

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

June 2001

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0101122F Air Launched Cruise Missile

PROJECT

4797

COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4797 Flight Testing & Navigation Enhancement	5,104	6,398	6,841	13,178	11,720	7,919	0	0	0	50,890
Quantity of RDT&E Articles	0	0	5	0	0	0	0	0	0	0

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

(U) **A. Mission Description**

(U) The Air Launched Cruise Missile (ALCM) AGM-86B is a subsonic, air-to-surface strategic nuclear missile, operational since 1982. Armed with a W80 warhead, it is designed to evade air and ground-based defenses in order to strike targets at any location within any enemy's territory. The ALCM is designed for B-52H internal and external carriage. Missile procurement is complete. An ALCM Service Life Extension Plan (SLEP) was developed to meet an AF Long Range Plan requirement to extend ALCM Service Life to FY30. Initial SLEP assessment requires acquisition of new Conventional Air Launched Cruise Missile/Air Launched Cruise Missile Test Instrumentation Kit (CATIK) payload doors, replacement of current obsolete navigation system, and replacement of Operational Test & Evaluation (OT&E) hardware and software. This program commenced in FY00 based on the decision to maintain this weapon system beyond its current design life. CATIK flight test payload doors, containing range transponder and battery, are required to be replaced, due to Department of Energy (DOE) range safety requirements and lack of current payload door assets. The current obsolete Inertial Navigation Element (INE) system has parts without spares or suppliers that are now supportable only through use of cannibalized parts from excess INE units. The INE has been identified as the ALCM item with largest number of unscheduled maintenance hours.

(U) **FY 2000 (\$ in Thousands)**

(U) \$5,104 - CATIK payload door Interface Design/Development, Operational Flight/Flight Termination Software Development, and Automated Test Equipment Development.

(U) \$5,104 Total

(U) **FY 2001 (\$ in Thousands)**

(U) \$907 - Continue CATIK Hardware Interface Development, Finalize Hardware Testing/Integration.

(U) \$2,383 - Continue Operational Flight Software Development, Software Testing and Integration.

(U) \$1,605 - Pre EMD Inertial Navigation Element (INE) Hardware Interface Development, Testing/Integration

(U) \$1,503 - Pre EMD INE Software Emulation Development, Testing and Integration

(U) \$6,398 Total

Project 4797

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Exhibit R-2 (PE 0101122F)

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE June 2001																																																							
BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0101122F Air Launched Cruise Missile	PROJECT 4797																																																							
<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <p>(U) \$3,460 -CATIK payload door Interface Design/Development, Operational Flight/Flight Termination Software Development, Automated Test Equipment Development</p> <p>(U) \$3,381 Continue INE Hardware Interface Pre-EMD , Testing/Integration</p> <p>(U) \$6,841 Total</p> <p>(U) <u>B. Budget Activity Justification</u></p> <p>These programs are in budget activity 7, Operational System Development. ALCM has completed procurement, is fielded, and is undergoing modification to extend its Service Life.</p> <p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 55%;"></th> <th style="width: 10%; text-align: center;"><u>FY 2000</u></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 10%; text-align: center;"><u>FY 2002</u></th> <th style="width: 15%; text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2001 PBR)</td> <td style="text-align: center;">5,344</td> <td style="text-align: center;">6,457</td> <td style="text-align: center;">6,841</td> <td style="text-align: center;">50,890</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">5,344</td> <td style="text-align: center;">6,457</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 style="text-align: center;">-34</td> <td></td> <td></td> <td></td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td style="text-align: center;">-152</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 style="text-align: center;">-54</td> <td style="text-align: center;">-59</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2001 PBR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2002 PBR</td> <td style="text-align: center;">5,104</td> <td style="text-align: center;">6,398</td> <td style="text-align: center;">6,841</td> <td style="text-align: center;">50,890</td> </tr> </tbody> </table> <p>(U) <u>Significant Program Changes:</u> N/A</p>				<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 2001 PBR)	5,344	6,457	6,841	50,890	(U) Appropriated Value	5,344	6,457			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-34				b. Small Business Innovative Research	-152				c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram					e. Rescissions	-54	-59			(U) Adjustments to Budget Years Since FY 2001 PBR					(U) Current Budget Submit/FY 2002 PBR	5,104	6,398	6,841	50,890
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<div style="display: flex; justify-content: space-between;"> Project 4797 Page 2 of 7 Pages Exhibit R-2 (PE 0101122F) </div>																																																									

