Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*							
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	48.616	58.313	3.954	-	3.954	7.212	3.129	0.559	0.569	Continuing	Continuing
67485L: *Theater Air Control System Imp (TACSI)*	3.697	9.614	3.954	-	3.954	7.212	3.129	0.559	0.569	Continuing	Continuing
675294: *Theater Air Control System Improvement - Radar (TACSI-R)*	44.919	48.699	-	-	-	-	-	-	-	Continuing	Continuing

Note

In FY 2012, BPAC 675294, Theater Control System Improvement-Radar (TACSI-R) efforts transfer to PE 0604283F, Battle Management Command & Control (BMC2) Sensor Development, BPAC 646002, Three Dimensional Expeditionary Long Range Radar in order to provide this pre-Major Defense Acquisition Program its own Program Element.

A. Mission Description and Budget Item Justification

This budget activity funds development of mobile ground-based command and control (C2) capabilities of the Control and Reporting Center (CRC) program. The CRC is identified as a component of the Integrated Air Missile Defense Family of Systems that defends the Homeland and US national interests at home and abroad by negating an adversary's ability to achieve adverse effects from their air and missile capabilities. The CRC mission is to provide battlespace awareness and tactical battle management command and control (BMC2) in an assigned area. It is a ground-based theater air control system (TACS) surveillance and BMC2 element. It consists of facilities, equipment, and people and is a tailorable, modular, transportable, sustainable and persistent weapon system employed at the tactical level to support air and surface operations. Currently, the CRCs are fully employed in Operations IRAQI FREEDOM, ENDURING FREEDOM, and NOBLE EAGLE. The CRC projects include development and modernization of Theater Air Control Systems Improvement (TACSI) capabilities and the Three-Dimensional Expeditionary Long-Range Radar (3DELRR). TACSI efforts include, but are not limited to the AN/TYQ-23 Operations Module (OM), AN/TPS-75 Long-Range Surveillance Radar and the AN/TRC-215 Remote Radio Secure Voice System (RRSVS) that may be tasked across the full range of military operations. AN/TYQ-23 OM is a low source/high demand (LS/HD) deployable ground-based C2 asset. This automated, computer-based information system provides operators the real-time battlespace visualization necessary to plan, direct, and control tactical air operations and airspace management tasks. AN/TRC-215 RRSVS is a mobile, vehicle-mounted voice radio and OM-interface unit. The RRSVS allows real-time, secure voice communication between aircraft operating in the battlespace and ground-based BMC2 operators located in the OM of the CRC. The AN/TRC-215 is typically deployed to a remote area which can extend the CRCs radio coverage beyond line of sight (BLOS) using organic SATCOM capabilities. The 3DELRR program is developing a replacement for the current legacy AN/TPS-75 radar. 3DELRR will be the principal USAF long-range, ground-based sensor for detecting, identifying, tracking, and reporting aircraft and missiles in support of the Joint Forces Air Component Commander (JFACC) through the Ground Theater Air Control System (GTACS). The primary mission of the 3DELRR will be to provide long-range surveillance, control of aircraft, theater ballistic missile detection and Combat Identification (CID). The 3DELRR will respond to the operational need to detect and report highly maneuverable, small radar cross section targets to enable battlespace awareness while at the same time mitigating the reliability, maintainability, and sustainability issues plaguing the AN/TPS-75 radar system. Ongoing planning and associated activities will take place to prevent and overcome diminishing manufacturing sources and obsolescence issues as required.

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207412F: *Control and Reporting Center (CRC)*

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	52.177	58.313	64.815	-	64.815
Current President's Budget	48.616	58.313	3.954	-	3.954
Total Adjustments	-3.561	-	-60.861	-	-60.861
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-3.342	-			
• Other Adjustments	-0.219	-	-60.861	-	-60.861

Change Summary Explanation

The FY12 funding decrease is due to the 3DELRR program funding being moved into PE 0604283F, Battle Management Command & Control Sensor Development.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 67485L: *Theater Air Control System Imp (TACSI)*	

