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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0102325F: JOINT SURVEILLANCE SYSTEM							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	0.000	9.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
675371: CRITICAL PARTS REPLACEMENT PROGRAM	0.000	9.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A. Mission Description and Budget Item Justification											
<p>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 &amp; 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 unsupportable.</p> <p>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.</p> <p>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.</p>											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0102325F: JOINT SURVEILLANCE SYSTEM			
BA 7: Operational Systems Development					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	9.832	0.000	0.000	0.000
Current President's Budget	0.000	9.832	0.000	0.000	0.000
Total Adjustments	0.000	0.000	0.000	0.000	0.000
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0102325F: JOINT SURVEILLANCE SYSTEM				PROJECT 675371: CRITICAL PARTS REPLACEMENT PROGRAM			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675371: CRITICAL PARTS REPLACEMENT PROGRAM	0.000	9.832	0.000	0.000	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	0		
A. Mission Description and Budget Item Justification											
<p>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 &amp; 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 unsupportable.</p> <p>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.</p> <p>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.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: System Integration, Purchase of Government Furnished Equipment, Documentation, Test and Certification Support							0.000	8.150	0.000	0.000	0.000
FY 2009 Accomplishments: In FY 2009: N/A											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0102325F: JOINT SURVEILLANCE SYSTEM		PROJECT 675371: CRITICAL PARTS REPLACEMENT PROGRAM		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY2010: System Integration, Purchase of Government Furnished Equipment, Documentation, Test and Certification Support.						
FY 2011 Base Plans: In FY 2011: N/A						
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.						
MAJOR THRUST: System Engineering  FY 2009 Accomplishments: In FY2009: N/A  FY 2010 Plans: In FY 2010: System Engineering  FY 2011 Base Plans: In FY 2011: N/A  FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.		0.000	1.250	0.000	0.000	0.000
MAJOR THRUST: Program Support  FY 2009 Accomplishments: In FY 2009: N/A		0.000	0.432	0.000	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Air Force							<b>DATE:</b> February 2010				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0102325F: <i>JOINT SURVEILLANCE SYSTEM</i>			<b>PROJECT</b> 675371: <i>CRITICAL PARTS REPLACEMENT PROGRAM</i>					
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
<i>FY 2010 Plans:</i> In FY 2010: Program Support  <i>FY 2011 Base Plans:</i> In FY 2011: N/A  <i>FY 2011 OCO Plans:</i> In FY 2011 OCO: Not Applicable.											
Accomplishments/Planned Programs Subtotals						0.000	9.832	0.000	0.000	0.000	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PE Not Provided (3765): <i>OPAF, BPAC 8330810 Comm Elec Mods BP83</i>	0.000	20.000	38.000	0.000	38.000	32.000	26.000	0.000	0.000	0.000	0.000
<b>D. Acquisition Strategy</b>											
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.											
<b>E. 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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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Air Force</b>											<b>DATE:</b> February 2010																																																										
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0102325F: <i>JOINT SURVEILLANCE SYSTEM</i>				<b>PROJECT</b> 675371: <i>CRITICAL PARTS REPLACEMENT PROGRAM</i>																																																													
<b>Product Development (\$ in Millions)</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method &amp; Type</th> <th>Performing Activity &amp; Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td>Prototype Integration</td> <td>C/FFP</td> <td>TBD TBD</td> <td align="right">0.000</td> <td align="right">7.150</td> <td>Jun 2010</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">7.150</td> <td align="right">0.000</td> </tr> <tr> <td align="right" colspan="3"><b>Subtotal</b></td> <td align="right">0.000</td> <td align="right">7.150</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">7.150</td> <td align="right">0.000</td> </tr> </table>																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	Prototype Integration	C/FFP	TBD TBD	0.000	7.150	Jun 2010	0.000		0.000		0.000	0.000	7.150	0.000	<b>Subtotal</b>			0.000	7.150		0.000		0.000		0.000	0.000	7.150	0.000
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																											
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Prototype Integration	C/FFP	TBD TBD	0.000	7.150	Jun 2010	0.000		0.000		0.000	0.000	7.150	0.000																																																								
<b>Subtotal</b>			0.000	7.150		0.000		0.000		0.000	0.000	7.150	0.000																																																								
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<b>Support (\$ in Millions)</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th colspan="4"></th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th colspan="3"></th> </tr> <tr> <th>Cost Category Item</th> <th>Contract Method &amp; Type</th> <th>Performing Activity &amp; Location</th> <th>Total Prior Years Cost</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Cost To Complete</th> <th>Total Cost</th> <th>Target Value of Contract</th> </tr> <tr> <td>Program Office Support</td> <td>Various</td> <td>OO ALC</td> <td align="right">0.000</td> <td align="right">0.432</td> <td>Jun 2010</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">0.432</td> <td align="right">0.000</td> </tr> <tr> <td align="right" colspan="3"><b>Subtotal</b></td> <td align="right">0.000</td> <td align="right">0.432</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">0.432</td> <td align="right">0.000</td> </tr> </table>																		FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	Program Office Support	Various	OO ALC	0.000	0.432	Jun 2010	0.000		0.000		0.000	0.000	0.432	0.000	<b>Subtotal</b>			0.000	0.432		0.000		0.000		0.000	0.000	0.432	0.000
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total																																																											
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract																																																								
Program Office Support	Various	OO ALC	0.000	0.432	Jun 2010	0.000		0.000		0.000	0.000	0.432	0.000																																																								
<b>Subtotal</b>			0.000	0.432		0.000		0.000		0.000	0.000	0.432	0.000																																																								
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<b>Test and Evaluation (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Prototype and Testing	Various	OO ALC	0.000	1.000	Jun 2010	0.000		0.000		0.000	0.000	1.000	0.000
<b>Subtotal</b>			0.000	1.000		0.000		0.000		0.000	0.000	1.000	0.000
<b>Remarks</b>													
<b>Management Services (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Management	C/FFP	A&AS Contractor TBD	0.000	1.250	Dec 2010	0.000		0.000		0.000	0.000	1.250	0.000
<b>Subtotal</b>			0.000	1.250		0.000		0.000		0.000	0.000	1.250	0.000
<b>Remarks</b>													
			<b>Total Prior Years Cost</b>	<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			0.000	9.832		0.000		0.000		0.000	0.000	9.832	0.000
<b>Remarks</b> Total Prior Years Cost may include only FY 2009 data.													

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2011 Air Force		<b>DATE:</b> February 2010	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0102325F: <i>JOINT SURVEILLANCE SYSTEM</i>	<b>PROJECT</b> 675371: <i>CRITICAL PARTS REPLACEMENT PROGRAM</i>	

## 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				

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Air Force			<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0102325F: <i>JOINT SURVEILLANCE SYSTEM</i>	<b>PROJECT</b> 675371: <i>CRITICAL PARTS REPLACEMENT PROGRAM</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
A&AS Contract	2	2010	3	2010
Prototype Inegration Contract	2	2010	3	2010
Engineeirng Design Evaluation	2	2010	3	2010
Prototype Testing	2	2010	3	2010

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