R-1 ITEM NOMENCLATURE

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy PE 0207161N: Tactical Aim Missiles

BA 7: Operational Systems Development

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	307.815	8.463	21.107	39.159	-	39.159	96.557	108.413	112.541	88.570	Continuing	Continuing
0457: <i>AIM-9X</i>	307.815	8.463	11.224	6.634	-	6.634	6.490	0.556	0.589	0.601	4.419	346.791
0458: AIM-9X Block III	0.000	0.000	9.883	32.525	-	32.525	90.067	107.857	111.952	87.969	Continuing	Continuing

MDAP/MAIS Code(s): 442,581,P911

Note

A new start Project Unit was established in FY 2013 for AIM-9X Block III.

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. 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 (fuze, 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 IC joint service program with Navy lead.

The Block II program has entered into Low Rate Initial Production (LRIP) with the Lot 11 (Block II LRIP 1) contract awarded in September 2011, and Lot 12 (Block II LRIP 2) awarded in December 2011. This budget line continues the development, test and integration of software updates to the missile and aircraft platform integration to ensure these capabilities perform in accordance with established requirements as documented in the Capabilities Production Document.

The AIM-9X Block II builds upon the incremental acquisition strategy used to develop AIM-9X Block I and Block II to provide increased kinematics, lethality, enhanced IR Counter-Measure performance against emerging advanced threats, and improved Insensitive Munitions performance and will employ several components common with the AIM-9X Block II (advanced seeker, Advanced Optical Target Detector / datalink).

This program is funded under Operational Systems Development because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate funding in the current or subsequent fiscal year.

PE 0207161N: Tactical Aim Missiles

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^{*}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

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0207161N: Tactical Aim Missiles

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	8.765	21.107	29.441	-	29.441
Current President's Budget	8.463	21.107	39.159	-	39.159
Total Adjustments	-0.302	0.000	9.718	-	9.718
Congressional General Reductions	-	_			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-0.129	0.000			
SBIR/STTR Transfer	-0.173	0.000			
Program Adjustments	0.000	0.000	9.916	-	9.916
 Rate/Misc Adjustments 	0.000	0.000	-0.198	-	-0.198

Change Summary Explanation

Schedule:

Navy

Project Unit 0457: 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 OT-C1 period. LRIP-3 Production Contract award has been extended from 2nd Qtr FY 2013 to 3rd Qtr FY 2013 as a result of extended contract negotiations.

Project Unit 0458: The Block III acquisition and system development schedule has been updated to incorporate the discussions with DASN(AIR), PEO(T) Staff, and PMA functional leads at the initial Acquisition Coordination Team (A.C.T.) meeting for the AIM-9X Block III program held in June 2012, as well as the pre-Acquisition Review Board held in February 2013.

Cost: Funding increased in FY14 for Project Unit 0458 by \$9.916M to fully integrate the new rocket motor technologies into the AIM-9X weapons system and threshold platforms.

PE 0207161N: Tactical Aim Missiles UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0207161N: Tactical Aim Missiles

0457: AIM-9X

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
0457: <i>AIM-9X</i>	307.815	8.463	11.224	6.634	-	6.634	6.490	0.556	0.589	0.601	4.419	346.791
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

AIM-9X (Sidewinder) is a long-term evolution of the AIM-9, a fielded system, qualifying this as a research category operational systems development. The AIM-9X short range Air-to-Air missile modification 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. 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 (fuze, rocket motor and warhead).

Milestone C decision for Low Rate Initial Production (LRIP) was held June 24, 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 FRP in FY 2014 and beyond.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Test and Evaluation of System	6.078	4.490	0.850
Articles:	0	0	0
Description: Funding required for Test & Evaluation (T&E) and associated Governmental support required to ensure the AIM-9X missile integration with threshhold US Navy aircraft platforms.			
FY 2012 Accomplishments: Completed final phase of Operational Testing (OT) of missile software rehosting into new AIM-9X components. Completed Integrated (Development and Operational) Testing and began OT of the follow-on missile software (v9.3) for the AIM-9X missile integration.			
FY 2013 Plans: Continue OT.			
FY 2014 Plans: Complete OT and await final report in support of Full Rate Production and fielding of missile. Determine potential of Verification of Correction of Deficiencies. Develop T&E requirements for Block II program Capabilities Production Document.			
Title: Product Development	2.036	6.332	5.696