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
67485L: *Theater Air Control System Imp (TACSI)*	3.697	9.614	3.954	-	3.954	7.212	3.129	0.559	0.569	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Control and Reporting Center (CRC) program element provides development and modernization of mobile ground-based command and control (C2) capabilities. The CRC is a ground-based theater air control system (TACS) surveillance and battle management command and control (BMC2) element. It consists of facilities, equipment, and people. It is a tailorable, modular, transportable, sustainable, and persistent weapon system employed at the tactical level to support air and surface operations. The CRC projects include development of Theater Air Control Systems Improvement (TACSI) capabilities and the Three-Dimensional Expeditionary Long-Range Radar (3DELRR). Currently USAF CRCs are fully employed in Operations IRAQI FREEDOM, ENDURING FREEDOM, and NOBLE EAGLE. The TACSI project develops and modernizes software and hardware to make the CRC a viable BMC2 element. These efforts include, but are not limited to, the development and modernization of the AN/TYQ-23 Operations Module (OM) and the AN/TRC-215 Remote Radio Secure Voice System (RRSVS). AN/TYQ-23 OM is a low source/high demand (LS/HD) rapidly deployable ground-based C2 asset. This automated, computer-based information system provides operators the real-time battlespace picture necessary to plan, direct, and control tactical air operations and airspace management tasks. AN/TRC-215 RRSVS is a mobile, vehicle-mounted voice radio and OM-interface unit. The RRSVS allows real-time, secure voice communication between aircraft operating in the battlespace and ground-based battle management C2 operators located in the OM of the CRC. OMs and RRSVS units are currently deployed world-wide in support of ongoing operations. In the absence of a replacement C2 system, Service Life Extension Program (SLEP) efforts to provide capability upgrades/improvements such as associated Mode 5 passive and/or active Identify Friend or Foe (IFF), are being developed for the CRC. Beginning in FY12, activities will include, but not be limited to, studies, analysis, design and prototype, documentation, testing, and production to support both current program planning and execution and future program planning. This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Continue upgrades to CRC	2.756	8.502	3.137	-	3.137
Description: Continue upgrades to CRC to include advanced planning, Modular Control System (MCS) upgrades, enhanced radio/radar/data link remoting, integrating upgrades into CRC, and AN/TPS-75 sensor replacement/upgrade.					
FY 2010 Accomplishments:					

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 67485L: *Theater Air Control System Imp (TACSI)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Continued development of remote HF and SATCOM radio software to provide operators ability to remotely control radios in RRSVS; conducted Radio Replacement Study; continued development of AN/TYQ-23 V5 SLEP Prototype, initial integration & drawing package. ***FY 2011 Plans:*** Continuing development & delivery of software upgrades to RRSVS to include, but not limited to, develop designs for next increment of RRSVS & redesign remote control terminal and server software to operate on a Linux based operating system; continuing development & delivery of AN/TYQ-23 V5 SLEP Prototype and redline drawing package; developing initial Mode 5 prototype to include, but not limited to, design of implementation of UPX-41C interrogator replacement to AN/TPS-75 Radar. ***FY 2012 Base Plans:*** Will upgrade AN/TPS-75 to Mode 5 Design: will prepare design to incorporate upgraded UPX-41C interrogator to AN/TPS-75. ***FY 2012 OCO Plans:***					
Title: Test Planning ***Description:*** Test and evaluation support ***FY 2010 Accomplishments:*** Test and evaluation included, but was not limited to, formal information assurance (IA) and lab acceptance test, formal acceptance test, developmental testing of Remote HF and SATCOM radio software. ***FY 2011 Plans:*** Test and evaluation includes, but not limited to, prototype and feasibility testing of changes associated with new radios and transport technology upgrades for RRSVS; test activities for AN/TYQ-23 V5 SLEP Prototype. ***FY 2012 Base Plans:*** Test and evaluation will include, but not be limited to, testing changes of new radios and transport technology upgrades for RRSVS; test activities for radio interface with TYQ-23 Mode 5 or suitable CRC C2 Prototype. ***FY 2012 OCO Plans:***	0.466	0.496	0.397	-	0.397
Title: Sys Eng/Tech Support ***Description:*** Continue Systems Engineering/Technical Support	0.475	0.616	0.420	-	0.420

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 67485L: *Theater Air Control System Imp (TACSI)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2010 Accomplishments: Continued Systems Engineering/Technical Support ***FY 2011 Plans:*** Coninuing Systems Engineering/Technical Support. ***FY 2012 Base Plans:*** Will continue Systems Engineering/Technical Support. ***FY 2012 OCO Plans:***					
Accomplishments/Planned Programs Subtotals	3.697	9.614	3.954	-	3.954

