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

Exhibit R-2, RDT&E Budget Item Justification	DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0101122F AIR LAUNCHED CRUISE MISSILE

	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	4.514	0.395	3.652	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
4797	Flight Testing & Navigation Enhancement	4.514	0.395	3.652	0.000	0.000	0.000	0.000	0.000	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 8010).

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 was responsible for funding ALCM W-80 integration. Integration included 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 in 2008. The W-80 LEP program has been archived.

Cruise Missile Functional Ground Testing (FGT) is required to provide the capability to non-destructively accomplish functional flight simulation of a full-up missile flight profile on the ground to obtain additional reliability data. This capability will provide critical reliability data without the costs of flight test missions and will also retain the missisles in the inventory. This effort will develop the software and hardware for an existing test facility for accomplishment of the ground tests.

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 led 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.

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0101122F AIR LAUNCHED CRUISE MISSILE

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

		FY 2008	FY 2009	FY 2010
(U)	Previous President's Budget	4.642	0.396	0.414
(U)	Current PBR/President's Budget	4.514	0.395	3.652
(U)	Total Adjustments	-0.128	-0.001	
(U)	Congressional Program Reductions			
	Congressional Rescissions		-0.001	
	Congressional Increases			
	Reprogrammings			
	SBIR/STTR Transfer	-0.128		

(U) Significant Program Changes:

In FY10, start Analysis of Alternatives (AOA) for future long range stand-off vehicle.

Exhibit R-2a, RDT&E Project Justification			DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0101122F AIR LAUNCHED CRUISE MISSILE	PROJECT NUMBER AND TITLE: 4797 Flight Testing & Navigation Enhancement	

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
4797	Flight Testing & Navigation Enhancement	4.514	0.395	3.652	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(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 8010).

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 was responsible for funding ALCM W-80 integration. Integration included 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 in 2008. The W-80 LEP program has been archived.

Cruise Missile Functional Ground Testing (FGT) is required to provide the capability to non-destructively accomplish functional flight simulation of a full-up missile flight profile on the ground to obtain additional reliability data. This capability will provide critical reliability data without the costs of flight test missions and will also retain the missisles in the inventory. This effort will develop the software and hardware for an existing test facility for accomplishment of the ground tests.

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 led 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.

Exhibit R-2a, RDT&E Project Justification		DATE May 2009
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0101122F AIR LAUNCHED CRUISE MISSILE	PROJECT NUMBER AND TITLE 4797 Flight Testing & Navigation Enhancement

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

		FY 2008	FY 2009	FY 2010
(U)	Functional Ground Test (FGT)		0.003	0.015
(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.	2.114	0.010	0.082
(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 systemto identify aging trends prior to failures in fielded components.	2.400	0.382	0.255
(U)	In FY10, start Analysis of Alternatives (AOA) for future long range stand-off vehicle.			3.300
(U)	Total Cost	4.514	0.395	3.652

(U) C. Other Program Funding Summary ($ 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 Cost
(U)	MPAF, Missile Modifications (BA 03, PE 0101122F, P-15)	10.043	10.120	0.000	0.000	0.000	0.000	0.000	0.000		20.163
(U)	MPAF, Missile Modifications Initial Spares (BA 04 PE 0101122F, P-16)	0.191	0.193	0.000	0.000	0.000	0.000	0.000	0.000		0.384
(U)	MPAF, Replenishment Spares (BA 04, PE 0101122F, P-16)	0.295	0.299	10.906						Continuing	TBD
(U)	OPAF, Electronics and Telecommunications Equipment (BP83) (BA 03, PE 0101122F, P-18)	1.461	1.495	1.540						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.

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

Exhibit R-3, RDT&E Project Cost Analysis

DATE: May 2009

BUDGET ACTIVITY: 07 Operational System Development

PE NUMBER AND TITLE: 0101122F AIR LAUNCHED CRUISE MISSILE

PROJECT NUMBER AND TITLE: 4797 Flight Testing & Navigation Enhancement

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) ($ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2008 Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
											0.000	
W80 LEP Support	Eng Asgn/T&M	Boeing, Seattle, WA.									0.000	TBD
JTA-1 Replacement Support	FFP	ESpectrum, San Antonio, TX	2.102	2.000		0.010	Jun-09	0.082	Feb-10		4.194	
Subtotal Product Development			2.102	2.000		0.010		0.082		0.000	4.194	TBD
Remarks:												
(U) Support												
W80 Support/PSM										0.000	0.000	TBD
ALCM Aging and Surveillance Program			2.540	2.514		0.382	Jun-09	0.255	Jun-10		5.691	
Subtotal Support			2.540	2.514		0.382		0.255		0.000	5.691	TBD
Remarks:												
(U) Test & Evaluation												
49th Test Wing (W-80 LEP)	MIPR										0.000	TBD
None											0.000	
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	TBD
Remarks:												
(U) Functional Ground Test												
											0.000	TBD
						0.003	May-09	0.015	May-09		0.018	
Subtotal Functional Ground Test			0.000	0.000		0.003		0.015		0.000	0.018	TBD
Remarks:												
(U) Cruise Missile AoA												
								3.300			3.300	TBD
Subtotal Cruise Missile AoA			0.000	0.000		0.000		3.300		0.000	3.300	TBD
Remarks:												
(U) Total Cost			4.642	4.514		0.395		3.652		0.000	13.203	TBD