PE 0207161N: Tactical Aim Missiles

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207161N: Tactical Aim Missiles	PROJ 0457:	ECT AIM-9X		
B. Accomplishments/Planned Programs (\$ in Millions, Article (Quantities in Each)		FY 2012	FY 2013	FY 2014
		Articles:	0	0	(
Description: Continuation of Primary Hardware Development/Pre-Includes Systems Engineering / Program management, as well as threshhold US Navy aircraft platforms. Includes efforts to update m (IM) requirements as established by Joint Requirements Oversight	support required to ensure AIM-9X missile integration values in order to comply with Insensitive N	vith			
FY 2012 Accomplishments: Continued refinement of v9.3 Software Algorithm and Code Develoeffort with threshhold US Navy aircraft platforms, as well as study II		gration			
FY 2013 Plans: Continue support of AIM-9X Block II integration. Study IM alternative anomaly resolution.	ves and risk reduction methods. Continue support of O	Г			
FY 2014 Plans: Continue support of AIM-9X Block II integration. Continue support or requirements for Block II program Capabilities Production Documents		nt			
Title: Transportation & Travel for Program Management		Articles:	0.187 0	0.102 0	0.088)
Description: Transportation / Travel for AIM-9X effort.					
FY 2012 Accomplishments: Funded transportation and travel costs associated with supporting to	the AIM-9X missile program.				
FY 2013 Plans: Continue funding transportation and travel costs associated with su	upporting the AIM-9X missile program.				
FY 2014 Plans: Continue funding transportation and travel costs associated with su	upporting the AIM-9X missile program.				
Title: Support		Articles:	0.162 0	0.300 0	0.000
Description: Studies and Analysis					
FY 2012 Accomplishments:					

PE 0207161N: Tactical Aim Missiles

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DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PROJECT 1319: Research, Development, Test & Evaluation, Navy PE 0207161N: Tactical Aim Missiles 0457: AIM-9X

BA 7: Operational Systems Development

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2012 FY 2013 FY 2014 Performed studies and analysis in support of Advanced Development of AIM-9X Sidewinder. FY 2013 Plans: Continue studies and analysis in support of Advanced Development of AIM-9X Sidewinder. 11.224 **Accomplishments/Planned Programs Subtotals** 8.463 6.634

C. Other Program Funding Summary (\$ in Millions)

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Total Cost
WPN 2209: Sidewinder	50.198	80.226	117.208		117.208	125.339	124.533	133.108	134.448	858.538	2,048.885
MPAF 3479: Sidewinder	88.454	88.020	119.904		119.904	134.456	133.066	136.706	115.266	1,413.484	2,781.649
RDTE, AF 41: Sidewinder	7.885	8.234	15.460		15.460	30.110	22.866	12.983	13.217	6.165	391.560

Remarks

D. Acquisition Strategy

Block I: 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.

E. Performance Metrics

The AIM-9X Sidewinder program is meeting the cost, schedule, performance, funding and life cycle sustainment in accordance with the Acquisition Program Baseline. Contractor is meeting production schedule.

PE 0207161N: Tactical Aim Missiles

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013 **PROJECT**

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

0457: AIM-9X

BA 7: Operational Systems Development

PE 0207161N: Tactical Aim Missiles

FY 2014 FY 2014 FV 2014

Product Developme	oduct Development (\$ in Millions)				FY 2012		2013		2014 ISE		201 4 CO	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	Total Cost	Target Value of Contract
Aircraft Integration	C/CPFF	The Boeing Company:St. Louis, MO	6.996	0.173	Jul 2012	2.510	Dec 2012	1.721	Dec 2013	-		1.721	2.882	14.282	14.282
Aircraft Integration	WR	NAWCWD:China Lake, CA	4.087	0.094	Nov 2011	2.233	Nov 2012	1.616	Nov 2013	-		1.616	2.977	11.007	
Munition Improvement Study	SS/CPFF	Raytheon Missile Systems:Tucson, AZ	0.000	0.000		0.000		2.359	Dec 2013	-		2.359	0.000	2.359	2.353
Systems Engineering	WR	NAWCWD:China Lake, CA	37.181	1.769	Nov 2011	1.589	Nov 2012	0.000		-		0.000	0.000	40.539	
Prior Year Prod Dev cost no longer funded in the FYDP	Various	Various:Various	210.294	0.000		0.000		0.000		-		0.000	0.000	210.294	
		Subtotal	258.558	2.036		6.332		5.696		0.000		5.696	5.859	278.481	

Remarks

Total prior years - FY95 and prior under PE 0603715D. FY12 and FY13 funds warhead improvements to comply with insensitive munitions requirements.

