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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				PE 0207161F: <i>Tactical AIM Missiles</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	5.890	6.040	8.023	-	8.023	8.219	9.675	10.710	12.766	Continuing	Continuing
674132: <i>AIM-9 Product Improvement</i>	5.890	6.040	8.023	-	8.023	8.219	9.675	10.710	12.766	Continuing	Continuing

A. Mission Description and Budget Item Justification

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.

The program is in full-rate production (FRP) with Lot 10 contract awarded in June 2010. Beginning with the Lot 9 contract award, the missile will include the preplanned product improvements (P3I) that resolve critical obsolescence associated with the CPU processors, as well as, appropriate software updates. 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.

Prior years funding estimate is \$261.750M.
The To Complete funding estimate is \$61.323M.

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.

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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>
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B. Program Change Summary (\$ in Millions)	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	5.915	6.040	6.135	-	6.135
Current President's Budget	5.890	6.040	8.023	-	8.023
Total Adjustments	-0.025	-	1.888	-	1.888
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.025	-	1.888	-	1.888

Change Summary Explanation

FY12 funding added to pay for AF portion of Insensitive Munitions (IM) effort.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force									DATE: February 2011		
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			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
674132: AIM-9 Product Improvement	5.890	6.040	8.023	-	8.023	8.219	9.675	10.710	12.766	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

Totals include funding for PRCP Program Number 581, Tactical Air Intercept/AIM-9X.

A. Mission Description and Budget Item Justification

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The program is in full-rate production (FRP) with Lot 10 contract awarded in June 2010. Beginning with the Lot 9 contract award, the missile will include the preplanned product improvements (P3I) that resolve critical obsolescence associated with the CPU processors, as well as, appropriate software updates. 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.

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Product Development	2.972	3.247	4.490	-	4.490
Description: Continue Software/Operational Flight Program (OFP) Upgrades					
FY 2010 Accomplishments:					

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B. Accomplishments/Planned Programs (\$ in Millions)						
		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Funds the development, test and integration of software updates to the missile, as well as, aircraft platform integration to ensure these capabilities perform IAW established requirements. Provides system engineering/program management and support required to ensure missile integration with threshold AF/Navy aircraft platforms. Continues the v9.3 algorithm and code development in support of the missile integration effort. FY 2011 Plans: Funds the development, test and integration of software updates to the missile, as well as, aircraft platform integration to ensure these capabilities perform IAW established requirements. Provides system engineering/program management and support required to ensure missile integration with threshold AF/Navy aircraft platforms. Funds the v9.4 algorithm and code development in support of the missile integration effort. FY 2012 Base Plans: Funds the development, test and integration of software updates to the missile, as well as, aircraft platform integration to ensure these capabilities perform IAW established requirements. Provides system engineering/program management and support required to ensure missile integration with threshold AF/Navy aircraft platforms. Continue the v9.4 algorithm and code development in support of the missile integration effort. FY 2012 OCO Plans:						
Title: Test and Evaluation Description: Continue DT&E/OT&E for P3I updates and FOT&E efforts FY 2010 Accomplishments: Funds T&E and associated Governmental test support required to ensure the missile integration with threshold AF/Navy aircraft platforms. Funds continuation of Block II v9.2 DT and initiates Block II v9.3 DT for missile integration. Continues to provide for in-house and contractor support. FY 2011 Plans: Funds T&E and associated Governmental test support required to ensure the missile integration with threshold AF/Navy aircraft platforms. Funds continuation of Block II v9.3 DT for missile integration. Continues to provide for in-house and contractor support. FY 2012 Base Plans:		2.918	2.793	3.533	-	3.533

