.001	-	12.001
Current President's Budget	8.453	9.892	22.922	-	22.922
Total Adjustments	0.915	-	10.921	-	10.921
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	1.139	-			
• SBIR/STTR Transfer	-0.225	-			
• Adjustments to Budget Years	-	-	10.921	-	10.921
• Other Adjustments 1	0.001	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
586: *AIR TRAFFIC CONTROL*	8.453	9.892	22.922	-	22.922	10.023	10.254	6.835	6.915	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project funds continuous efforts in the development of modernized tactical and fixed base Air Traffic Control (ATC) systems that will enable safety of aircraft landings in both the tactical and strategic ATC domains. ATC systems are required to achieve or maintain compliance with civil, military, domestic and international air traffic control and combat identification requirements and mandates. Funding will be utilized to develop, evaluate and integrate candidate technology mandates. Funded in this program element is the development of the Tactical Airspace Integration System (TAIS) Web Based Architecture and Airspace Improvements Initiative, Advanced Surveillance, Air Traffic Navigation Integration and Coordination System (ATNAVICS) modernization, Mobile Tower System (MOTS), Tactical Terminal Control System (TTCS) Pre-Planned Product Improvements (P3I), Fixed Base Precision Approach Radar (FBPAR) P3I, and maintenance monitoring. ATNAVICS provides all weather instrument flight capabilities to include enroute, terminal, radar precision approach and landing services to all Army, Joint, and allied aircraft. The MOTS is a tactical mobile tower designed to meet the deployability and communication requirements of the current to future force. TAIS develops software and required hardware for airspace management web services, to operate effectively in a dynamic net-centric interconnected environment. TAIS also integrates advanced surveillance interfaces to further enhance airspace integration and dynamic management capabilities. FBPAR is the Army's primary ground controlled precision approach capability to provide recovery operations for aircraft to fixed base airfields during adverse weather conditions. TTCS provides enhanced Air Traffic Services (ATS) communications support to aviation assets conducting reconnaissance, maneuver, medical evacuation, logistics, and intelligence operations across the battlefield. Maintenance monitoring is a remote maintenance capability for ATC systems.

Funded project improvements to ATC systems, including the TAIS and ATNAVICS, will align these programs with advanced networking, communications and interoperability goals, and provide compatibility with the Army Aviation aircraft and avionics upgrade programs including military (Global Air Traffic Management) and civil initiatives (Next Gen). In a networked battlefield, joint service systems and radars provide operational data to ATC missions assuming a communications infrastructure and data processing capability is embedded in ATC systems. ATC systems control and maintain information relevant to higher level organizations or other external systems; advanced networks and communications allow such information to be transmitted, to include aircraft positional information, weather data, landing surface conditions, airspace density, airspace control orders, restricted airspace, and flight plan data. As the Department of Defense transitions military aircraft to positional self-reporting technologies. These various technologies will be demonstrated and tested prior to integration into the ATC systems. Advanced surveillance relies on aircraft self-reporting technologies which include Automatic Dependent Surveillance Broadcast (ADS-B), Mode 5 and Mode S. Initial testing and integration of these systems are foundational to Advanced Surveillance to increase ATC systems availability to detect, manage, and disseminate aircraft information. ATNAVICS will network its advanced surveillance data (Mode 5 and Mode S) to aviation and joint network nodes. TAIS, the Airspace Management System of the Army Battle Command System (ABCS), requires the development and testing of web-based services for Airspace Command and Control (AC2) and ATS, and integration of these new web-based services into a common Army Battle Command hardware, ATS and Airspace Integration Improvement Initiatives (AI3) through advanced surveillance interfaces, mission planning interfaces, and providing TAIS dynamic airspace updates to the cockpit. TAIS RDTE also includes separate TAIS P3I efforts in FY12/13, FY 15 and FY 17. TAIS P3I include, but are not limited to, developing and testing improvements to the air picture adding unmanned aircraft positions cooperative self-reporting aircraft . To facilitate increased maintenance and system support, a remote maintenance capability will be developed for robust maintenance and