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)										DATE June 2001	
BUDGET ACTIVITY 07 - Operational System Development					PE NUMBER AND TITLE 0101122F Air Launched Cruise Missile					PROJECT 4797	
(U) D. Other Program Funding Summary (\$ in Thousands)											
	<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>FY 2006</u>	<u>FY 2007</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>Estimate</u>	<u>Complete</u>		
(U) Missile Procurement, AF											
(U) Missile Modifications (BA 3, PE 11122F, P-1#14)		4,029	0	15,608	11,913	16,228	17,597	10,042	27,232		102,649
(U) Replenishment + Spares/Spare Parts (BA 4, PE 11122F, P-1#17)	213	252	9,857	264	269	276	292	297	Continuing		TBD
(U) Other Procurement (BP83) Electronics and Telecommunications Equipment (BA 3, PE 11122F, P-1#51) FY02 Replenishment Spares funding reflects PMD 810 for ALCM Pyrotechnical Devices	1,297	1,287	1,331	1,333	1,362	1,389	1,443	1,476	Continuing		TBD
(U) E. Acquisition Strategy											
ALCM is using Boeing for the SLEP MOD development and production. An Engineering Assignment was used for the CATIK portion of the SLEP MOD development with a Cost Plus Award Fee contract. Firm Fixed Price will be used for all SLEP MOD production. CATIK development started in Jul FY00 and the production contract will award in Oct FY03. Parellel efforts for INE replacement Pre-EMD started with TRW contract in Jun FY01: Boeing effort to begin Jul FY01. Production contract award will be Jan FY05.											
(U) F. Schedule Profile											
		<u>FY 2000</u>				<u>FY 2001</u>				<u>FY 2002</u>	
	1	2	3	4	1	2	3	4	1	2	3
(U) CATIK Milestones											
(U) PDR					*						
(U) CDR									X		
(U) INE Milestones											
(U) PDR											X
(U) CDR (1st Qtr FY03)											
<div style="display: flex; justify-content: space-between; margin-top: 20px;"> Project 4797 Page 3 of 7 Pages Exhibit R-2 (PE 0101122F) </div>											

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BUDGET ACTIVITY 07 - Operational System Development					PE NUMBER AND TITLE 0101122F Air Launched Cruise Missile					PROJECT 4797		
(U) <u>F. Schedule Profile Continued</u>												
					<u>FY 2000</u>		<u>FY 2001</u>		<u>FY 2002</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Contract Milestones- Development												
(U) Contract Award - CATIK				*								
(U) Contract Award -INE								*				
(U) Contract Milestones- Procurement												
(U) Contract Award - CATIK (1st Qtr of FY03)												
(U) Contract Award - INE (2nd Qtr of FY05)												
CDR Slipped due to late contract award with Boeing												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)			DATE
			June 2001
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT	
07 - Operational System Development	0101122F Air Launched Cruise Missile	4797	
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>			
		<u>FY 2000</u>	<u>FY 2001</u>
(U) CATIK:			<u>FY 2002</u>
(U) Hardware Development			
(U) Interface Development		2,274	407
(U) Testing/Integration		281	100
(U) Software Development			
(U) Operational Flight Software		1,601	785
(U) Automated Test Equipment Development			423
(U) Testing/Integration		492	142
(U) Data Collection/Documentation		456	
(U) CATIK Design for Test Range Requirements			
(U) Flight Test			
(U) Flight Test			400
(U) Flight Test Support			100
(U) INE:			
(U) Hardware Development			
(U) Card Development			1,409
(U) Nuclear Certification			195
(U) Testing/Integration			202
(U) Software Development			
(U) Operational Flight Software			2,588
(U) Nuclear Certification			
(U) Automated Test Equipment Development			100
(U) Mission Planning			
(U) Testing/Integration			71
(U) Flight Testing			17
(U) Data Collection/Documentation			
(U) Congressional Withhold			59
(U) Total		5,104	6,398
			6,841
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE			
								June 2001			
BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT			
07 - Operational System Development					0101122F Air Launched Cruise Missile			4797			
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
<u>Contractor or Government Performing Activity</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 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>											
Development:											
Boeing - CATIK		Eng Asgn/CPAF	Jul 00	5,104	5,104	0	5,104	3,290	2,858	3,677	14,929
TRW - INE		Eng Asgn/T&M	Jun 01	1,444	1,444	0	0	1,444	0	0	1,444
Boeing - INE		EngAsgn/CPAF	Jul 01	6,400	6,400	0	0	1,664	3,483	17,870	23,017
<u>Support and Management Organizations</u>											
N/A											
<u>Test and Evaluation Organizations</u>											
Utah Test Range		MIPR	Sept 02	N/A	N/A	0	0	0	400	8,500	8,900
49th Test Wing		MIPR	Sept 02	N/A	N/A	0	0	0	100	2,500	2,600
(U) Government Furnished Property:											
<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 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Property</u>											
N/A											
N/A											
<u>Support and Management Property</u>											
N/A											
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)					DATE June 2001	
BUDGET ACTIVITY			PE NUMBER AND TITLE			PROJECT
07 - Operational System Development			0101122F Air Launched Cruise Missile			4797
(U) <u>Government Furnished Property Continued:</u>						
N/A						
<u>Test and Evaluation Property</u>						
None						
			<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
			<u>to FY 2000</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<u>Subtotals</u>						<u>Budget to</u>
Subtotal Product Development			0	5,104	6,398	6,341
Subtotal Support and Management						21,547
Subtotal Test and Evaluation			0	0	0	500
Total Project			0	5,104	6,398	6,841
						32,547
						50,890

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