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba		FY 2		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	Total Cost	Target Value of Contract
Studies & Analyses	C/CPFF	NSMA:Arlington, VA	0.000	0.162	Sep 2012	0.300	Feb 2013	0.000		-		0.000	0.000	0.462	0.462
	Subtotal 0.000					0.300		0.000		0.000		0.000	0.000	0.462	0.462

Test and Evaluation (t and Evaluation (\$ in Millions)				2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		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
Navy Test & Eval (Govt Op Test - WD)	WR	NAWC WD:China Lake, CA	0.814	0.000		0.000		0.000		-		0.000	0.000	0.814	
Oper Test & Eval (OPTEVFOR)	WR	OPTEVFOR:Norfolk, VA	2.861	2.450	Nov 2011	1.604	Oct 2012	0.850	Oct 2013	-		0.850	6.796	14.561	

PE 0207161N: Tactical Aim Missiles

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0207161N: Tactical Aim Missiles

0457: AIM-9X

DATE: April 2013

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

Test and Evaluation	Test and Evaluation (\$ in Millions)					FY 2	2013	FY 2 Ba		FY 2		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
System Improvement Process	SS/CPFF	Raytheon Missile Systems:Tucson, AZ	0.000	3.628	Mar 2012	2.886	Dec 2012	0.000		-		0.000	0.000	6.514	6.514
Prior year T&E cost no longer funded in the FYDP	Various	Various:Various	35.051	0.000		0.000		0.000		-		0.000	0.000	35.051	
	Subtotal 38.726			6.078		4.490		0.850		0.000		0.850	6.796	56.940	

Management Service	lanagement Services (\$ in Millions)				FY 2012		2013	FY 2 Ba		FY 2		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
Transportation - Material	WR	NAVAIR:Patuxent River, MD	0.086	0.060	Nov 2011	0.050	Oct 2012	0.050	Oct 2013	-		0.050	0.000	0.246	
Travel - Obligation throughout the year	WR	NAWCAD:Patuxent River, MD	2.412	0.127	Oct 2011	0.052	Oct 2012	0.038	Oct 2013	-		0.038	0.000	2.629	
Prior Year Mgmt cost no longer funded in the FYDP	Various	Various:Various	8.033	0.000		0.000		0.000		-		0.000	0.000	8.033	
	Subtotal			0.187		0.102		0.088		0.000		0.088	0.000	10.908	

									Target
	All Prior			FY 2014	FY 2014	FY 2014	Cost To	Total	Value of
	Years	FY 2012	FY 2013	Base	oco	Total	Complete	Cost	Contract
Project Cost Totals	307.815	8.463	11.224	6.634	0.000	6.634	12.655	346.791	

Remarks

Breakout of Block I and Block II costs:

USN Prior Yrs FY12 FY13

Block I 281,425

Block II 26,390 8,463 11,224 307,815 8,463 11,224 Total

PE 0207161N: Tactical Aim Missiles Navy

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R-1 Line #192

UNCLASSIFIED

DATE: April 2013 Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207161N: Tactical Aim Missiles

PROJECT 0457: AIM-9X

TACTICAL AIM MISSILES Block I & II	F	Y 20	112			FY	2013			FY 2	014			FY 2	015			FY 2	016			FY 2	2017	-		FY	2018	3
	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											1																	
Systems Development		1	1	\Box	П	\Box		\Box	П		1	1				\Box				\Box				\Box	\Box	\neg	\neg	
Primary Hardware Development																												
T&E Milestones - Block II																										\neg		
Development Test	DT-I	B1																										
Operational Test	IT-E	31	Ĺ	<u> </u>		от-	C1	<u> </u>			İ	İ								İ		İ	İ		İ	İ	İ	
Production Milestones - Block II	i	T_	i	I		$\overline{\Box}$		I			i	i			i	\vdash				i		i	i	i	\dashv	一十	Ti-	
Contract Awards	LRIP 2 (WPN)	,					LRIP 3 (WPN)			FRP 1				FRP 2				FRP 3										
Production Deliveries	Lot	10 0	ty 4	5	LRI	IP 1	Qty 63		LRII	> 2 Q	ty 69	 																
												\sqsubseteq	LRIF	3 Qt	y 150													
																	FRP	1 Qty	225		RP	2 Qt	y 22		FRE	30	Ī	25 FRP 4 Qty 226

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207161N: Tactical Aim Missiles

