

UNCLASSIFIED

PE NUMBER: 0101122F
 PE TITLE: AIR LAUNCHED CRUISE MISSILE

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2007
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BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0101122F AIR LAUNCHED CRUISE MISSILE
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Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	3.050	3.722	4.672	0.400	0.418	0.434	0.442	0.451	Continuing	TBD
4797 Flight Testing & Navigation Enhancement	3.050	3.722	4.672	0.400	0.418	0.434	0.442	0.451	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

The AGM-86B, Air Launched Cruise Missile (ALCM), is a subsonic, air-to-surface strategic nuclear missile, operational since 1982. Armed with a W-80 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.

A Service Life Extension Plan (SLEP) was developed to meet an AF Long Range Plan requirement to extend ALCM Service Life to FY30. The results of Service Life Extension Program (SLEP) studies identified system components that cannot be sustained beyond the standard service life. The current system is experiencing obsolescence of parts/components. Missile components and support equipment are becoming non-supportable. Service Life Extension of this critical weapon is essential to meet Air Combat Command (ACC) and United States Strategic Command (USSTRATCOM) commitments (also known as OPLAN 8044).

The W-80 LEP replaces warhead components to extend its service life. The National Nuclear Security Administration (NNSA) is responsible for most of the refurbishment costs associated with the W-80 warhead. The Air Force is responsible for funding ALCM W-80 integration. Integration includes evaluation of interface control changes as part of the Initial Concept Design (ICD), missile testing, and logistics requirements necessary to support a First Production Unit (FPU) delivery of 2008.

Joint Test Assembly (JTA-1) Replacement Support: The W80-1 JTA (warhead flight test configuration) is becoming unsupportable with sunset technology. Update of this JTA was to be addressed within the W80 Life Extension Program (LEP). With the cancellation of the W80 LEP, the JTA replacement still needs to be accomplished, which will be lead by NNSA. Air Force support is required to evaluate the interface changes, revise the W80-1 Interface Control Documents (ICDs), provide integration support, and flight test qualification.

Aging and surveillance program for ALCM critical components such as those in the safe arm and fuze subsystem, navigation/guidance system, and electrical/power distribution system. This is needed to identify aging trends prior to failures in fielded components that would result in fleet-wide reliability and supportability problems.

These programs are in Budget Activity 7, Operational System Development, due to efforts supporting a fielded, post Milestone III operational weapon system.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	2.218	3.736	5.822	0.395
(U) Current PBR/President's Budget	3.050	3.722	4.672	0.400
(U) Total Adjustments	0.832	-0.014		
(U) Congressional Program Reductions				
Congressional Rescissions	-0.032	-0.014		
Congressional Increases	0.926			
Reprogrammings				
SBIR/STTR Transfer	-0.062			
(U) <u>Significant Program Changes:</u>				

Exhibit R-2a, RDT&E Project Justification

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07 Operational System Development		0101122F AIR LAUNCHED CRUISE MISSILE						4797 Flight Testing & Navigation Enhancement		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4797 Flight Testing & Navigation Enhancement	3.050	3.722	4.672	0.400	0.418	0.434	0.442	0.451	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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

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A Service Life Extension Plan (SLEP) was developed to meet an AF Long Range Plan requirement to extend ALCM Service Life to FY30. The results of Service Life Extension Program (SLEP) studies identified system components that cannot be sustained beyond the standard service life. The current system is experiencing obsolescence of parts/components. Missile components and support equipment are becoming non-supportable. Service Life Extension of this critical weapon is essential to meet Air Combat Command (ACC) and United States Strategic Command (USSTRATCOM) commitments (also known as OPLAN 8044).

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(U) B. Accomplishments/Planned Program (\$ in Millions)	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Continue ALCM/W80 interface change evaluations/changes and contractor ICD support for W80 LEP	1.040			
(U) Continue ALCM integration data development	0.085			
(U) Continue ALCM W-80 integration ground test and flight test support, Environmental Flight Test and Developmental Flight Test	1.925	0.500		
(U) W80 Joint Test Assembly (JTA-1) Replacement Support, revise the W80-1 Interface Control Documents (ICDs), provide integration support, and flight test qualification. Continuation of W80 efforts - not a New Start.			2.102	0.170
(U) Develop aging and surveillance program for ALCM critical components such as those in the safe arm and fuze subsystem, navigation/guidance system, and electrical/power distribution system to identify aging trends prior to failures in fielded components.		3.222	2.570	0.230
(U) Total Cost	3.050	3.722	4.672	0.400