Exhibit R-4, RDT&E Schedule Profile		DATE May 2009
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0101122F AIR LAUNCHED CRUISE MISSILE	PROJECT NUMBER AND TITLE 4797 Flight Testing & Navigation Enhancement

ALCM Schedule

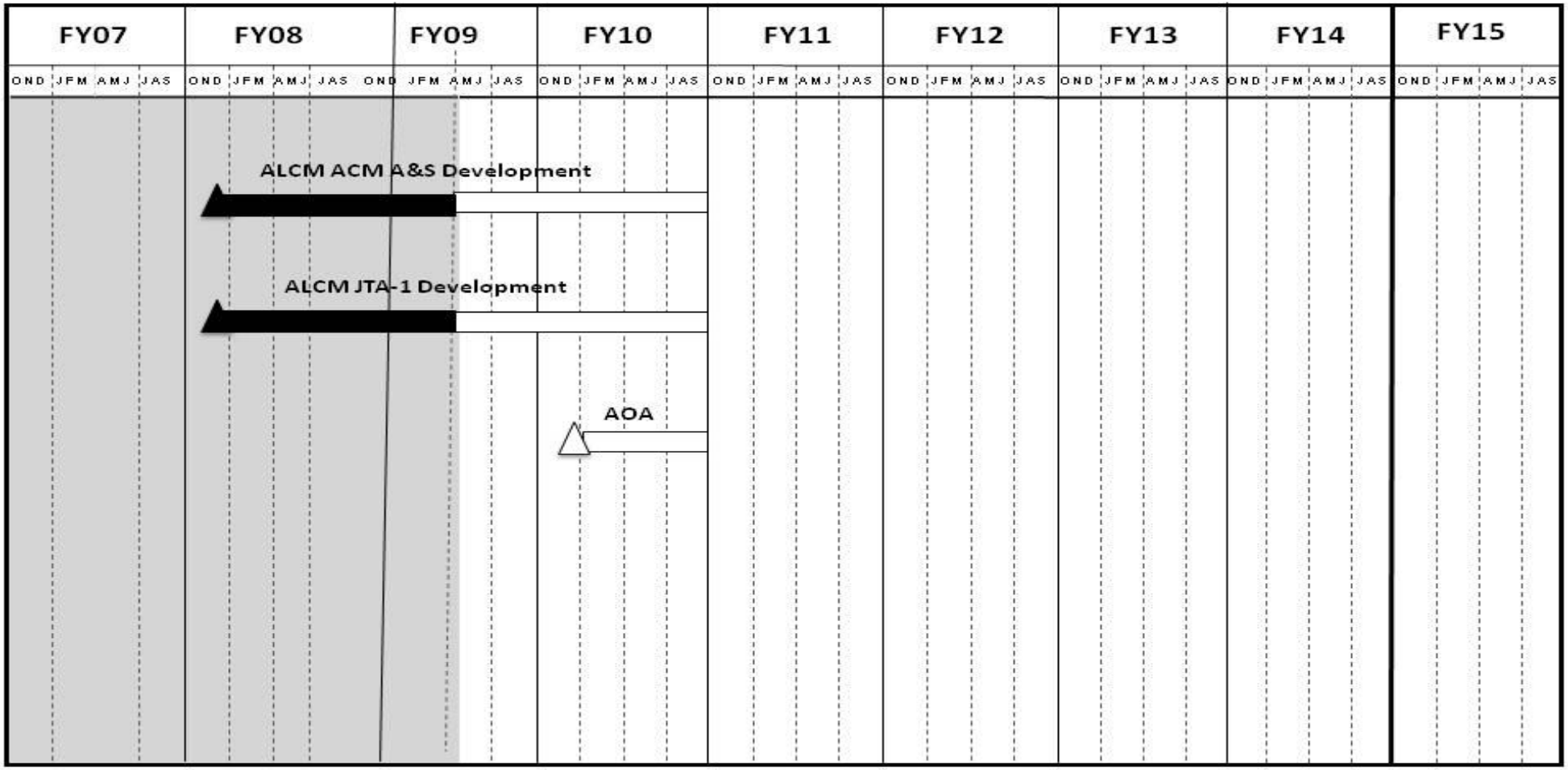

Exhibit R-4a, RDT&E Schedule Detail		DATE: May 2009
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0101122F AIR LAUNCHED CRUISE MISSILE	PROJECT NUMBER AND TITLE: 4797 Flight Testing & Navigation Enhancement

(U) Schedule Profile	FY 2008	FY 2009	FY 2010
(U) ALCM JTA-1 Support	2-4Q	1-4Q	1-4Q
(U) Cruise Missile AoA			2-4Q
(U) ALCM Aging & Surveillance Program Development	2-4Q	1-4Q	1-4Q

THIS PAGE INTENTIONALLY LEFT BLANK