PROJECT

0457: *AIM-9X*

Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
TACTICAL AIM MISSILES Block I & II					
T&E Milestones - Block II: Development Test: v9.3 Development Test (DT-B1)	1	2012	2	2012	
T&E Milestones - Block II: Operational Test: v9.3 Integrated Development/Operational Test (IT-B1)	1	2012	2	2012	
T&E Milestones - Block II: Operational Test: v9.3 Operational Test (OT-C1)	3	2012	1	2014	
Production Milestones - Block II: Contract Awards: Low Rate Initial Production (LRIP 2) Award (WPN)	1	2012	1	2012	
Production Milestones - Block II: Contract Awards: Low Rate Initial Production (LRIP 3) Award (WPN)	3	2013	3	2013	
Production Milestones - Block II: Contract Awards: Full Rate Production (FRP 1) Award	2	2014	2	2014	
Production Milestones - Block II: Contract Awards: Full Rate Production (FRP 2) Award	2	2015	2	2015	
Production Milestones - Block II: Contract Awards: Full Rate Production (FRP 3) Award	2	2016	2	2016	
Production Deliveries: Full Rate Production Deliveries Lot 10	1	2012	4	2012	
Production Deliveries: Low Rate Initial Production Lot 11 / LRIP 1 Qty 63	4	2012	4	2013	
Production Deliveries: Low Rate Initial Production Lot 12 / LRIP 2 Qty 69	4	2013	4	2014	
Production Deliveries: Low Rate Initial Production Lot 13 LRIP 3 Qty 150	4	2014	4	2015	
Production Deliveries: Full Rate Production Lot 14 FRP 1 Qty 225	4	2015	4	2016	
Production Deliveries: Full Rate Production Lot 15 FRP 2 Qty 225	4	2016	4	2017	
Production Deliveries: Full Rate Production Lot 16 FRP 3 Qty 225	4	2017	4	2018	
Production Deliveries: Full Rate Production Lot 17 FRP 4 Qty 226	4	2018	4	2018	

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DATE: April 2013 Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0207161N: Tactical Aim Missiles 0458: AIM-9X Block III BA 7: Operational Systems Development

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
0458: AIM-9X Block III	0.000	0.000	9.883	32.525	-	32.525	90.067	107.857	111.952	87.969	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Project Unit is a new start in FY 2013.

A. Mission Description and Budget Item Justification

The AIM-9X Block II builds upon the incremental acquisition strategy used to develop AIM-9X Block I and Block II to provide increased kinematics, lethality, enhanced Infrared Counter-Measure performance against emerging advanced threats, and improved Insensitive Munitions (IM) performance. Block III includes design improvements to enhance performance capabilities of the missile and will employ several components common with the AIM-9X Block II (e.g. advanced seeker, Advanced Optical Target Detector / datalink). This budget line item will fund the technology risk reduction, software development, hardware development, insensitive munitions improvements, test, and aircraft platform integration of AIM-9X Block III to ensure these capabilities perform in accordance with established requirements. Risk reduction and EMD programs also comply with and address the Joint Requirements Oversight Council Memorandum Insensitive Munitions direction (11 February 2009) for AIM-9X IM technology insertion. Applicable anti-tamper features already incorporated in the existing AIM-9X Block II to protect improvements inherent in design will be brought forward for AIM-9X Block III.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Product Development	0.000	9.470	28.788
Articles:		0	0
Description: Funding required to establish the AIM-9X Block III Integrated Product Team which will develop program technology development strategy, develop draft acquisition program baseline, refine program requirements, identify best value preferred system concept, and commence competitive prototyping with associated technology risk reduction. FY 2013 Plans: Establish AIM-9X Block III IPT. Complete the Counter-Air Weapons Study Analysis of Alternatives, conduct Alternative System Review and select best value preferred material solution alternative. Develop draft program Technology Development Strategy (TDS), Capabilities Description Document (CDD), and Acquisition Program Baseline (APB). Commence early science and technology risk reduction activities to mature common technological components required for rocket motor, warhead, and insensitive munitions enabling technologies. Complete Milestone A with approved TDS, draft CDD, and APB. Award contracts /			