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
• PE 0207412F: *Control and Reporting Center, (OPAF)*	22.459	20.231	22.813	0.000	22.813	31.383	27.385	21.953	22.345	Continuing	Continuing

D. Acquisition Strategy

The CRC program is utilizing spiral development to modernize and further advance current and future battlespace awareness and tactical BMC2 capabilities.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 67485L: *Theater Air Control System Imp (TACSI)*

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
Remote Radio Spiral 3	MIPR	AFRL:Rome, NY	0.525	0.550	Dec 2010	-		-		-	Continuing	Continuing	TBD
Remote Radio Spiral 3.2	MIPR	SPAWARSYSCEN Atlantic:North Charleston, SC	-	5.952	Dec 2010	-		-		-	0.000	5.952	0.000
Remote Radio Replacement Study	MIPR	SPAWARSYSCEN Atlantic:North Charleston, SC	0.188	-		-		-		-	0.000	0.188	0.000
Mode 5 Upgrade - A	TBD	ESC:Hanscom AFB, MA	-	0.300	Dec 2010	-		-		-	Continuing	Continuing	TBD
Mode 5 Upgrade - B	MIPR	NAWCAD:St Inigoes, MD	-	-		3.137	Dec 2011	-		3.137	0.000	3.137	0.000
Operations Modules (OMs) V5 Service Life Extension Program (SLEP) - A	SS/FFP	CSC:Falls Church, VA	0.198	-		-		-		-	0.000	0.198	0.000
Operations Modules (OMs) V5 Service Life Extension Program (SLEP) - B	PO	309th Maintenance Wing:Ogden ALC, UT	1.644	1.700	Feb 2011	-		-		-	0.000	3.344	0.000
CRC Technology Opportunities & Resource Study (TORS)	SS/TBD	Booz Allen Hamilton, Inc.:McLean, VA	0.201	-		-		-		-	0.000	0.201	0.300
		Subtotal	2.756	8.502		3.137		-		3.137			

Support ($ 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
Technical Support	TBD	Various:Various,	0.475	0.616	Dec 2010	0.420	Dec 2011	-		0.420	Continuing	Continuing	TBD
		Subtotal	0.475	0.616		0.420		-		0.420			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 67485L: *Theater Air Control System Imp (TACSI)*

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
46th Test Wing/Other Test Activity	Various	Various:Various,	0.466	0.496	Dec 2010	0.397	Nov 2011	-		0.397	0.000	1.359	0.591
		Subtotal	0.466	0.496		0.397		-		0.397	0.000	1.359	0.591

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
		Subtotal	-	-		-		-		-	0.000	0.000	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	3.697	9.614		3.954		-		3.954			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207412F: *Control and Reporting Center (CRC)*	**PROJECT** 67485L: *Theater Air Control System Imp (TACSI)*

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207412F: *Control and Reporting Center (CRC)*	**PROJECT** 67485L: *Theater Air Control System Imp (TACSI)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Remote Radio Spiral 3 Design/Development/Test	1	2010	2	2011
Remote Radio Spiral 3 Updates Fielding	3	2011	2	2012
Remote Radio - Radio Replacement Study	1	2010	1	2010
TRC 214 Spiral 4 Concept/Design/Development	1	2013	3	2013
TRC 214 Spiral 4 Developmental Testing	4	2013	4	2013
TRC 214 Spiral 4 Fielding	1	2014	4	2016
TRC 213 Spiral 3.2 Concept/Design/Development	1	2010	3	2012
TRC 213 Spiral 3.2 Developmental Testing	4	2012	4	2012
TRC 213 Spiral 3.2 Fielding	1	2013	4	2013
Mode 5 Acquisition Strategy Support	1	2011	4	2011
Mode 5 PDR	2	2012	2	2012
Mode 5 CDR	3	2012	3	2012
Mode 5 Developmental/Operational Testing	2	2014	3	2014
OM v(5) SLEP PDR	4	2010	4	2010
OM v(5) SLEP CDR	2	2011	2	2011
OM v(5) SLEP Developmental/Operational Testing	2	2012	2	2012

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*	

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
675294: *Theater Air Control System Improvement - Radar (TACSI-R)*	44.919	48.699	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

In FY 2012, BPAC 675294, Theater Control System Improvement-Radar (TACSI-R) efforts transferred to PE 0604283F, Battle Management Command & Control (BMC2) Sensor Development, BPAC 646002, Three Dimensional Expeditionary Long Range Radar in order to provide this pre-Major Defense Acquisition Program its own Program Element.

