

**UNCLASSIFIED**

<b>RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)</b>								DATE <b>February 2000</b>	
BUDGET ACTIVITY <b>07 - Operational System Development</b>				PE NUMBER AND TITLE <b>0101120F Advanced Cruise Missile</b>				PROJECT <b>674798</b>	
COST (\$ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
674798 Life Extension Study	0	0	4,182	972	776	677	580	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
<p>(U) <b><u>A. Mission Description</u></b>                      The Advanced Cruise Missile (ACM) is a low-observable air-launched, strategic missile with significant improvements over the Air Launched Cruise Missile B version (ALCM-B) in range, accuracy, and survivability. Armed with a W80 warhead, it is designed to evade air and ground-based defenses in order to strike heavily defended, hardened targets at any location within any enemy's territory. An ACM Service Life Extension Plan (SLEP) was developed to meet an AF Long Range Plan requirement to extend ACM service life to FY30. The ACM is designed for B-52H external carriage. Missile procurement is complete. The ACM fleet design service life expires between the years 2003 and 2008. The results of Service Life Extension Program (SLEP) studies will identify those components that cannot be sustained beyond the normal service life. This was reported in FY00 President's Budget (PB) as a New Start Program, but was deferred to FY01.</p> <p>(U) <b><u>FY 1999 (\$ in Thousands)</u></b>                      (U) \$0 No Activity                      (U) \$0 Total</p> <p>(U) <b><u>FY 2000 (\$ in Thousands)</u></b>                      (U) \$0 No Activity                      (U) \$0 Total</p> <p>(U) <b><u>FY 2001 (\$ in Thousands)</u></b>                      (U) \$750 Research/evaluate ACM components for age sensitivities. Research and develop modifications to existing Sensor components. Research and develop Automated Test Equipment (ATE) to support age sensitivity testing of Sensor components.                      (U) \$962 Develop process to rebuild composite structures and evaluate new Radar Cross Section (RCS)                      (U) \$2,470 Design special tooling and prototype support equipment for new/rebuilt composite structures. Develop Test and Evaluation criteria for new/rebuilt composite structures, develop process/procedures for testing new/rebuilt composite structures.                      (U) \$4,182 Total</p>									
Project 674798			Page 1 of 5 Pages				Exhibit R-2 (PE 0101120F)		