PE 0207161N: Tactical Aim Missiles

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development B. Accomplishments/Planned Programs (§ in Millions, Article Quantities in Each) 1349: Research, Development of competitive prototypes for AIM-9X Block III. Low cost warhead prototypes will be developed with down-selection of best available option. Conduct System Requirements Review to refine draft CDD and program requirements. FY 2014 Plans: 1549: PY 2014 Plans: 1559: Engineering Manufacturing Development (EMD) of the AIM-9X Block III with completion of risk reduction activities. Award contracts/lask orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction efforts for insensitive munitions (IM) improvements to the MIM-9X warhead and begin engineering analysis of rocket motor in mitigation technologies and complete studies related to S/W modifications required for changes to the rocket motor, increased kinematics, and guidance & control algorithms. Refine cost estimates based on rocket motor technologies and impacts associated with IM requirements. Manufacturing of prototypes using producibility approaches and lessons learned. Will conduct IM and arena tests after subjecting prototypical warheads to thermal and mechanical environments, and assess anchored lethality models. Plan to integrate optimized Digital or Insensitive Detonator into selected warhead demonstration prototype and conduct IM and arena demonstrations in conjunction with selected warhead after environment testing. FY 2014 Plans: Engineering technical support services associated with AIM-9X Sidewinder Block III. Title: Test and Evaluation Articles: Description: Test and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile. Begin developmental testing of improved warhead PEXN-112 explosive fill with a reduced sensitivity digital detonator. Testing wil		UNCLASSIFIED				
PE 0207161N: Tactical Aim Missiles 0458: AlM-9X Block III	Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
task orders for development of competitive prototypes for AIM-9X Block III. Low cost warhead prototypes will be developed with down-selection of best available option. Conduct System Requirements Review to refine draft CDD and program requirements. FY 2014 Plans: Begin Engineering Manufacturing Developement (EMD) of the AIM-9X Block III with completion of risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III missile to challes and software (S/W) systems for the AIM-9X Block III missile to meet IM improvement and tactical kinematics, and arean tests after subjecting prototypical varieties and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile to meet IM improvement and tactical kinematic and lethality performance objectives. FY 2014 Plans: Begin developmental testing of technologies introduced to improve safety, kinematics and lethality of the AIM-9X Block III missile. Begin developmental testing of improved warhead PBXN-112 explosive fill with a reduced sensitivity digital detonator. Testing will evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor finings for candidate motor concepts will also be executed to determine performance of highly loaded gr	1319: Research, Development, Test & Evaluation, Navy				c III	
down-selection of best available option. Conduct System Requirements Review to refine draft CDD and program requirements. FY 2014 Plans: Begin Engineering Manufacturing Developement (EMD) of the AIM-9X Block III with completion of risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction efforts for insensitive munitions (IM) improvements to the AIM-9X warhead and begin engineering analysis of rocket motor IM mitigation technologies into candidate rocket motor. Begin preliminary design review for candidate technologies and complete studies related to S/W modifications required for changes to the rocket motor, increased kinematics, and guidance & control algorithms. Refine cost estimates based on rocket motor technologies and impacts associated with IM requirements. Manufacturing of prototypes using producibility approaches and lessons learned. Will conduct IM and arena tests after subjecting prototypical warheads to thermal and mechanical environments, and assess anchored lethality models. Plan to integrate optimized Digital or Insensitive Detonator into selected warhead demonstration prototype and conduct IM and arena demonstrations in conjunction with selected warhead after environment testing. Fittle: Support Articles: FY 2014 Plans: Engineering technical support services associated with AIM-9X Sidewinder Block III. Title: Test and Evaluation Articles: Description: Test and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile to meet IM improvement and tactical kinematic and lethality performance objectives. FY 2014 Plans: Begin developmental testing of improved warhead PBXN-112 explosive fill with a reduced sensitivity digital detonator. Testing will evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor finings for candidate motor concepts will also be executed to determine	B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	uantities in Each)		FY 2012	FY 2013	FY 2014
Begin Engineering Manufacturing Developement (EMD) of the AIM-9X Block III with completion of risk reduction activites. Award contracts/task orders for EMD hardware and software (S/W) systems for the AIM-9X Block III. Complete risk reduction efforts for insensitive munitions (IM) improvements to the AIM-9X wheat and begin engineering analysis of rocket motor IM mitigation technologies into candidate rocket motor. Begin preliminary design review for candidate technologies and complete studies related to S/W modifications required for changes to the rocket motor, increased kinematics, and guidance & control algorithms. Refine cost estimates based on rocket motor technologies and impacts associated with IM requirements. Manufacturing of prototypes using producibility approaches and lessons learned. Will conduct IM and arena tests after subjecting prototypical warheads to thermal and mechanical environments, and assess anchored lethality models. Plan to integrate optimized Digital or Insensitive Detonator into selected warhead demonstration prototype and conduct IM and arena demonstrations in conjunction with selected warhead after environment testing. **Title:** Support** **Articles:** **P* 2014 Plans:** **Description:** Test and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile to meet IM improvement and tactical kinematic and lethality performance objectives. **P* 2014 Plans:** **Begin developmental testing of technologies introduced to improve safety, kinematics and lethality of the AIM-9X Block III missile. Begin developmental testing of improved warhead PBXN-112 explosive fill with a reduced sensitivity digital detonator. Testing will evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor firings for candidate motor concepts will also be executed to determine performance of highly loaded grain and conventional grain in a dual pulse firing sequence. Results of develop						