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*

troubleshooting. FBPAR includes upgrading computer capability. TTCS P3I includes enhanced survivability and capability for situational awareness through Force XXI Battle Command, Brigade-and-Below (FBCB2) and interoperability with TAIS.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Mobile Tower System (MOTS) System Development, Demonstration & Testing	3.388	-	-
Articles:	0		
Description: The MOTS is a tactical mobile tower designed to meet the deployability and communication requirements of the current to future force.			
FY 2010 Accomplishments: Completes developmental testing to include transportability and handling testing, environmental, operational and storage testing, high altitude electromagnetic pulse testing, and system communications performance testing.			
Title: Tactical Airspace Integration System (TAIS) Native New Web Services Dev (AVN BOS)	3.409	5.000	4.127
Articles:	0	0	
Description: TAIS develops software and required hardware for airspace management web services to operate effectively in a dynamic net-centric interconnected environment. TAIS also integrates advanced surveillance interfaces to further enhance a dynamic airspace management capability.			
FY 2010 Accomplishments: Design and Develop TAIS service oriented architecture and web services in support of Airspace Command and Control (AC2) and Airspace Information Center (AIC) missions. These services will support airspace deconfliction and flight information and advisories.			
FY 2011 Plans: Design and Develop TAIS service oriented architecture and web services in support of Airspace Command and Control (AC2) and Airspace Information Center (AIC) missions. Continue development of airspace deconflict and flight information/advisory capabilities. Develop improved situational awareness and rapid clearance of fires capabilities.			
FY 2012 Plans: Design and Develop TAIS service oriented architecture and web services in support of Airspace Command and Control (AC2) and Airspace Information Center (AIC) missions. Continue development of airspace deconflict, flight information / advisory, situational awareness, and rapid clearance of fires capabilities. Develop advanced conflict detection capabilities such as Nuclear, Biological, Chemical Radiation (NBCR) conflict detection and aircraft safe altitude service.			
Title: TAIS P3I	0.500	-	3.300
Articles:	0		

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Description: TAIS P3I efforts are required to develop and test improvements to the air picture adding unmanned aircraft positions. ***FY 2010 Accomplishments:*** Develop improvements to TAIS air picture and situational awareness by providing capability to share airspace graphics and alerts with aircraft and UAS ground station cockpits. Conduct spiral development activities with coalition partners to provide interoperability of TAIS with NATO/coalition Battle Command systems to rapidly clear airspace. ***FY 2012 Plans:*** Develop improvements to TAIS air picture by adding the capability to view Blue Force Tracker-Aviation (BFT-A) air tracks that are integrated into the TAIS display. Continue development of situational awareness to the cockpit capabilities. Continue spiral development activities with coalition partners to enhance TAIS capability to deconflict airspace in a NATO/coalition environment.			
Title: Air Traffic Navigation Integration and Coordination System (ATNAVICS) Modernization ***Articles:*** ***Description:*** ATNAVICS is a highly mobile tactical area surveillance and precision approach air traffic control system. It provides the Joint Force Commander (JFC), or Combatant Commander (CCDR), with a mobile, self-contained, and reliable Airport Surveillance Radar (ASR), Precision Approach Radar (PAR), and a Secondary Surveillance Radar (SSR) capability. ***FY 2011 Plans:*** Begin Future Battle Command, Brigade and Below (FBCB2)/Blue Force Tracker integration ***FY 2012 Plans:*** Begin integration of the TPX-57 transponder permitting international standard Mode 5 and Mode S compatibility of the ATNAVICS system	-	0.200 0	13.000
Title: Advanced Surveillance ***Articles:*** ***Description:*** Advanced Surveillance technologies integration supports the non-recurring engineering, integration and test tasks required to incorporate the passive reception of self reporting technologies into Air Traffic Control programs. These Advanced Surveillance technologies include Advanced Dependent Surveillance-Broadcast (ADSB) as well as Mode 5 Level 2, Mode S and similar self reporting technologies. ***FY 2011 Plans:***	-	1.393 0	1.344

