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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0207455F I Three Dimensional Long-Range Radar (3DELRR)							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	-	54.191	88.825	-	88.825	98.250	68.613	24.790	35.734	-	370.403
646002: Three Dimensional Expeditionary Long Range Radar	0.000	-	54.191	88.825	-	88.825	98.250	68.613	24.790	35.734	-	370.403
Quantity of RDT&E Articles	0.000	-	3.000	-	-	-	-	-	-	-		
MDAP/MAIS Code: 393												
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
In FY 2014, Project 646002, Three-Dimensional Expeditionary Long-Range Radar (3DELRR), efforts were transferred from PE 0604283F, Battle Management Command and Control (BMC2) Sensor Development, Project 646002, in order to provide this program its own Program Element.												
A. Mission Description and Budget Item Justification												
Beginning in FY 2014, PE 0207455F funds the development of the Three-Dimensional Expeditionary Long-Range Radar (3DELRR) which will replace the current legacy AN/TPS-75 radar. 3DELRR will be the principal United States Air Force (USAF) long-range, ground-based sensor for detecting, identifying, tracking, and reporting aerial targets for the Joint Force Air Component Commander (JFACC) through the Theater Air Control System (TACS). 3DELRR will respond to the operational need to detect and report highly maneuverable, small radar cross section targets to enable battlefield awareness while at the same time mitigating the reliability, maintainability, and sustainability issues plaguing the AN/TPS-75 radar system. 3DELRR will provide air controllers with a precise, real-time air picture of sufficient quality to conduct control of individual aircraft under a wide range of environmental and operational conditions. It will replace the aging USAF AN/TPS-75 radar system as the AN/TPS-75 is incapable of detecting some current and emerging threats. In addition, as the AN/TPS-75 is reaching the end of its service life, it is more difficult and costly to maintain. The United States Marine Corps (USMC) is considering 3DELRR as a potential replacement for the AN/TPS-59, at the end of its service life, to support the Marine Air-Ground Task Force (MAGTF) Commander through the Marine Air Command and Control System (MACCS).												
3DELRR will address system sustainability, transportability and operational availability shortfalls while providing long-range surveillance, detection, and tracking of Air Breathing Targets (ABTs) and, potentially, Theater Ballistic Missiles (TBMs). This capability will support the USAF contribution to the primary roles of the Airspace Control Authority (ACA) and the Area Air Defense Commander (AADC) and enhance the USAF contributions to the Integrated Air and Missile Defense (IAMD) mission area. 3DELRR will contribute to the USAF critical role in the United States Government/DoD efforts to build partnership capacity via the Defense Exportability Features (DEF) pilot program. 3DELRR will provide the USAF Control and Reporting Center (CRC) and, if purchased by the USMC, the Composite Tracking Network (CTN), with real-time data to display air activity.												
FY 2014 completes the Pre-EMD period of the TD phase. The EMD phase of the 3DELRR program begins after a MS-B decision in FY 2014. Acquisition activities for the EMD phase within the FY 2014 timeframe include, but are not limited to; MS-B preparation, MS-B decision, EMD contract award, Integrated Baseline Review (IBR),												

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Critical Design Review (CDR), test planning/preparation and fabrication/test of system components. A CDR is conducted during this timeframe to ensure the program has properly matured the system design and is postured for successful development of three Production Representative Units (PRUs). Activities also include studies and analyses to support both current program planning and execution and future program planning.						
This program is in Budget Activity 04, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment. Transition to Budget Activity 05 occurs after MS-B decision approval to enter the EMD Phase.						
B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		-	70.160	69.533	-	69.533
Current President's Budget		-	54.191	88.825	-	88.825
Total Adjustments		-	-15.969	19.292	-	19.292
• Congressional General Reductions		-	-0.236			
• Congressional Directed Reductions		-	-15.733			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-	-	19.292	-	19.292
Change Summary Explanation						
In FY14 the Congression Directed Reduction was due to program delays						
In FY14 the BY1 Other Adjustment was for program decrease (Sequestration)						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014	FY 2015
Title: Technology Development (TD)/EMD Phases				-	41.970	80.722
Description: Technology Development (TD)/EMD efforts associated with delivering a new long-range ground-based sensor.						
FY 2013 Accomplishments: N/A						
FY 2014 Plans: Complete a limited competition source selection to award a single contract for the EMD Phase, MS-B preparation, and MS-B decision. Begin EMD Phase after MS-B decision. Acquisition activities for the EMD phase include, but are not limited to, Integrated Baseline Review (IBR), Delta Preliminary Design Review (PDR), Critical Design Review (CDR), test planning /preparation and						