FY 2014 Plans: Engineering technical support services associated with AIM-9X Sidewinder Block III. Title: Test and Evaluation Articles: Description: Test and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile to meet IM improvement and tactical kinematic and lethality performance objectives. FY 2014 Plans: Begin developmental testing of technologies introduced to improve safety, kinematics and lethality of the AIM-9X Block III missile. Begin developmental testing of improved warhead PBXN-112 explosive fill with a reduced sensitivity digital detonator. Testing will evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor firings for candidate motor concepts will also be executed to determine performance of highly loaded grain and conventional grain in a dual pulse firing sequence. Results of developmental testing and evaluation will directly inform selection of warhead and rocket motor candidates for a Milestone B down select for the Block III. Title: Transportation & Travel for Program Management O.000 0.413	Begin Engineering Manufacturing Developement (EMD) of the AIM-9 contracts/task orders for EMD hardware and software (S/W) systems for insensitive munitions (IM) improvements to the AIM-9X warhead attechnologies into candidate rocket motor. Begin preliminary design related to S/W modifications required for changes to the rocket motor. Refine cost estimates based on rocket motor technologies and impact prototypes using producibility approaches and lessons learned. Will warheads to thermal and mechanical environments, and assess anch Insensitive Detonator into selected warhead demonstration prototype with selected warhead after environment testing.	s for the AIM-9X Block III. Complete risk reduction efformed begin engineering analysis of rocket motor IM mit review for candidate technologies and complete studies, increased kinematics, and guidance & control algoricts associated with IM requirements. Manufacturing conduct IM and arena tests after subjecting prototypic hored lethality models. Plan to integrate optimized Dig	orts igation es thms. if cal			
Title: Test and Evaluation Articles: Description: Test and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile to meet IM improvement and tactical kinematic and lethality performance objectives. FY 2014 Plans: Begin developmental testing of technologies introduced to improve safety, kinematics and lethality of the AIM-9X Block III missile. Begin developmental testing of improved warhead PBXN-112 explosive fill with a reduced sensitivity digital detonator. Testing will evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor firings for candidate motor concepts will also be executed to determine performance of highly loaded grain and conventional grain in a dual pulse firing sequence. Results of developmental testing and evaluation will directly inform selection of warhead and rocket motor candidates for a Milestone B down select for the Block III. Title: Transportation & Travel for Program Management 0.000 0.413	FY 2014 Plans:		Articles:	0.000	0.000	0.270 0
Articles: Description: Test and evaluation of two improved IM warhead concepts and two improved IM rocket motor grain concepts for the AIM-9X Block III missile to meet IM improvement and tactical kinematic and lethality performance objectives. FY 2014 Plans: Begin developmental testing of technologies introduced to improve safety, kinematics and lethality of the AIM-9X Block III missile. Begin developmental testing of improved warhead PBXN-112 explosive fill with a reduced sensitivity digital detonator. Testing will evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor firings for candidate motor concepts will also be executed to determine performance of highly loaded grain and conventional grain in a dual pulse firing sequence. Results of developmental testing and evaluation will directly inform selection of warhead and rocket motor candidates for a Milestone B down select for the Block III. Title: Transportation & Travel for Program Management 0.000 0.413		winder Block III.		0.000	0.000	2.545
evaluate current warhead (WDU-17/B) with container mitigation for IM response to slow cook-off. Static rocket motor firings for candidate motor concepts will also be executed to determine performance of highly loaded grain and conventional grain in a dual pulse firing sequence. Results of developmental testing and evaluation will directly inform selection of warhead and rocket motor candidates for a Milestone B down select for the Block III. **Title:** Transportation & Travel for Program Management** 0.000 0.413	AIM-9X Block III missile to meet IM improvement and tactical kinema FY 2014 Plans: Begin developmental testing of technologies introduced to improve sa	epts and two improved IM rocket motor grain conceptatic and lethality performance objectives. afety, kinematics and lethality of the AIM-9X Block III	s for the			0
	evaluate current warhead (WDU-17/B) with container mitigation for IN candidate motor concepts will also be executed to determine perform pulse firing sequence. Results of developmental testing and evaluating candidates for a Milestone B down select for the Block III.	M response to slow cook-off. Static rocket motor firing nance of highly loaded grain and conventional grain in	s for a dual	0.000	0.413	0.922
	·		Articles:			0

