

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0207161F: Tactical AIM Missiles							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	7.885	8.234	15.460	-	15.460	30.110	22.866	12.983	13.217	Continuing	Continuing
674132: AIM-9 Product Improvement	-	7.885	8.234	15.460	-	15.460	30.110	22.866	12.983	13.217	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		
MDAP/MAIS Code(s): 442,581												
[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
^{##} The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
<p>The AIM-9X Sidewinder short-range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile (AMRAAM). Air superiority in the short range air-to-air missile arena is essential and includes first-shot, first-kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M (fuse, rocket motor, and warhead). Anti-Tamper features have been incorporated to protect improvements inherent in this design. AIM-9X is a Post Milestone III, Acquisition Category 1C (ACAT 1C) joint-service program with Navy lead.</p> <p>This budget line item will fund the development, test and integration of software updates to the missile, insensitive munitions improvements and aircraft platform integration, to ensure these capabilities perform in accordance with established requirements.</p> <p>Completion of OT-C1 has been extended from 3rd Qtr FY 2013 to 1st Qtr FY 2014 as a result of the Operational Test Readiness Review (OTRR) held in April 2012. Updated program requirements leading up to the OTRR (including detailed OT Test Plan development) and provided during the OTRR determined the need to extend the OTC1 period. Begin of DT-D1 has slid from 3rd Qtr FY 2012 to 2nd QTR 2014 to allow completion of OT-C1 activity. Beginning of IT-D1 has slid from 4th Qtr FY 2013 to 3rd Qtr 2015 to allow for DT-D1 activity to begin. Beginning of OT-D1 has slid from 2nd QTR FY 2015 to 1st QTR 2017 to allow for completion of DT-D1 activity.</p> <p>This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.</p>												

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force				DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207161F: Tactical AIM Missiles				
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		7.885	8.234	9.675	-	9.675
Current President's Budget		7.885	8.234	15.460	-	15.460
Total Adjustments		0.000	0.000	5.785	-	5.785
• 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	5.785	-	5.785
Change Summary Explanation						
FY 2014 adjustment by \$5.785M to fund improvements in the F-15C/D Suite 9 Operational Flight Program to utilize full capability of the AIM-9X Block II missile.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: Product Development				6.405	7.000	13.389
Description: Continuation of Primary Hardware Development/Pre-Planned Product Improvement efforts for the AIM-9X fuze. Includes Systems Engineering/Program management, as well as support required to ensure AIM-9X missile integration with threshold aircraft platforms. Includes efforts to update missile components in order to comply with Insensitive Munitions requirements as established by Joint Requirements Oversight Council memo dated 11 February 2009.						
FY 2012 Accomplishments: Continued refinement of v9.3 Software Algorithm and Code Development in support of the AIM-9X missile testing and integration effort with threshold aircraft platforms, as well as study IM alternatives and risk reduction methods.						
FY 2013 Plans: Continue support of AIM-9X Block II integration. Study IM alternatives and risk reduction methods. Continue support of Operational Test anomaly resolution. Begin Software Algorithm and Code Development on version 9.4 of missile software.						
FY 2014 Plans: Continue development of v9.4 Software Algorithm and Code Development in support of the AIM-9X missile testing and integration effort with threshold aircraft platforms. Continue study on insensitive munitions alternatives and risk reduction methods. Continue						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0207161F: <i>Tactical AIM Missiles</i>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
support of Operational Test anomaly resolution. Initiate improvements in the F-15C/D suite 9 OFP to utilize full capability of the AIM-9X Block II missile.				
Title: Test and Evaluation Description: Funding required for Test & Evaluation and associated Ggvernmental & contractor support required to ensure the AIM-9X missile integration with threshold aircraft platforms. FY 2012 Accomplishments: Complete final phase of Operational Testing of missile software rehosting into new AIM-9X components. Complete Integrated (Development and Operational) Testing and begin Operational Testing of the follow on missile software (v9.3) for the AIM-9X missile integration. FY 2013 Plans: Continue Operational Testing of the follow on missile software (v9.3). FY 2014 Plans: Complete Operational Test and await final report in support of Full Rate Production (FRP) and fielding of missile. Determine potential of Verification of Correction of Deficiencies (VCD). Develop T&E requirements for Block II program Capabilities Production Document (CPD). Begin Integrated (Development and Operational) Testing of version 9.4 missile software.		0.958	0.703	1.530
Title: Program Mangement Administrative Description: Funding required for in house govenrment and contractor support. FY 2012 Accomplishments: Continue in house government and contarctor support. FY 2013 Plans: Continue in house government and contarctor support. FY 2014 Plans: Continue in house government and contarctor support.		0.522	0.531	0.541
Accomplishments/Planned Programs Subtotals		7.885	8.234	15.460

