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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy									Date: March 2014			
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0207163N / AMRAAM							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	113.950	2.669	2.613	10.210	-	10.210	32.549	44.312	46.208	32.348	15.275	300.134
0981: AMRAAM	113.950	2.669	2.613	10.210	-	10.210	32.549	44.312	46.208	32.348	15.275	300.134
MDAP/MAIS Code: 185												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This joint Navy/Air Force program is structured in response to the Joint Service Operational Requirement and Mission Element Need Statement to develop an air superiority air-to-air missile with significant improvements in operational utility and combat effectiveness. This program supports the integration of the Advanced Medium Range Air-to-Air Missile (AMRAAM) into Navy aircraft with analysis of Navy unique applications, aircraft missile integration tasks, product improvement efforts including missile software upgrade development and procurement of hardware to support Navy test and evaluation tasks.												
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.												
B. Program Change Summary (\$ in Millions)				FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total				
Previous President's Budget				2.857	2.613	2.818	-	2.818				
Current President's Budget				2.669	2.613	10.210	-	10.210				
Total Adjustments				-0.188	-	7.392	-	7.392				
• Congressional General Reductions				-	-							
• Congressional Directed Reductions				-	-							
• Congressional Rescissions				-	-							
• Congressional Adds				-	-							
• Congressional Directed Transfers				-	-							
• Reprogrammings				-	-							
• SBIR/STTR Transfer				-0.034	-							
• Program Adjustments				-	-	7.700	-	7.700				
• Rate/Misc Adjustments				-	-	-0.308	-	-0.308				
• Congressional General Reductions Adjustments				-0.154	-	-	-	-				
Change Summary Explanation												
Technical: FY15 funding increase supports Electronic Protection Improvement Program (EPIP) efforts.												

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Schedule: The F/A-18E/F Operational Test (OT) schedule growth was driven by software fixes, which paused testing until May 2013. Further testing delays were the result of sequestration, furlough, target aircraft grounding and the government shutdown. Forecast Initial Operational Capability (IOC) dates were shifted consistent with the delay in the completion of OT. Advanced EPIP AIM-120C7 is being divided into two software releases to permit fielding of incremental improvements against advanced electronic attack threats as soon as possible. Updated to reflect estimate of contract restructure dates pending receipt of proposal in mid February 2014. Schedule growth for Basic and Advanced EPIP for AIM-120D due to additional scope to address Operational Test issues.		

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0207163N / AMRAAM				Project (Number/Name) 0981 / AMRAAM			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
0981: AMRAAM	113.950	2.669	2.613	10.210	-	10.210	32.549	44.312	46.208	32.348	15.275	300.134
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This joint Navy/Air Force program is structured in response to the Joint Service Operational Requirement and Mission Element Need Statement to develop an air superiority air-to-air missile with significant improvements in operational utility and combat effectiveness. This program supports the integration of the Advanced Medium Range Air-to-Air Missile (AMRAAM) into Navy aircraft with analysis of Navy unique applications, aircraft missile integration tasks, product improvement efforts including missile software upgrade development and procurement of hardware to support Navy test and evaluation tasks. Funding increases in FY15 through FY19 support Navy unique Test & Evaluation for Navy fielding of the AIM-120C7 and AIM-120D Electronic Protection Improvement Program (EPIP) capability. Funding increases in FY16 through FY19 are for System Improvement Program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2013	FY 2014	FY 2015
Title: Aircraft integration Articles: Description: Aircraft integration activities and test and evaluation for Navy unique requirements. FY 2013 Accomplishments: Continued aircraft integration activities and test and evaluation for Navy unique requirements. FY 2014 Plans: Continue aircraft integration activities and test and evaluation for Navy unique requirements. FY 2015 Plans: Continue aircraft integration activities and test and evaluation for Navy unique requirements. Additional FY15 resources are required to begin AIM-120C7 Test & Evaluation of the EPIP capability for Navy fielding.	0.850 -	0.870 -	3.644 -
Title: Identify potential improvements Articles: Description: Engineering support of AMRAAM, including investigation and analysis of technologies that offer potential improvements in AMRAAM lethality/performance and compatibility with related weapons systems. FY 2013 Accomplishments:	0.402 -	0.426 -	0.436 -