PE 0207161N: Tactical Aim Missiles

Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0207161N: Tactical Aim Missiles	0458: AIM-	-9X Block III
BA 7: Operational Systems Development			

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
FY 2013 Plans: Transportation and travel costs associated with supporting the AIM-9X Block III missile program.			
FY 2014 Plans: Management Support, transportation of government funrnished materials, and travel costs associated with supporting the AIM-9X Block III missile program.			
Accomplishments/Planned Programs Subtotals	0.000	9.883	32.525

C. Other Program Funding Summary (\$ in Millions)

N/A

Navy

Remarks

D. Acquisition Strategy

AIM-9X Block III will achieve Milestone Decision Authority concurrence on the program's entry into the acquisition framework and acquisition strategy. The program will likely be approved to enter at Milestone(MS) B, Engineering & Manufacturing Development. Competitive prototyping to develop common core technologies will occur from FY 2014 to FY 2015. In FY 2015 the program will downselect to a single AIM-9X Block III primary system design, which will be used for final technology development in preparation for MS-B.

E. Performance Metrics

AIM-9X Block III supporting technologies and best value preferred system concept will be developed to meet minimum system requirements that will be defined in a draft AIM-9X Block III Capabilities Description Document and draft program Acquisition Program Baseline; which will be established by FY 2013.

PE 0207161N: Tactical Aim Missiles

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207161N: Tactical Aim Missiles

PROJECT

0458: AIM-9X Block III

DATE: April 2013

Complete

Cost

1.018 Continuing Continuing Continuing

Contract

Cost

Product Developme	ent (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ase		2014 CO	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	Total Cost	Target Value of Contract
Blk III Primary Hdw Development #1	C/FPIF	TBD:TBD	0.000	0.000		3.802	Feb 2013	0.000		-		0.000	0.000	3.802	3.80
Blk III Primary Hdw Development #2	C/FPIF	TBD:TBD	0.000	0.000		3.802	Feb 2013	0.000		-		0.000	0.000	3.802	3.80
Primary Hardware EMD	C/FPIF	TBD:TBD	0.000	0.000		0.000		23.706	Jun 2014	-		23.706	Continuing	Continuing	Continuin
Blk III Systems Engineering	WR	NAWCWD:China Lake, CA	0.000	0.000		0.866	Nov 2012	0.756	Nov 2013	-		0.756	Continuing	Continuing	Continuin
Blk III Munition Improvement Study	SS/CPFF	Raytheon Missile Systems:Tucson, AZ	0.000	0.000		0.600	Nov 2012	0.000		-		0.000	0.000	0.600	0.60
Blk III Gov't Engineering Support	WR	NAWCAD:Patuxent River, MD	0.000	0.000		0.400	Nov 2012	0.400	Nov 2013	-		0.400	Continuing	Continuing	Continuin
Aircraft Integration	SS/CPFF	The Boeing Company:St. Louis, MO	0.000	0.000		0.000		1.963	Dec 2013	-		1.963	Continuing	Continuing	Continuin
Aircraft Integration	SS/CPFF	Lockheed Martin:Fort Worth, TX	0.000	0.000		0.000		1.963	Dec 2013	-		1.963	Continuing	Continuing	Continuin
		Subtotal	0.000	0.000		9.470		28.788		0.000		28.788			
Support (\$ in Million	าร)			FY 2	2012	FY 2	2013		2014 ase		2014 CO	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	Total Cost	Target Value of Contrac
Studies and Analysis	WR	NSMA:Arlington, VA	0.000	0.000		0.000		0.270	Nov 2013	-		0.270	Continuing	Continuing	Continuin
		Subtotal	0.000	0.000		0.000		0.270		0.000		0.270			
Test and Evaluation	ı (\$ in Milli	ions)		FY 2	2012	FY 2	2013		2014 ase		2014 CO	FY 2014 Total			
	Contract Method	Performing	All Prior		Award		Award		Award		Award		Cost To	Total	Target Value of