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force									DATE: February 2011				
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					
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Funds T&E and associated Governmental test support required to ensure the missile integration with threshold AF/Navy aircraft platforms. Funds continuation of Block II v9.3 DT for missile integration. Continues to provide for in-house and contractor support.													
FY 2012 OCO Plans:													
Accomplishments/Planned Programs Subtotals									5.890	6.040	8.023	-	8.023
C. Other Program Funding Summary (\$ in Millions)													
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost		
• PE 0207161F: Tactical AIM Missile Modification, MPAF (BP21)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing		
• PE 0207161F (1): Tactical AIM Missile Procurement, MPAF (BP20)	78.527	64.523	88.769	0.000	88.769	87.785	82.729	83.212	83.626	Continuing	Continuing		
• PE 0207161F (2): Tactical AIM Missile Procurement, MPAF (BP25)	0.817	3.514	7.866	0.000	7.866	8.831	10.728	10.838	11.033	Continuing	Continuing		
• PE 0207161F (3): Tactical AIM Missile Procurement, MPAF (BP26)	1.571	1.558	1.659	0.000	1.659	1.647	1.650	1.736	1.766	Continuing	Continuing		
D. Acquisition Strategy													
The Low-Rate Initial Production (LRIP) 4, Lot 4, Firm-Fixed-Price (FFP) contract was awarded Apr 04. ASN(RD&A) approved the FRP decision in May 04. FRP 1, Lot 5 contract awarded Nov 04. FRP 1, Lot 5 through FRP 3, Lot 7 contracts awarded Nov 06. Rewards/penalties are provided depending on RMS performance relative to the Procurement Price Commitment Curve (PPCC) for Lots 5 through 7 (FY05 through FY07). FRP 4, Lot 8 (FY08) contract was negotiated outside of the PPCC, and was awarded in Jan 08. The FRP 5, Lot 9 (FY09) contract was awarded in Jun 09, and incorporated the new electronics unit into the Captive Air Training Missiles resolving critical obsolescence issues, as well as, a low quantity of Block II test articles to prove out the capability and producibility of the Block II missile. The FRP 6, Lot 10 (FY10) contract was awarded in Jun 10 to procure Block I AUR missiles, as well as, additional Block II tactical test articles. Following successful Block II MS C approval in 3QFY11, the program will enter into LRIP contracts for Block II in FY11 and FY12, followed by Block II FRP in FY13 and beyond. In the event that a Block II program is not approved, the Services will continue to procure the less capable missile in FY11.													
E. 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.													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force										DATE: February 2011			
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 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
RMS Software/OFP Upgrade	C/CPIF	RMS:Tucson, AZ	9.075	3.247	Jan 2011	4.490	Jan 2012	-		4.490	29.800	46.612	0.000
RMS P3I Contract	C/CPIF	RMS:Tucson, AZ	24.188	-	Dec 2010	-		-		-	11.400	35.588	0.000
Subtotal			33.263	3.247		4.490		-		4.490	41.200	82.200	0.000
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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	2.926	0.497	Jan 2011	0.522	Jan 2012	-		0.522	15.000	18.945	0.000
Subtotal			2.926	0.497		0.522		-		0.522	15.000	18.945	0.000
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	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,	47.311	2.296	Nov 2010	3.011	Nov 2011	-		3.011	7.500	60.118	0.000
Subtotal			47.311	2.296		3.011		-		3.011	7.500	60.118	0.000
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	Various	Not specified.:	0.275	-		-		-		-	3.000	3.275	0.000
Subtotal			0.275	-		-		-		-	3.000	3.275	0.000
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			83.775	6.040		8.023		-		8.023	66.700	164.538	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force						DATE: February 2011			
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	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
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>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
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
AOTD P3I, Phase 2	1	2010	3	2010
Operational Test OT-IIIC(1), CATM OT (version 9.2 software)	4	2010	1	2011
OT-IIIC(2), AUR OT (version 9.2 software)	1	2012	2	2012
Developmental Test DT-IIID, Phase 2 (version 9.2 software)	1	2010	1	2010
Integrated Test IT-IIID, Phase 1 (version 9.2 software)	2	2010	4	2010
Integrated Test IT-IIID, Phase 2 (version 9.2 software)	1	2011	3	2011
Operational Test OT-IIID (version 9.2 software)	4	2011	4	2011
Developmental Test DT-IIID (version 9.3 software)	3	2010	2	2011
Integrated DT/OT Test IT-IIID (version 9.3 software)	4	2010	3	2012
Operational Test OT-IIID (version 9.3 software)	3	2012	3	2013
Full Rate Production (FRP-6) Award Lot 10	2	2010	2	2010
Full Rate Production (FRP-7) Award Lot 11	2	2011	2	2011
Full Rate Production (FRP-8) Award Lot 12	2	2012	2	2012

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