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207161F: Tactical AIM Missiles							
D. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• MPAF: BA02: M09HAI: PE 0207161F,...: Missile Mods, USAF	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• MPAF: BA02: M09HAI: PE 02071(1)...: Sidewinder (AIM-9X)	88.454	88.020	119.904		119.904	134.456	133.066	136.706	115.266	1,413.484	2,781.650
• MPAF: BA04: 000999: PE 0207161F,...: Replen Spares, USAF	7.866	8.854	10.728		10.728	10.838	11.033	11.232	11.434	117.807	220.223
• MPAF: BA04: 000999: PE 02071(3)...: Inital Spares, USAF	1.659	1.651	1.650		1.650	1.736	1.766	1.798	1.830	67.509	117.934
• RDT&E,N: BA07: Tactical AIM...: Tactical AIM Missile, USN	8.463	21.107	39.159		39.159	96.557	108.413	112.541	88.570	4.419	833.600
• WPN: BA07: PE 0207162N, Sidewind...: Sidewinder, USN	50.198	80.226	117.208		117.208	125.339	124.533	133.108	134.448	858.536	2,048.883
Remarks											
Congressional language directed the program to report as a missile procurement, starting in FY2002, and not as a missile modification.											
E. Acquisition Strategy											
The Low Rate Initial Production (LRIP), LOT 4, Firm-Fixed-Price (FFP) contract was awarded in April 2004. Assistant Secretary of the Navy for (Research Development & Acquisitions) approved the Full-Rate Production (FRP) decision in May 2004. FRP 1, LOT 5 contract was awarded November 2004. FRP 1, LOT 5 through FRP 3 LOT 7 contracts were awarded November 2006. Rewards or penalties are provided depending on Raytheon Missile Systems Performance relative to the Procurement Price Commitment Curve (PPCC) for LOTs 5 through 7 (FY 2005 through FY 2007). FRP 4 LOT 8 (FY 2008) contract was re-negotiated outside of the PPCC, and was awarded in January 2008. The FRP 5 LOT 9 (FY 2009) contract was awarded in June 2009, and incorporated the new electronics unit into the Captive Air Training Missile resolving critical obsolescence issues, as well as a low quantity of test articles to prove out the capability and producibility of the AIM-9X missile. The FRP 6 Lot 10 (FY 2010) contract was awarded in June 2010 to procure Block I All Up Round missiles as well as additional tactical test articles.											
Block II: Milestone C decision for LRIP was held on June 24th 2011, and the program has entered into LRIP contracts for Block II in FY 2011 and FY 2012. The program will enter the final LRIP in FY 2013, followed by Block II full rate production (FRP) in FY 2014 and beyond.											
F. Performance Metrics											
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.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0207161F: Tactical AIM Missiles				PROJECT 674132: AIM-9 Product Improvement					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
RMS Software/OFP Upgrade	SS/CPFF	RMS:Tucson, AZ	-	4.490	Jan 2012	4.980	Jan 2013	5.699	Jan 2014	-		5.699	Continuing	Continuing	63.486
Munitions Improvement Study (RG)	SS/CPFF	RMS:Tucson, AZ	-	0.000		0.000		1.695	Jan 2014	-		1.695	Continuing	Continuing	17.349
Munitions Improvement Study (USG)	MIPR	NAWC WD:China Lake, CA	-	1.915	Dec 2011	2.020	Dec 2012	1.695	Jan 2014	-		1.695	Continuing	Continuing	13.416
Aircraft Integration	SS/CPFF	Boeing:St. Louis, MO	-	0.000		0.000		4.300	Dec 2013	-		4.300	Continuing	Continuing	17.400
All Prod Dev Costs from program implementation through FY02	Various	Various:,	-	0.000		0.000		0.000		-		0.000	Continuing	Continuing	197.699
Subtotal			0.000	6.405		7.000		13.389		0.000		13.389			309.350
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
In House Support	MIPR	PMA-259:Patuxent River, MD	-	0.522	Jan 2012	0.531	Jan 2013	0.541	Jan 2013	-		0.541	Continuing	Continuing	10.358
Subtotal			0.000	0.522		0.531		0.541		0.000		0.541			10.358
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DT&E/OT&E for P3I	PO	Various:Various,	-	0.958	Nov 2011	0.703	Mar 2013	1.530	Mar 2014	-		1.530	Continuing	Continuing	58.993
DT&E/OT&E for F-15C/D	PO	Various:Various,	-	0.000		0.000		0.000		-		0.000	Continuing	Continuing	5.300
Subtotal			0.000	0.958		0.703		1.530		0.000		1.530			64.293