PE 0207161N: *Tactical Aim Missiles* Navy

& Type

WR

Activity & Location

NAWC WD:China

Lake, CA

Cost Category Item

DEV Test & Eval - Gov't

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Cost

0.000

Date

Cost

Date

1.018 Nov 2013

Cost

0.000

Date

Years

0.000

R-1 Line #192

Cost

Date

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

Project Cost Totals

0.000

0.000

R-1 ITEM NOMENCLATURE **PROJECT**

PE 0207161N: Tactical Aim Missiles 0458: AIM-9X Block III

BA 7: Operational Sys	stems Dev	velopment													
Test and Evaluation	(\$ in Milli	ions)		FY 2	2012	FY:	2013		2014 ase		2014 CO	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	Total Cost	Target Value of Contract
DEV Test & Eval - Contractor	C/CPFF	TBD:TBD	0.000	0.000		0.000		1.527	Nov 2013	-		1.527	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		2.545		0.000		2.545)		
Management Servic	es (\$ in M	lillions)		FY 2	2012	FY:	2013		2014 ase		2014 CO	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	Total Cost	Target Value of Contract
Blk III Management and Support Services	C/CPFF	Jorge Scientific Corporation:Lexington Park, MD	0.000	0.000		0.343	Nov 2012	0.865	Nov 2013	-		0.865	Continuing	Continuing	Continuing
Blk III Travel- Obligation throughout the year	WR	NAVAIR:Patuxent River, MD	0.000	0.000		0.050	Nov 2012	0.037	Oct 2013	-		0.037	Continuing	Continuing	Continuing
Blk III Transportation - Material	WR	NAWCAD:Patuxent River, MD	0.000	0.000		0.020	Nov 2012	0.020	Nov 2013	-		0.020	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.413		0.922		0.000		0.922	:		
			All Prior Years	FY 2	2012	FY :	2013		2014 ase		2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract

9.883

32.525

Remarks

PE 0207161N: Tactical Aim Missiles Navy

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R-1 Line #192

0.000

32.525

9: Research, Development, Test & Evalua 7: Operational Systems Development ACTICAL AIM MISSILES Block III FY 2 1Q 2Q cquisition Milestone - Blk III		FY 2013	1Q 2Q	PE 02071	NOMENCLATU 61N: Tactical Ai FY 2015	FY 2016	PROJECT 0458: <i>AIM</i> -	9X Block III 117 FY 2018
1Q 2Q Acquisition Milestone - Blk III	2012	FY 2013 2Q 3Q 4Q MDD	1Q 2Q	PE 02071 2014 3Q 4Q 1	61N: Tactical Ai	FY 2016	0458: <i>AIM</i> -	9X Block III 117 FY 2018
1Q 2Q Acquisition Milestone - Blk III		2Q 3Q 4Q	1Q 2Q	3Q 4Q 1		1Q 2Q 3Q 4Q	 	
Acquisition Milestone - Blk III	3Q 4Q 1Q	MDD	M	IS-A	Q 2Q 3Q 4Q		1Q 2Q 3	3Q 4Q 1Q 2Q 3Q 4Q
Acquisition Milestone - Blk III Systems Development - Blk III								
Systems Development - Blk III		 				MS-B ▲		
		IM Risk Red	duction					
				Downse	lect Rocket Moto	pr Ha	rdware Deve	elopment E&MD
Reviews				SRR ■	SFR	PDR	CDR	TRR
T&E Milestones - Blk III						Develoment	al Tests	
2014PB - 0207161N - 0458								

PE 0207161N: Tactical Aim Missiles Navy

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0207161N: Tactical Aim Missiles 0458: AIM-9X Block III

BA 7: Operational Systems Development

Schedule Details

	Sta	art	Е	nd
Events by Sub Project	Quarter	Year	Quarter	Year
TACTICAL AIM MISSILES Block III				•
Acquisition Milestone - Blk III: Material Development Decision	3	2013	3	2013
Acquisition Milestone - Blk III: Acquisition Milestone A	3	2014	3	2014
Acquisition Milestone - Blk III: Acquisition Milestone B	2	2016	2	2016
Systems Development - Blk III: IM Risk Reduction (Warhead + Rocket Motor)	1	2012	2	2015
Systems Development - Blk III: Systems Development Primary H/W Development Competitive	3	2014	1	2016
Systems Development - Blk III: Systems Develoment Primary EMD	2	2016	4	2018
Systems Development - Blk III: Reviews: System Requirements Review (SRR)	4	2014	4	2014
Systems Development - Blk III: Reviews: System Function Review (SFR)	2	2015	2	2015
Systems Development - Blk III: Reviews: Preliminary Design Review (PDR)	1	2016	1	2016
Systems Development - Blk III: Reviews: Critical Design Review (CDR)	2	2017	2	2017
Systems Development - Blk III: Reviews: Technical Readiness Review (TRR)	4	2017	4	2017
T&E Milestones - Blk III: Developmental Testing	4	2014	4	2018