(U) C. Other Program Funding Summary (\$ in Millions)	<u>FY 2006</u>	<u>FY 2007</u>	<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>Cost to Complete</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>								
(U) MPAF, Missile Modifications (BA 03, PE 0101122F, P-15)	24.432	9.669	10.111	10.216	0.000	0.000	0.000	0.000		54.428
(U) MPAF, Missile Modifications Initial Spares (BA 04 PE 0101122F, P-16)	0.177	0.185	0.192	0.195	0.000	0.000	0.000	0.000		0.749
(U) MPAF, Replenishment Spares (BA 04, PE 0101122F, P-16)	4.248	0.287	0.297	0.302	11.156	11.437	11.657	11.905	Continuing	TBD
(U) OPAF, Electronics and Telecommunications Equipment (BP83) (BA 03, PE 0101122F, P-18)	1.364	1.415	1.471	1.509	1.575	1.634	1.665	1.699	Continuing	TBD

(U) D. Acquisition Strategy

The ALCM/W-80 LEP integration is being performed by the prime contractor utilizing a Time and Materials (T&M) engineering assignment on an existing sustainment contract.

The ALCM JTA-1 Replacement Support will be performed utilizing a Firm Fixed Price (FFP) contract.

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**4797 Flight Testing & Navigation
Enhancement**

The ALCM Aging and Surveillance Program will be developed by the prime contractor utilizing a Time and Materials (T&M) engineering assignment.

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Exhibit R-3, RDT&E Project Cost Analysis

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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2006 Cost</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>		
<u>(U) Product Development</u>																
W80 LEP Support	Eng Asgn/T&M	Boeing, Seattle, WA.		1.040	Feb-06	0.500	Jan-07					1.420	2.960			
JTA-1 Replacement Support	FFP	ESpectrum, San Antonio, TX						2.102	Jan-08	0.170	Jan-09		2.272			
Subtotal Product Development			0.000	1.040		0.500		2.102		0.170		1.420	5.232	0.000		
Remarks:																
<u>(U) Support</u>																
OC-ALC/PSM												0.652	0.652			
W80 Support/PSM				0.085	Jan-06							0.000	0.085			
ALCM Aging and Surveillance Program						3.222	Jan-07	2.570	Jan-08	0.230	Jan-09		6.022			
Subtotal Support			0.000	0.085		3.222		2.570		0.230		0.652	6.759	0.000		
Remarks:																
<u>(U) Test & Evaluation</u>																
Utah Test Range	MIPR											0.475	0.475			
49th Test Wing	MIPR											0.450	0.450			
Responsible Test Org	TBD											0.025	0.025			
Eglin AFB	MIPR											0.000	0.000			
49th Test Wing (W-80 LEP)	MIPR			1.925	Jul-06							4.685	6.610			
None													0.000			
Subtotal Test & Evaluation			0.000	1.925		0.000		0.000		0.000		5.635	7.560	0.000		
Remarks:																
<u>(U) Management</u>																
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000		
Remarks:																
<u>(U) Total Cost</u>			0.000	3.050		3.722		4.672		0.400		7.707	19.551	0.000		

Exhibit R-4, RDT&E Schedule Profile

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PROJECT NUMBER AND TITLE
4797 Flight Testing & Navigation
Enhancement



U.S. AIR FORCE

ALCM Schedule

	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
CATIK								
Integ/Qual Testing	▲							
Prototype Delivery		▲						
FCA		▲						
Flight Testing		▲	▲					
Production Award			▲					
CATIK Deliveries				▲				△
CATIK Test Set		▲						
FGT Dew/Del	▲				△			
W80 Integration						△		
W80 Flight Tests				▲	△			
ALCM A&S Dev					△	△		
ALCM JTA-1					△		△	

Integrity - Service - Excellence

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Exhibit R-4a, RDT&E Schedule Detail

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(U) <u>Schedule Profile</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Flight Testing	3Q			
(U) FGT CDR	1Q			
(U) ALCM/W-80 Contract Award	2Q			
(U) ALCM/W-80 Ground Test Support	2Q			
(U) ALCM W80 Flight Test Support	2Q			
(U) ALCM JTA-1 Support			2Q	2Q
(U) ALCM Aging & Surveillance Program development		3Q	2Q	3Q