A. Mission Description and Budget Item Justification

The Three-Dimensional Expeditionary Long-Range Radar (3DELRR) program is developing a replacement for the current legacy AN/TPS-75 radar. 3DELRR will be the principal USAF long-range, ground-based sensor for detecting, identifying, tracking, and reporting aircraft and missiles in support of the Joint Forces Air Component Commander (JFACC) through the Ground Theater Air Control System (GTACS). The primary mission of the 3DELRR will be to provide long-range surveillance, control of aircraft, and theater ballistic missile detection and Combat Identification (CID). The 3DELRR will respond to the operational need to detect and report highly maneuverable, small radar cross section targets to enable battlespace awareness while at the same time mitigating the reliability, maintainability, and sustainability issues plaguing the AN/TPS-75 radar system. The 3DELRR will provide air controllers with a precise, real-time air picture of sufficient quality to conduct close control of individual aircraft under a wide range of environmental and operational conditions. In the case of theater missile defense operations, the 3DELRR will have the capability to detect, track, and disseminate target information to respective command and control nodes such as the Control and Reporting Center (CRC) to disseminate for warning and engagement. Similarly, the joint targeting process will benefit from trajectory information provided by the 3DELRR, which will include launch and impact location.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Technology Development (TD) and Program Definition and Risk Reduction (PDRR) ***Description:*** Technology development (TD) phase and Program Definition and Risk Reduction (PDRR) efforts associated with delivering a new long-range, ground-based sensor. ***FY 2010 Accomplishments:*** Continue the Technology Development (TD) Phase and risk reduction efforts of 3DELRR. Technical requirements will be baselined, and emphasis will shift to development and risk reduction work leading toward a mature system design. 3DELRR acquisition activities during this phase include, but are not limited to,	35.055	33.955	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
maturation of Critical Technology Elements (CTEs) to Technology Readiness Level (TRL) 6, performance-based trade studies, refinement of the Life Cycle Cost Estimate, test planning, modeling and simulation for requirements refinement, development of Milestone B documentation, analysis and identification of program risks, development and implementation of the program protection plan, adaptation and implementation of Open Technology Development (OTD) standards, and support of an independent 3DELRR Technology Readiness Assessment (TRA). ***FY 2011 Plans:*** Continue the Technology Development (TD) Phase and risk reduction efforts of 3DELRR. Activities include demonstration of Critical Technology Elements (CTEs) to Technology Readiness Level (TRL) 6, design options analyses, requirements refinement, identification and analyses of existing and emerging system threats, (including cyber warfare) and capturing those results in appropriate technical requirements, life-cycle cost estimate revision, test planning, and Milestone B documentation development. Initiate PDRR activities after completing a full and open competitive source selection. PDRR activities include, but are not limited to, conducting preliminary design development, development of system functional modeling and simulation, and execution of the program protection plan. ***FY 2012 Base Plans:*** ***FY 2012 OCO Plans:***					
Title: Test and Evaluation Support ***Description:*** Continue Program Support (i.e., travel, supplies, equipment, miscellaneous) ***FY 2010 Accomplishments:*** Test and evaluation to include, but not limited to, development of the test strategy and test-related documentation, planning of future developmental test and evaluation events, information assurance planning, and participation in technical and test-related working groups. ***FY 2011 Plans:*** Test and evaluation to include, but not limited to, development of the test strategy and test-related documentation, planning of future developmental test and evaluation events, information assurance planning, and participation in technical and test-related working groups. ***FY 2012 Base Plans:***	0.268	0.329	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
FY 2012 OCO Plans:					
Title: Systems Engineering/Technical Support	9.596	14.415	-	-	-
Description: Continue Systems Engineering/Technical Support ***FY 2010 Accomplishments:*** Continue Systems Engineering/Technical Support ***FY 2011 Plans:*** Continue Systems Engineering/Technical Support ***FY 2012 Base Plans:*** ***FY 2012 OCO Plans:***					
Accomplishments/Planned Programs Subtotals	44.919	48.699	-	-	-