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0207161F: Tactical AIM Missiles				PROJECT 674132: AIM-9 Product Improvement					
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	Various	Not specified.:	-	0.000		0.000		0.000		-		0.000	0.000	0.000	7.549
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	7.549
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	7.885		8.234		15.460		0.000		15.460			391.550
Remarks															
Funding in FY11 and out is for the Block II program only. The AIM-9X Block I program costs for FY11 and prior are \$233.583M. The AIM-9X Block II program costs for FY11 and prior are \$41,057M.															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force																				DATE: April 2013									
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development												R-1 ITEM NOMENCLATURE PE 0207161F: Tactical AIM Missiles								PROJECT 674132: AIM-9 Product Improvement									
Tactical AIM Missiles Block I & II		FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestone - Block II																													
Systems Development Primary Hardware Development																													
T&E Milestones - Block II																													
Development Test		DT-B1																											
Operational Test																													
		IT-B1		OT-C1																									
Production Milestones - Block II																													
Contract Awards		LRIP 2 ■				LRIP 3 ■				FRP 1 ■				FRP 2 ■				FRP 3 ■				FRP 4 ■				FRP 5 ■			
Production Deliveries																													
		Lot 10 Qty 65																											
						LRIP 1 Qty 116																							
										LRIP 2 Qty 127																			
														LRIP 3 Qty 164															
																		FRP 1 Qty 225											
																					FRP 2 Qty 243								
																									FRP 3 Qty 243				
																													FRP 4 Qty 244

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0207161F: <i>Tactical AIM Missiles</i>	PROJECT 674132: <i>AIM-9 Product Improvement</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
T&E Milestones: Block II Development Test: v9.3 Development Test (DT-B1)	1	2012	2	2012
T&E Milestones: Block II Development Test: v9.3 Integrated Development/Operational Test (IT-B1)	1	2012	2	2012
T&E Milestones: Block II Development Test: v9.3 Operational Test (OT-C1)	3	2012	1	2014
T&E Milestones: Block II Development Test: v9.4 Development Test (DT-D1)	2	2014	4	2016
T&E Milestones: Block II Development Test: v9.4 Integrated Development/Operational Test (IT-D1)	3	2015	4	2016
T&E Milestones: Block II Development Test v9.4 Operational Test (OT-D1)	1	2017	4	2018
Production: Block II Contract Award: Low Rate Initial Production Lot 12 / LRIP 2	1	2012	1	2012
Production: Block II Contract Award: Low Rate Initial Production Lot 13 / LRIP 3	2	2013	2	2013
Production: Block II Contract Award: Full Rate Production (FRP 1)	2	2014	2	2014
Production: Block II Contract Award: Full Rate Production (FRP 2)	2	2015	2	2015
Production: Block II Contract Award: Full Rate Production (FRP 3)	2	2016	2	2016
Production: Full Rate Production Deliveries Lot 10	1	2012	4	2012
Production: Deliveries: Low Rate Initial Production Lot 11 / LRIP 1	4	2012	4	2014
Production: Deliveries: Low Rate Initial Production Lot 12 / LRIP 2	4	2013	4	2014
Production: Deliveries: Low Rate Initial Production Lot 13 / LRIP 3	4	2014	4	2015
Production: Deliveries: Full Rate Production Lot 14 / FRP 1	4	2015	4	2016
Production: Deliveries: Full Rate Production Lot 15 / FRP 2	4	2016	4	2017
Production: Deliveries: Full Rate Production Lot 16 / FRP 3	4	2017	4	2017
Production: Deliveries: Full Rate Production Lot 17 / FRP 3	4	2018	4	2018