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Supports the integration of passive reception devices into a single engineering and development asset; the development of engineering release software to utilize these technologies; and then the test of these integrated technologies in a live fly field experiment. The associated documentation, analysis and integration data developed here will accelerate the technology maturization process and can then be directly leveraged to support future block upgrade activities. ***FY 2012 Plans:*** Supports continuing non-recurring engineering, integration and test tasks required to incorporate the passive reception of self reporting technologies in PM ATC programs of record. These Advanced Surveillance technologies include ADSB as well as Mode 5 Level 2, Mode S and similar self reporting technologies. Supports the continued software development to utilize these technologies; and then the test of these integrated technologies in a live fly field experiment. The associated documentation, analysis and integration data developed here will accelerate the technology maturization process and can then be directly leveraged to support future block upgrade activities.			
Title: TAIS Battle Command (BC) Collapse ***Articles:*** ***Description:*** TAIS BC Collapse efforts are required to develop conflict detection services and BC Thin Client collaboration web services that interface with the BC Collapse environment. ***FY 2011 Plans:*** Develop second phase of the Dynamic Airspace Collaboration Tool (DACT) to operate on the BC Thin Client. Develop airspace control means and conflict detection services on the BC Central Repository.	-	2.039 0	-
Title: Tactical Terminal Control System (TTCS) ***Articles:*** ***Description:*** TTCS provides enhanced Air Traffic Services communications support to aviation assets conducting reconnaissance, maneuver, medical evacuation, logistics, and intelligence operations across the battlefield. ***FY 2011 Plans:*** Complete closeout of the Up-Armor Non-Recurring Engineering (NRE) efforts. Perform Analysis of Alternatives (AoA)/Trade Study to determine how best to meet the DA survivability requirement for the future TTCS NRE effort. ***FY 2012 Plans:*** Provide TTCS technical support in refining system requirements and creating request for proposal. Perform proposal reviews and technical evaluations. Also, provide support for the competition process, negotiations, and award of contract.	-	0.472 0	0.209
Title: Tech and Log Support	0.826	0.678	0.829

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Articles:	0	0	
Description: Technical and logistics services in support of PM ATC. ***FY 2010 Accomplishments:*** Continue technical and logistic services in support of PM ATC. ***FY 2011 Plans:*** Continue technical and logistic services in support of PM ATC. ***FY 2012 Plans:*** Continue technical and logistic services in support of PM ATC.			
Title: Program Management Support	0.105	0.110	0.113
Articles:	0	0	
Description: Program Management Support of PM ATC. ***FY 2010 Accomplishments:*** Continue program management in support of PM ATC. ***FY 2011 Plans:*** Continue program management in support of PM ATC. ***FY 2012 Plans:*** Continue program management in support of PM ATC.			
Title: Small Business Innovative Research/ Small Business Technology Transfer Programs (SBIR/STRR)	0.225	-	-
Articles:	0		
Description: SBIR/STRR ***FY 2010 Accomplishments:*** SBIR/STRR			
Accomplishments/Planned Programs Subtotals	8.453	9.892	22.922

Exhibit R-2A, RDT&E Project Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• AA0050: *Air Traffic Control*	86.762	90.399	114.844		114.844		83.306	83.176	83.675	Continuing	Continuing