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
• PE 0604283F: *RDT&E*	0.000	0.000	60.250	0.000	60.250	117.713	95.432	98.842	81.727	Continuing	Continuing

D. Acquisition Strategy

The Three-Dimensional Expeditionary Long-Range Radar (3DELRR) Project is taking a single-step-to-full-capability acquisition approach via full and open competition to further advance C2 capabilities supporting battlefield command and control.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*

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
Analysis of Alternatives Update	MIPR	DTIC-R:Ft Belvoir, VA	1.401	-		-		-		-	0.000	1.401	0.000
Risk Reduction - A	TBD	TBD:TBD,	1.568	-		-		-		-	Continuing	Continuing	TBD
Risk Reduction - B	SS/CPFF	MIT/Lincoln Laboratory:Lexington, MA	2.566	-		-		-		-	Continuing	Continuing	TBD
Risk Reduction - C	SS/CPFF	Carnegie Mellon University:Pittsburgh, PA	0.234	-		-		-		-	0.000	0.234	0.000
Modeling & Simulation	SS/CPFF	MIT/Lincoln Laboratory:Lexington, MA	1.613	4.268	Mar 2011	-		-		-	0.000	5.881	0.000
CDD Update	MIPR	DTIC:Ft Belvoir, VA	0.300	-		-		-		-	0.000	0.300	0.000
System Threat Assessment	SS/CPFF	MITRE:Bedford, MA	0.300	0.687	Nov 2010	-		-		-	0.000	0.987	0.000
Capability Demonstration	MIPR	728 ACS:Eglin AFB, FL	0.005	-		-		-		-	0.000	0.005	0.000
Technology Demonstration (TD) - A	C/FFP	Lockheed Martin Corp, MS2 Radar Systems:Liverpool, NY	14.993	-		-		-		-	0.000	14.993	24.851
Technology Demonstration (TD) - B	C/FFP	Sensis Corp:East Syracuse, NY	12.075	-		-		-		-	0.000	12.075	21.933
Program Definition & Risk Reduction	C/CPIF	TBD:TBD,	-	29.000	Aug 2011	-		-		-	0.000	29.000	TBD
		Subtotal	35.055	33.955		-		-		-			

Support ($ 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
Systems Engineering - A	SS/CPFF	MITRE:Bedford, MA	2.374	3.306	Oct 2010	-		-		-	0.000	5.680	0.000
Systems Engineering - B	SS/CPFF	MIT/Lincoln Laboratory:Lexington, MA	2.697	4.015	Jan 2011	-		-		-	0.000	6.712	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0207412F: *Control and Reporting Center (CRC)*	PROJECT 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*

Support ($ 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
Systems Engineering - C	MIPR	Naval Research Laboratory:Washington, DC	0.460	0.617	Nov 2010	-		-		-	0.000	1.077	0.000
Systems Engineering - D	SS/CPFF	Carnegie Mellon University:Pittsburgh, PA	0.455	0.502	Dec 2010	-		-		-	0.000	0.957	0.000
Technical Support	C/CPFF	Various:Various,	3.610	5.975	Dec 2010	-		-		-	0.000	9.585	0.000
		Subtotal	9.596	14.415		-		-		-	0.000	24.011	0.000

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
46th Test Wing/Other Test Activity	Various	Various:Various,	0.268	0.329	Oct 2010	-		-		-	0.000	0.597	0.000
		Subtotal	0.268	0.329		-		-		-	0.000	0.597	0.000

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
		Subtotal	-	-		-		-		-	0.000	0.000	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	44.919	48.699		-		-		-			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207412F: *Control and Reporting Center (CRC)*	**PROJECT** 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0207412F: *Control and Reporting Center (CRC)*	**PROJECT** 675294: *Theater Air Control System Improvement - Radar (TACSI-R)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
3DELRR On-going Risk Reduction (continued from Project 485L)	1	2010	2	2011
3DELRR On-going System Development (continued from Project 485L)	1	2010	4	2016
3DELRR TD Phase Capability Demo A	2	2010	2	2010
3DELRR Preliminary Design Review (TD Phase - Prototyping)	4	2010	4	2010
3DELRR TD Phase Capability Demo B	1	2011	1	2011
3DELRR PDRR Contract Award	4	2011	4	2011