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Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>		R-1 Program Element (Number/Name) PE 0207455F <i>I Three Dimensional Long-Range Radar (3DELRR)</i>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
fabrication/test of system components /subsystems. A CDR is conducted during this timeframe to ensure the program has properly matured the system design and is postured for successful development of 3 Production Representative Units (PRUs). Activities also include studies and analyses to support both current program planning and execution and future program planning. FY 2015 Plans: Acquisition activities for the EMD phase will include, but are not limited to, test planning /preparation, fabrication/test of system components /subsystems, continued efforts to insure the program has properly matured the system design and is postured for successful completion of 3 Production Representative Units (PRUs) to be delivered in FY16. Activities will also include studies and analyses to support both current program planning and execution and future program planning.				
Title: Test and Evaluation Support Description: Test and Evaluation Support FY 2013 Accomplishments: N/A FY 2014 Plans: Continue test and evaluation support activities for development of the test strategy and test related documentation, planning of future developmental test and evaluation events, information assurance planning, supporting contractor testing, and participation in technical and test-related working groups. FY 2015 Plans: Will Continue test and evaluation support activities for development of the test strategy and test related documentation, planning of future developmental test and evaluation events, information assurance planning, supporting contractor testing, and participation in technical and test-related working groups.		-	2.229	1.507
Title: Systems Engineering/Technical Support Description: Systems Engineering/Technical Support FY 2013 Accomplishments: N/A FY 2014 Plans:		-	9.992	6.596

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2013	FY 2014	FY 2015
Continue Engineering and Manufacturing efforts to further mature program technologies and manufacturing capabilities. Document and monitor changes to the program that could affect the system baseline. Support reliability growth efforts during contractor test and continue to identify, monitor, and mitigate technical program risks.												
FY 2015 Plans: Will continue Engineering and Manufacturing efforts to further mature program technologies and manufacturing capabilities. Document and monitor changes to the program that could affect the system baseline. Support reliability growth efforts during contractor test and continue to identify, monitor, and mitigate technical program risks.												
Accomplishments/Planned Programs Subtotals										-	54.191	88.825
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• 1 - RDTE: BA04: PE 0604283F: Three Dimensional Long Range Radar	91.702	-	-	-	-	-	-	-	-	-	120.442	
• 2 - OPAF: BA04: Line Item # 646002: Three Dimensional Long Range Radar	-	-	-	-	-	-	-	73.393	162.656	Continuing	Continuing	
Remarks												
E. Acquisition Strategy Three Dimensional Expeditionary Long-Range Radar (3DELRR) will provide full capability via limited competition to further advance Command and Control capabilities supporting Theater Battle Management.												
F. 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.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force												Date: March 2014			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0207455F / <i>Three Dimensional Long-Range Radar (3DELRR)</i>						Project (Number/Name) 646002 / <i>Three Dimensional Expeditionary Long Range Radar</i>			
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
EMD Phase	C/FPIF	TBD : TBD,	0.000	-		41.970	Jun 2014	79.691	Oct 2014	-		79.691	125.265	246.926	265.000
Subtotal			0.000	-		41.970		79.691		-		79.691	125.265	246.926	265.000
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering - A	SS/CPFF	MIT/Lincoln Laboratory : Lexington, MA	0.000	-		1.266	Jan 2014	0.997	Oct 2014	-		0.997	Continuing	Continuing	TBD
System Engineering - C	SS/CPFF	Carnegie Mellon University : Pittsburgh, PA	0.000	-		0.575	Dec 2013	-		-		-	Continuing	Continuing	TBD
Government Furnished Equipment (GFE)	TBD	Various : TBD,	0.000	-		1.587	Sep 2014	0.034	Oct 2014	-		0.034	-	1.621	TBD
Subtotal			0.000	-		3.428		1.031		-		1.031	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
46th Test Wing/Other Test Agencies	Various	Various : Various,	0.000	-		2.229	Oct 2013	1.507	Oct 2014	-		1.507	1.028	4.764	TBD
Subtotal			0.000	-		2.229		1.507		-		1.507	1.028	4.764	-
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Administration	Various	Various : Various,	0.000	-		6.564	Oct 2013	6.596	Oct 2014	-		6.596	87.865	101.025	TBD

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Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	-		6.564		6.596		-		6.596	87.865	101.025	-

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-	54.191	88.825	-	88.825	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