D. Acquisition Strategy

PM ATC will continue to embrace applicable new technology initiatives for the development of tactical and fixed base ATC equipment and the integration of new technology into existing systems. ATC systems are required to achieve or maintain compliance with civil, military, domestic and international air traffic control and upcoming Next Gen requirements and mandates. Funding will be utilized to develop, evaluate, and integrate required key technology and capability upgrades. Technology insertion will be acquired through contract modifications, engineering services tasks, and new/follow-on 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 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	PM ATC:Redstone Arsenal, AL	2.122	0.110		0.113		-		0.113	Continuing	Continuing	Continuing
SBIR/STTR	TBD	TBD:TBD	-	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	2.122	0.110		0.113		-		0.113			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MOTS System Development and Demo	C/CPFF	Sierra Nevada Corp:Sierra, NV	28.951	-		-		-		-	Continuing	Continuing	0.000
MOTS Systems Development Support	Various	AMCOM and ATEC:Various	0.891	-		-		-		-	Continuing	Continuing	0.000
MOTS Contracted Services	C/CPFF	AMCOM:Huntsville, AL	0.930	-		-		-		-	Continuing	Continuing	0.000
ATNAVICS Modernization	SS/CPFF	Raytheon:Marlboro, Mass	-	0.200		13.000		-		13.000	Continuing	Continuing	Continuing
Advanced Surveillance	Various	Various:Various	-	1.393		1.344		-		1.344	Continuing	Continuing	Continuing
TAIS P3I	SS/CPFF	General Dynamics C4S:Huntsville, AL	0.691	-		3.300		-		3.300	Continuing	Continuing	Continuing
Tactical Terminal Control System (TTCS)	Various	Various:Various	-	0.472		0.209		-		0.209	Continuing	Continuing	Continuing
TAIS Battle Command Collapse	SS/CPFF	General Dynamics C4S:Huntsville, AL	-	2.039		-		-		-	Continuing	Continuing	Continuing
Tech and Log Development Support	Various	PM ATC:Huntsville, AL	2.376	0.678		0.829		-		0.829	Continuing	Continuing	Continuing
TAIS Native New Web Services Dev (AVN BOS) (Formerly BC Migration)	SS/CPFF	General Dynamics C4S:Huntsville, AL	5.224	5.000		4.127		-		4.127	Continuing	Continuing	Continuing
		Subtotal	39.063	9.782		22.809		-		22.809			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Army			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MOTS Prototype Testing	Various	Various:Various	3.709	-		-		-		-	Continuing	Continuing	0.000
		Subtotal	3.709	-		-		-		-			0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	44.894	9.892		22.922		-		22.922			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604633A: *AIR TRAFFIC CONTROL*	PROJECT 586: *AIR TRAFFIC CONTROL*

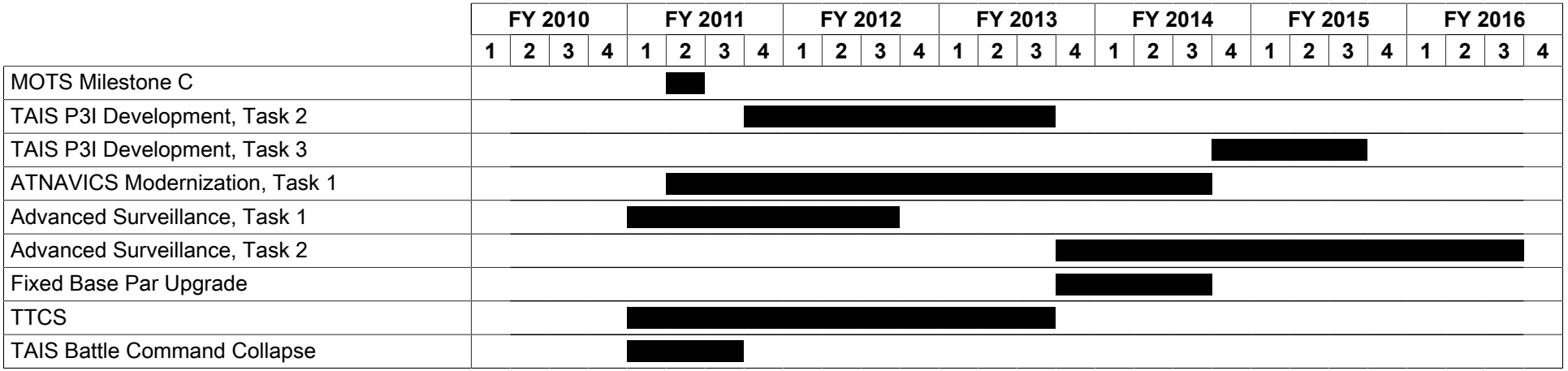

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604633A: *AIR TRAFFIC CONTROL*	**PROJECT** 586: *AIR TRAFFIC CONTROL*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
MOTS Milestone C	2	2011	2	2011
TAIS P3I Development, Task 2	4	2011	3	2013
TAIS P3I Development, Task 3	4	2014	3	2015
ATNAVICS Modernization, Task 1	2	2011	3	2014
Advanced Surveillance, Task 1	1	2011	3	2012
Advanced Surveillance, Task 2	4	2013	3	2016
Fixed Base Par Upgrade	4	2013	3	2014
TTCS	1	2011	3	2013
TAIS Battle Command Collapse	1	2011	3	2011