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<p>(U) <b><u>B. Budget Activity Justification</u></b>                  These programs are in budget activity 7, Operational System Development. ACM has completed procurement, is fielded, and is undergoing modification to extend missile service life. AF Long Range Plan requires ACM to extend beyond design life (2003-2008). Service Life Extension Program (SLEP) requires studies to determine what components can be sustained or need to be replaced to extend life to 2030.</p>																																																																				
<p>(U) <b><u>C. Program Change Summary (\$ in Thousands)</u></b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;"></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2000 PBR)</td> <td style="text-align: center;">0</td> <td style="text-align: center;">688</td> <td style="text-align: center;">785</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td></td> <td style="text-align: center;">0</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    a. Congressional/General Reductions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    d. Below Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    e. Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    f. Other</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2000 PBR</td> <td></td> <td style="text-align: center;">0</td> <td style="text-align: center;">3,397</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2001 PBR</td> <td></td> <td style="text-align: center;">0</td> <td style="text-align: center;">4,182</td> <td style="text-align: center;">TBD</td> </tr> </tbody> </table>										<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 2000 PBR)	0	688	785	TBD	(U) Appropriated Value		0			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions					b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram					e. Rescissions					f. Other					(U) Adjustments to Budget Years Since FY 2000 PBR		0	3,397		(U) Current Budget Submit/FY 2001 PBR		0	4,182	TBD
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<p>(U) <b><u>Significant Program Changes:</u></b>                  Since funding for FY 2000 was reduced to zero, program start was deferred until FY 2001. New program start is based on AF Long Range Plan decision to maintain ACM beyond design life. The results of SLEP are required to determine other actions on critical components. The funding plus-up of \$3.397 in FY2001 is for development associated with the process of rebuilding composite structures and the evaluation of radar cross sections, and the design of special tooling and support equipment associated with the new/rebuilt composite structures.</p>																																																																				
<p>(U) <b><u>D. Other Program Funding Summary (\$ in Thousands)</u></b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:20%;"></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>Cost to</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> <tr> <td></td> <th style="text-align: center;"><u>Actual</u></th> <th style="text-align: center;"><u>Estimate</u></th> <th style="text-align: center;"><u>Complete</u></th> <td></td> </tr> </thead> <tbody> <tr> <td>(U) Missile Procurement, AF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Aeronautical Vehicle (BA2, PE 11120F, P-1#2)</td> <td style="text-align: center;">1,395</td> <td style="text-align: center;">1,039</td> <td style="text-align: center;">2,006</td> <td style="text-align: center;">2,022</td> <td style="text-align: center;">2,038</td> <td style="text-align: center;">2,031</td> <td style="text-align: center;">2,156</td> <td style="text-align: center;">Continuing</td> <td></td> </tr> <tr> <td>(U) Missile Modifications (BA3,</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2,920</td> <td style="text-align: center;">0</td> <td style="text-align: center;">3,777</td> <td style="text-align: center;">4,050</td> <td style="text-align: center;">4,324</td> <td style="text-align: center;">4,510</td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">Continuing</td> </tr> </tbody> </table>										<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Cost to</u>	<u>Total Cost</u>		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		(U) Missile Procurement, AF										(U) Aeronautical Vehicle (BA2, PE 11120F, P-1#2)	1,395	1,039	2,006	2,022	2,038	2,031	2,156	Continuing		(U) Missile Modifications (BA3,	0	2,920	0	3,777	4,050	4,324	4,510	Continuing	Continuing										
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Cost to</u>	<u>Total Cost</u>																																																											
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BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0101120F Advanced Cruise Missile				PROJECT 674798		
<b>(U) D. Other Program Funding Summary (\$ in Thousands)</b>										
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Cost to</u>	<u>Total Cost</u>	
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		
PE 11120F, P-1#9)										
(U)	Replen Spares & Spares (BA4, PE 11120F, P-4#17)	0	315	321	330	347	355	365	Continuing	TBD
(U)	Mod Initial Spares (BA4, PE 11120F, P-1#17)	0	0	1,942	2,307	2,620	2,930	618	Continuing	TBD
FY00 Missile Modification funding moved to FY Replenishment Spares funding as of 1 Feb 00										
<b>(U) E. Acquisition Strategy</b>										
Development will be through the prime contractor, Raytheon. Contract is Time and Materials. Contract number: F34601-96-0775.										
<b>(U) F. Schedule Profile</b>										
				<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>		
			1	2	3	4	1	2	3	4
(U)	Replacement Component Development									
(U)	Contract Award							X		
(U)	Engineering Investigation								X	X
(U)	PDR									X
(U)	CDR (2nd Qtr FY02)									
(U)	FQT (4th Qtr FY02)									
(U)	Test & Evaluation (1st Qtr FY03)									

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000				
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0101120F Advanced Cruise Missile			PROJECT 674798				
<b>(U) A. Project Cost Breakdown (\$ in Thousands)</b>											
						<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>	
(U)	Research/evaluate ACM components for age sensitivities. Research and develop modifications to existing Sensor components. Research and develop Automated Test Equipment (ATE) to support age sensitivity testing of Sensor components					0		0		750	
(U)	Develop process to rebuild composite structures and evaluate new Radar Cross Section					0		0		962	
(U)	Design special tooling and prototype support equipment for new/rebuilt composite structures. Develop Test and Evaluation criteria for new/rebuilt composite structures, develop process/procedures for testing new/rebuilt composite structures									2,470	
(U)	Total					0		0		4,182	
<b>(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)</b>											
<b>(U) Performing Organizations:</b>											
	<u>Contractor or Government</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 1999</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Product Development Organizations</u>										
	Raytheon	SS/CPT&M	Jan 01	4,182	4,182	0	0	0	4,182	Continuing	TBD
	<u>Support and Management Organizations</u>										
	N/A										
	<u>Test and Evaluation Organizations</u>										
	N/A										
<b>(U) Government Furnished Property:</b>											
	<u>Item Description</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Delivery Date</u>		<u>Total Prior to FY 1999</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Product Development Property</u>										
	<u>Support and Management Property</u>										

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE February 2000	
BUDGET ACTIVITY			PE NUMBER AND TITLE		PROJECT	
<b>07 - Operational System Development</b>			<b>0101120F Advanced Cruise Missile</b>		<b>674798</b>	
<b>(U) <u>Government Furnished Property Continued:</u></b>						
<u>Test and Evaluation Property</u>						
None						
			<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
			<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
				<u>Budget to</u>		<u>Total</u>
				<u>Complete</u>		<u>Program</u>
<u>Subtotals</u>						
Subtotal Product Development			0	0	0	4,182
Subtotal Support and Management						TBD
Subtotal Test and Evaluation						
Total Project			0	0	0	4,182
						TBD
						TBD