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Appropriation/Budget Activity 1319 / 7				R-1 Program Element (Number/Name) PE 0207163N / AMRAAM				Project (Number/Name) 0981 / AMRAAM			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015
Continued engineering support of AMRAAM, including investigation and analysis of technologies that offer potential improvements in AMRAAM lethality/performance and compatibility with related weapons systems. Conduct Operational Flight Profile efforts.											
FY 2014 Plans: Continue engineering support of AMRAAM, including investigation and analysis of technologies that offer potential improvements in AMRAAM lethality/performance and compatibility with related weapons systems. Conduct Operational Flight Profile efforts.											
FY 2015 Plans: Continue engineering support of AMRAAM, including investigation and analysis of technologies that offer potential improvements in AMRAAM lethality/performance and compatibility with related weapons systems. Conduct Operational Flight Profile efforts.											
Title: System Improvement Program (SIP) efforts									1.417	1.317	6.130
Articles:									-	-	-
Description: System engineering and test activities in AMRAAM missiles which includes aircraft integration/aircraft Operational Flight Profile efforts and Phase 4 test/equipment tasks. System engineering/aircraft integration activities for SIP with emphasis on Navy unique compatibility requirements and Navy aircraft integration/compatibility requirements.											
FY 2013 Accomplishments: Continued system engineering/aircraft integration activities for SIP with emphasis on Navy unique compatibility requirements and Navy aircraft integration/compatibility requirements.											
FY 2014 Plans: Continue system engineering/aircraft integration activities for SIP with emphasis on Navy unique compatibility requirements and Navy aircraft integration/compatibility requirements.											
FY 2015 Plans: Continue system engineering/aircraft integration activities for SIP with emphasis on Navy unique compatibility requirements and Navy aircraft integration/compatibility requirements. Additional FY15 resources support the EPIP to improve AIM-120C7 performance to counter evolving Electronic Attack threats.											
Accomplishments/Planned Programs Subtotals									2.669	2.613	10.210
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• WPN/ 220600: AMRAAM	86.883	82.529	32.165	-	32.165	194.767	210.749	269.200	315.951	1,695.381	4,923.514
• MPAF/3479: AMRAAM	201.370	323.015	329.600	-	329.600	367.944	402.093	455.149	460.807	2,078.842	12,487.820
• RDTE,AF/673777: AMRAAM	79.831	70.614	83.222	-	83.222	62.569	51.605	49.540	53.687	106.600	1,163.647

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C. Other Program Funding Summary (\$ in Millions)												
	<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Remarks												
D. Acquisition Strategy												
AMRAAM production procurements will continue across the FYDP with periodic pre-planned product improvements and Value Engineering Change Proposals. The Air Dominance Division, previously the 328th Armanent Systems Group, will revisit instituting a Long Term Pricing Agreement upon Raytheon's ability to consistently achieve monthly deliveries of 30 - 35 AIM-120Ds.												
E. Performance Metrics												
Meet cost, schedule, performance, funding and life cycle sustainment requirements in accordance with the Acquisition Program Baseline.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0207163N / AMRAAM						Project (Number/Name) 0981 / AMRAAM			

Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Development (EGLIN)	SS/CPAF	RAYTHEON COMPANY : Tucson AZ	43.911	0.609	Jan 2013	0.546	Jan 2014	4.660	Jan 2015	-		4.660	116.833	166.559	166.559
Award Fees (EGLIN)	SS/CPAF	RAYTHEON COMPANY : Tucson AZ	6.253	0.107	Jan 2013	0.096	Jan 2014	0.822	Jan 2015	-		0.822	20.618	27.896	27.896
Primary Hdw Development (DAHLGREN)	WR	NSWC DAHLGREN D C XDM1 : Dahlgren VA	0.117	0.026	Nov 2012	0.026	Nov 2013	0.028	Nov 2014	-		0.028	0.283	0.480	-
Primary Hdw Development (NAWCAD)	WR	NAWCAD : Patuxent River MD	1.521	0.467	Nov 2012	0.469	Nov 2013	0.447	Nov 2014	-		0.447	3.651	6.555	-
Primary Hdw Development (NAWCWD)	WR	NAWCWD : China Lake CA	0.816	0.089	Dec 2012	0.088	Dec 2013	0.088	Dec 2014	-		0.088	0.677	1.758	-
Prior Years Dev Cost no longer funded in the FYDP	Various	Various : Various	22.670	-		-		-		-		-	-	22.670	-
Subtotal			75.288	1.298		1.225		6.045		-		6.045	142.062	225.918	-

Remarks

Remarks: Percentage of award fees actually awarded in past award fee periods is 14.2%.

Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support (NSMA)	WR	NAVY SYST MGT ACT : Arlington VA	3.233	0.201	Mar 2013	0.212	Jan 2014	0.217	Jan 2015	-		0.217	2.156	6.019	-
Studies & Analyses - JHU/APL	SS/FFP	NAVSEASYS COM : Washington DC	1.460	0.201	May 2013	0.214	May 2014	0.219	May 2015	-		0.219	2.175	4.269	4.269
Prior Years Support costs no longer funded in the FYDP	Various	Various : Various	17.420	-		-		-		-		-	-	17.420	-
Subtotal			22.113	0.402		0.426		0.436		-		0.436	4.331	27.708	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0207163N / AMRAAM				Project (Number/Name) 0981 / AMRAAM					
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Dev Test & Eval (NAWCWD)	WR	NAWCWD : China Lake CA	9.603	0.850	Nov 2012	0.870	Nov 2013	3.644	Nov 2014	-		3.644	23.630	38.597	-
Subtotal			9.603	0.850		0.870		3.644		-		3.644	23.630	38.597	-
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	MIPR	PMA-259 : Eglin AFB FL	2.944	0.119	Oct 2012	0.092	Oct 2013	0.085	Oct 2014	-		0.085	0.669	3.909	-
Prior Years Mgmt Costs no longer funded in the FYDP	Various	Various : Various	4.002	-		-		-		-		-	-	4.002	-
Subtotal			6.946	0.119		0.092		0.085		-		0.085	0.669	7.911	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			113.950	2.669		2.613		10.210		-		10.210	170.692	300.134	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity
1319 / 7

R-1 Program Element (Number/Name)
PE 0207163N / AMRAAM

Project (Number/Name)
0981 / AMRAAM

AMRAAM	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Pre-Planned Product Improvement (P3I)																												
SIP/SWUP	SIP/SWUP																											
									EPIP																			
EPIP Basic IOC																											AIM-120D	▲
EPIP Advanced IOC																AIM-120C7 Tape 1	▲			AIM-120C7 Tape 2	▲							
Phase 4 System OT	F/A-18E/F Operational Test																											
AIM-120D IOC								F/A18 E/F	▲	F/A18 C/D	▲																	
Production Milestones																												
Contract Awards			Lot 27				Lot 28				Lot 29				Lot 30				Lot 31				Lot 32				Lot 33	

2015PB - 0207163N - 0981

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0207163N / AMRAAM	Project (Number/Name) 0981 / AMRAAM	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AMRAAM				
Pre-Planned Product Improvement (P3I): SIP/SWUP: SIP/SWUP Start (P3I Follow-On)	1	2013	4	2019
Pre-Planned Product Improvement (P3I): SIP/SWUP: EPIP	1	2015	4	2019
Pre-Planned Product Improvement (P3I): EPIP Basic IOC: AIM-120D IOC	3	2019	3	2019
Pre-Planned Product Improvement (P3I): EPIP Advanced IOC: AIM-120C7 IOC Tape 1	4	2016	4	2016
Pre-Planned Product Improvement (P3I): EPIP Advanced IOC: AIM-120C7 IOC Tape 2	4	2017	4	2017
Pre-Planned Product Improvement (P3I): Phase 4 System OT: F/A-18E/F Operational Test	1	2013	4	2014
Pre-Planned Product Improvement (P3I): AIM-120D IOC: IOC F/A18 E/F (Threshold)	4	2014	4	2014
Pre-Planned Product Improvement (P3I): AIM-120D IOC: IOC F/A18 C/D	1	2015	1	2015
Production Milestones: Contract Awards: Production Lot 27 Contract Award	3	2013	3	2013
Production Milestones: Contract Awards: Production Lot 28 Contract Award	2	2014	2	2014
Production Milestones: Contract Awards: Production Lot 29 Contract Award	2	2015	2	2015
Production Milestones: Contract Awards: Production Lot 30 Contract Award	2	2016	2	2016
Production Milestones: Contract Awards: Production Lot 31 Contract Award	2	2017	2	2017
Production Milestones: Contract Awards: Production Lot 32 Contract Award	2	2018	2	2018
Production Milestones: Contract Awards: Production Lot 33 Contract Award	2	2019	2	2019