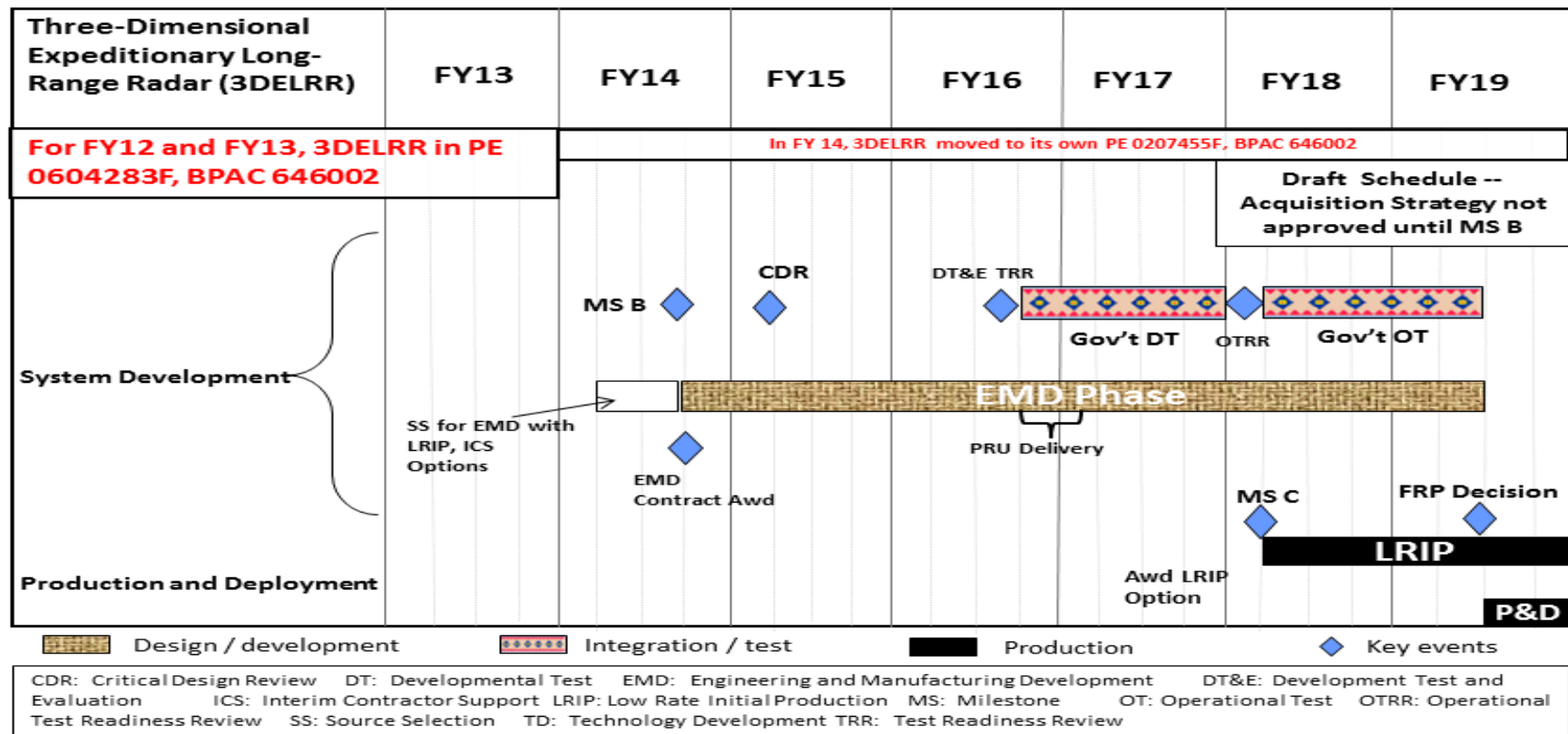
Date: March 2014

Appropriation/Budget Activity
3600 / 4

R-1 Program Element (Number/Name)
PE 0207455F / Three Dimensional Long-Range Radar (3DELRR)

Project (Number/Name)
646002 / Three Dimensional Expeditionary Long Range Radar

3DELRR Program Schedule



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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0207455F / <i>Three Dimensional Long-Range Radar (3DELRR)</i>	Project (Number/Name) 646002 / <i>Three Dimensional Expeditionary Long Range Radar</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Source Selection for EMD and LRIP Contract	1	2014	3	2014
Milestone B	3	2014	3	2014
EMD Contract Award	3	2014	3	2014
EMD Phase	3	2014	2	2019
Critical Design Review (CDR)	1	2015	1	2015
Developmental Test & Evaluation Test Readiness Review	3	2016	3	2016
Production Representative Units Delivery	3	2016	1	2017
Government Developmental Test	3	2016	4	2017
Operational Test Readiness Review (OTRR)	1	2018	1	2018
Government Operational Test	2	2018	2	2019
Milestone C	2	2018	2	2018
Low Rate Initial Production (LRIP)	2	2018	4	2019
Full Rate Production Decision	2	2019	2	2019
Production and Deployment Phase	3	2019	4	2019