Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0207163N: *AMRAAM*

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.588	2.913	2.857	-	2.857	2.774	2.823	2.894	2.975	24.500	44.324
0981: <i>AMRAAM</i>	2.588	2.913	2.857	-	2.857	2.774	2.823	2.894	2.975	24.500	44.324

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.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.633	2.913	2.942	-	2.942
Current President's Budget	2.588	2.913	2.857	-	2.857
Total Adjustments	-0.045	-	-0.085	-	-0.085
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.032	-			
Program Adjustments	-	-	-0.091	-	-0.091
 Rate/Misc Adjustments 	-	-	0.006	-	0.006
 Congressional General Reductions Adjustments 	-0.013	-	-	-	-

Change Summary Explanation

Technical: Not Applicable

Schedule: The AIM-120D completed an FCA in Sep 09 and the SDD contract was closed. The program entered the DT/OT phase of flight test in 2010. Two successful shots were conducted but several anomalies were discovered during this period. These anomalies were categorized as Build-in-test (BIT) failures, GPS satellite acquisition, Active Electronically Scanned Array (AESA) interference, and missile lockups. Software updates have since mitigated the GPS satellite acquisition, AESA, and BIT issues. Additional software improvements introduced in FY11 have reduced the frequency of missile lockups; and further

PE 0207163N: AMRAAM

DATE: February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	1	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy	R-1 ITEM NOMENCLATURE PE 0207163N: AMRAAM	
BA 7: Operational Systems Development		
improvements are being flight-tested in early-FY12. In A the 3rd quarter of FY12.	ug 11, the third DT/OT shot was successfully conduct	red; and the program plans to enter dedicated OT in

PE 0207163N: AMRAAM Navy

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DATE: February 2012

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APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0207163N: AMRAAM 0981: AMRAAM BA 7: Operational Systems Development FY 2013 FY 2013 FY 2013 Cost To **COST (\$ in Millions)** Complete | Total Cost FY 2011 FY 2012 Base OCO Total FY 2014 FY 2015 FY 2016 FY 2017 24.500 0981: AMRAAM 2.588 2.913 2.857 2.857 2.774 2.823 2.894 2.975 44.324

A. Mission Description and Budget Item Justification

Quantity of RDT&E Articles

0

0

0

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

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 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.

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Continue aircraft integration	0.860	0.822	0.850
Articles:	0	0	0
Description: Continue Aircraft integration activities and test and evaluation for Navy unique requirements.			
FY 2011 Accomplishments: Continued aircraft integration activities and test and evaluation for Navy unique requirements.			
FY 2012 Plans: Continue aircraft integration activities and test and evaluation for Navy unique requirements.			
FY 2013 Plans: Continue aircraft integration activities and test and evaluation for Navy unique requirements.			
Title: Continue to identify potential improvements Articles:	0.400	0.404 0	0.402 0
Description: 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.			
FY 2011 Accomplishments: 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 (OFP) efforts.			
FY 2012 Plans:			

