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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 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0308699F I Shared Early Warning (SEW)							
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	-	1.077	1.060	1.212	-	1.212	1.221	1.224	1.248	1.273	Continuing	Continuing
674838: Shared Early Warning System	-	1.077	1.060	1.212	-	1.212	1.221	1.224	1.248	1.273	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

# The FY 2015 OCO Request will be submitted at a later date.

## **A. Mission Description and Budget Item Justification**

The Shared Early Warning System (SEWS) is the result of Presidential foreign policy initiatives which began in 1996. The SEWS continues to provide Theater Combatant Commanders and foreign nation customers direct operational benefit by improving the architectural design and equipment thereby providing enhanced mission capabilities (i.e., expanded coverage, integration with active defense systems, and radar integration). Foreign customer arrangements are negotiated with individual countries on a bilateral basis to provide selected region-specific missile warning information. SEWS Integration and Test facility is kept current by enhancing systems to improve analysis of real world events. To enhance mission capability the SEWS program tests the Integrated Broadcast Service (IBS) migration to Common Interactive Broadcast (CIB), mandatory crypto upgrades, SEWS integration with various radar systems, and the transition to "coalition-based" warning. SEWS uses Federally Funded Research and Development Centers (FFRDC), Engineering and Technology Acquisition Support Services (ETASS), and Advisory and Assistance Services (A&AS) contractors to support design, development, and acquisition of a common SEWS architecture to enhance mission capability of existing and future partners.

Activities also include studies and analysis 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.

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B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		1.175	1.079	1.228	-	1.228
Current President's Budget		1.077	1.060	1.212	-	1.212
Total Adjustments		-0.098	-0.019	-0.016	-	-0.016
• Congressional General Reductions		-0.001	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-0.097	-0.019	-0.016	-	-0.016
Change Summary Explanation						
FY 2013: Other Adjustments reduction of \$0.097M due to sequestration.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014	FY 2015
Title: Shared Early Warning System (SEWS)				1.077	1.060	1.212
Description: Development of SEWS common architecture and SEWS initiatives as identified by theater commanders.						
FY 2013 Accomplishments:						
Continued design and development of SEW-Radar (SEWR). This work included Air Defense System Integrator (ADSI) and Kinematic Correlator testing conducted with results for Global Command & Control System-Joint (GCCS-J).						
Continued progress in transition of legacy to Common Message Format (CMF) format with Radiant Mercury (RM) CMF spiral development.						
Accuracy improvements development work conducted.						
Developed initial capability of Central Command (CENTCOM) Partner Network (CPN), Secondary Distribution Facility (SDF), and Voice over Internet Protocol (VoIP).						
Continued Phase One, or the "one-to-one" and began Phase Two, or "one-to-many" development of Force Protection Tiered Notification System (FPTNS) capability.						

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
Began development of the SEWS Tactical Tactical Display Processor (TDP)(GCCS-J). TDP includes Agile Client work.				
Began design and test of Information Assurance (IA) implementations requirements as directed by the Designated Approval Authority (DAA).				
Began Radiant Mercury (RM) development including the "P3" rule set.				
<b>FY 2014 Plans:</b> Continue to investigate and integrate Unified Combatant Command (COCOM) validated requirements and system enhancements (e.g., Radiant Mercury), will continue to evaluate alternative solutions and approaches for integrated infrared/radar architectures. Tasks will include but not be limited to: SEW-R test and fielding; integration and test of redesign to improve and increase performance capabilities; and updating the rule set in the Cross Domain Solutions (CDS) to comply with data disclosure.				
Continue SEW-R developmental work, including conducting studies to evaluate upgrades to SEW-R.				
Initial design and development of Active Cue Monitoring as a subset of Remote Data Monitoring (RDM). This work will include Cue Monitoring and also improve ability to remotely monitor: Tab, RM, GCCS, and IA.				
Design the next phase of the CMF specification implementation.				
Continue development of new methods to increase system accuracy.				
Complete the SDF and VoIP.				
Continue FPTNS development and begin testing/integration of Phase Two, the "one-to-many".				
Continue TDP (GCCS-J) development including, the TDP/GCCS 3D/Agile Client, and testing of changes for CMF.				
Continue design and test of Information Assurance (IA) implementations requirements as directed by the DAA.				
Continue RM testing and intergration of the "P3" rule set.				
<b>FY 2015 Plans:</b> Continue to investigate and integrate COCOM validated requirements and system enhancements (e.g., Radiant Mercury), will continue to evaluate alternative solutions and approaches for integrated infrared/radar architectures. Tasks will include but not				

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C. Accomplishments/Planned Programs (\$ in Millions)							FY 2013	FY 2014	FY 2015		
be limited to: SEW-R test and fielding; integration and test of redesign to improve and increase performance capabilities; and updating the rule set in the Cross Domain Solutions (CDS) to comply with data disclosure.											
Continue SEW-Radar developmental work.											
Complete design, integration and testing of RDM including the active Cue, Tab, GCCS, and IA monitoring.											
Continue to design and test SEWS architecture to accommodate the next phase of the CMF specification. This has design and testing impacts upon RM, Radios, GCCS.											
Continue development and testing of new methods to increase system accuracy.											
Continue FPTNS Phase Two "one-to-many" and the related CDS fielding and testing of the complete capability in the CENTCOM architecture.											
Test revisions of 3D/Agile Client for Tactical Display Processor (TDP) (GCCS-J).											
Continue integration and testing of IA implementations as directed by the DAA.											
Begin development of Pacific Command (PACOM) Secondary Distribution Facility (SDF).											
Design the Deployable SEWS Suite (DSS).											
Continue RM development including V 6.0 and "exclusion".											
Accomplishments/Planned Programs Subtotals							1.077	1.060	1.212		
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
• OPAF: BA07: Line Item # 838010: Shared Early Warning Acquisition	0.322	0.328	0.332	-	0.332	0.338	0.344	0.350	0.356	Continuing	Continuing
Remarks											

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<b>E. Acquisition Strategy</b> The acquisition strategy builds on existing capabilities using evolutionary acquisition to modernize and sustain SEWS.		
<b>F. Performance Metrics</b> 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-4, RDT&E Schedule Profile: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity

3600 / 7

R-1 Program Element (Number/Name)

PE 0308699F / Shared Early Warning  
(SEW)

Project (Number/Name)

674838 / Shared Early Warning System

