

**UNCLASSIFIED**

PE NUMBER: 0102325F  
 PE TITLE: JOINT SURVEILLANCE SYSTEM

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>May 2009</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0102325F JOINT SURVEILLANCE SYSTEM</b>
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	0.000	9.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5371 CRITICAL PARTS REPLACEMENT PROGRAM	0.000	0.000	9.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**(U) A. Mission Description and Budget Item Justification**

The FPS-117 radar supports the NORAD, USNORTHCOM, and PACOM missions. The radars are part of the Atmospheric Early Warning System (AEWS), providing radar data to both USAF and Federal Aviation Administration control systems in Alaska. The radars also provide air surveillance capability as part of a bi-national defense program with Canada. The USAF FPS-117s (versions 1 & 4) are no longer in production, however the latest FPS-117 (version 7, aka Block 3) is in production. The Original Equipment Manufacturer (OEM) has continued to advance this radar system's technology and perform service life upgrades for other developing nations, however, Sixty-five percent of LRUs installed in the North American system are no longer manufactured by the OEM and many subcomponents are obsolete rendering the AEWS unupportable.

Air surveillance is NORAD's number #1 issue as stated by the NORAD Commander to Congress in March 2008. Without the immediate replacement of this equipment NORAD will lose air surveillance capability by 2013 due to failing radars.

The AN/FPS-117 Essential Parts Replacement Program restores the radar system capability to its original availability rates by eliminating parts obsolescence and replacing high failure rate components.

**(U) B. Program Change Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget			
(U) Current PBR/President's Budget	0.000	0.000	9.832
(U) Total Adjustments	0.000	0.000	
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
(U) <u>Significant Program Changes:</u>			

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**May 2009**

BUDGET ACTIVITY <b>07 Operational System Development</b>				PE NUMBER AND TITLE <b>0102325F JOINT SURVEILLANCE SYSTEM</b>				PROJECT NUMBER AND TITLE <b>5371 CRITICAL PARTS REPLACEMENT PROGRAM</b>			
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total	
5371 CRITICAL PARTS REPLACEMENT PROGRAM	0.000	0.000	9.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

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**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) System Integration, Purchase of Government Furnished Equipment, Documentation, Test and Certification Support			8.150
(U) System Engineering			1.250
(U) Program Support			0.432
(U) Total Cost	0.000	0.000	9.832

**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) OPAF, BPAC 8330810 Comm Elec Mods BP83			20.000	38.000	32.000	26.000				

**(U) D. Acquisition Strategy**

The RDT&E will be used to conduct acquisition activities, integration with equipment not being replaced, documentation and testing. Ogden ALC will be the SPD for this program. They are the best option as they have been the program office/acquisition authority for the radars while it has been in sustainment and have the expertise to conduct the procurement. There will be a full and open competition followed by a Firm Fixed Price contract award.

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**May 2009**

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>07 Operational System Development</b>				<b>0102325F JOINT SURVEILLANCE SYSTEM</b>					<b>5371 CRITICAL PARTS REPLACEMENT PROGRAM</b>			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u> Prototype Integration	Full & Open FFP	TBD						7.150	Jun-10		7.150	
Subtotal Product Development			0.000	0.000		0.000		7.150		0.000	7.150	0.000
Remarks:												
(U) <u>Support</u> Program Office Support	Organic	OO-ALC						0.432	Jun-10		0.432	
Subtotal Support			0.000	0.000		0.000		0.432		0.000	0.432	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u> Prototype and Testing	Organic	OO-ALC						1.000	Jun-10		1.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		1.000		0.000	1.000	0.000
Remarks:												
(U) <u>Management</u> Management	Full & Open FFP	A&AS Contractor						1.250	Dec-10		1.250	
Subtotal Management			0.000	0.000		0.000		1.250		0.000	1.250	0.000
Remarks:												
(U) Total Cost			0.000	0.000		0.000		9.832		0.000	9.832	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

May 2009

BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0102325F JOINT SURVEILLANCE  
SYSTEM

PROJECT NUMBER AND TITLE  
5371 CRITICAL PARTS  
REPLACEMENT PROGRAM

## Joint Surveillance System

Schedule Profile Milestones	FY10 Q1	FY10 Q2	FY10 Q3	FY10 Q4
A&AS Contract Award	▲			
Prototype Integration Contract Award		▲		
Engineering Design Evaluation			▲	
Prototype Testing				▲

Exhibit R-4a, RDT&E Schedule Detail

DATE

May 2009

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0102325F JOINT SURVEILLANCE  
SYSTEM

PROJECT NUMBER AND TITLE

5371 CRITICAL PARTS  
REPLACEMENT PROGRAM

(U) Schedule Profile

FY 2008

FY 2009

FY 2010

(U) A&AS Contract

2-3Q

(U) Prototype Inegration Contract

2-3Q

(U) Engineeirng Design Evaluation

2-3Q

(U) Prototype Testing

2-3Q

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