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ation: PB	2013 Navy							DATE: Feb	ruary 2012	
f Evaluation, nt	Navy	I .								
ams (\$ in N	Millions, Art	icle Quantit	ies in Each)	<u>.</u>				FY 2011	FY 2012	FY 2013
						itial improver	ments			
						tial improver	ments			
rogram (Sl	P) efforts					A	rticles:	1.328 0	1.687 0	1.605 0
quipment to requirement t activities i ks. Contin	asks. Contirents and Nav n AMRAAM ue system e	nue system e y aircraft int Phase 4 pro ngineering/a	engineering/a egration/com ogram which ircraft integra	aircraft integ npatibility red includes air ation activitie	ration activiti quirements. craft integrat	es for SIP wi	ofth of the office of the offi			
itegration a	ctivities for				ompatibility r	equirements	and			
		SIP with emp	ohasis on Na	vy unique c	ompatibility r	equirements	and			
			Accon	plishments	/Planned P	rograms Su	btotals	2.588	2.913	0.057
							*			2.857
(\$ in Milli	ons)									2.857
•	•	FY 2013	FY 2013	FY 2013					Cost To	
FY 2011	FY 2012	Base	OCO	Total	FY 2014	FY 2015	FY 201		Complete	Total Cost
•	•				FY 2014 169.561 340.015	FY 2015 173.851 356.796	FY 2010 187.240 381.742	189.247		Total Cost 4,984.211
	Evaluation, nt Imms (\$ in No. AMM, include compatibility and the quipment the requirement activities in the sand Navy attegration are equirement attegration are equipment attegration attegration attegration are equipment attegration attegration attended a	evaluation, Navy nt ms (\$ in Millions, Art AM, including investigated and inves	Evaluation, Navy nt Imms (\$ in Millions, Article Quantity AM, including investigation and an compatibility with related weapons AM, including investigation and an compatibility with related weapons Frogram (SIP) efforts Pering and test activities in AMRAAM equipment tasks. Continue system of requirements and Navy aircraft interest activities in AMRAAM Phase 4 processes and Navy aircraft integration/compategration activities for SIP with emperent activiti	R-1 ITEM NO PE 0207163N Ams (\$ in Millions, Article Quantities in Each) AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech compatibility with related weapons systems. Co AM, including investigation and analysis of tech com	R-1 ITEM NOMENCLATE PE 0207163N: AMRAAM PE 0207163N: AMRAAM Phase 4 program which requirements and Navy aircraft integration/compatibility requirements. Ractivities in AMRAAM Phase 4 program which includes aim that the continue system engineering/aircraft integration activities and Navy aircraft integration activities on Navy unique contegration activities for SIP with emphasis on Navy unique contegration activities on Navy unique contegration activities for SIP with emphasis on Navy unique contegration activities on Navy unique contegration activities for SIP with emphasis	R-1 ITEM NOMENCLATURE PE 0207163N: AMRAAM Rems (\$ in Millions, Article Quantities in Each) RAM, including investigation and analysis of technologies that offer potent compatibility with related weapons systems. Conduct OFP efforts. RAM, including investigation and analysis of technologies that offer potent compatibility with related weapons systems. Conduct OFP efforts. RAM, including investigation and analysis of technologies that offer potent compatibility with related weapons systems. Conduct OFP efforts. Reging and test activities in AMRAAM Phase 4 program which includes aimquipment tasks. Continue system engineering/aircraft integration activities requirements and Navy aircraft integration/compatibility requirements. Restrictivities in AMRAAM Phase 4 program which includes aircraft integration activities for SIP with and Navy aircraft integration activities for SIP with emphasis on Navy unique compatibility requirements. Regration activities for SIP with emphasis on Navy unique compatibility requirements.	R-1 ITEM NOMENCLATURE Evaluation, Navy ITEM NOMENCLATURE PE 0207163N: AMRAAM Residuation, Navy ITEM NOMENCLATURE PE 0207163N: AMRAAM ITEM NOMENCLATURE ITEM NOM	R-1 ITEM NOMENCLATURE Evaluation, Navy nt R-1 ITEM NOMENCLATURE PE 0207163N: AMRAAM PROJECT 0981: AMR O981: AMR O981: AMR AMR, including investigation and analysis of technologies that offer potential improvements compatibility with related weapons systems. Conduct OFP efforts. AM, including investigation and analysis of technologies that offer potential improvements compatibility with related weapons systems. Conduct OFP efforts. Articles: Program (SIP) efforts Articles: Pring and test activities in AMRAAM Phase 4 program which includes aircraft integration/quipment tasks. Continue system engineering/aircraft integration activities for SIP with requirements and Navy aircraft integration/compatibility requirements. At activities in AMRAAM Phase 4 program which includes aircraft integration/aircraft OFP ets. Continue system engineering/aircraft integration activities for SIP with emphasis on and Navy aircraft integration/compatibility requirements. Attegration activities for SIP with emphasis on Navy unique compatibility requirements and equirements.	R-1 ITEM NOMENCLATURE Evaluation, Navy Int R-1 ITEM NOMENCLATURE PE 0207163N: AMRAAM PE 0207163N: AMRAAM FY 2011 FY 2	R-1 ITEM NOMENCLATURE PE 0207163N: AMRAAM RY 0981: AMRAAM RY 2011 RY 2012 RY 2011 FY 2012 FY 2011 FY 2012 FY 2011 FY 2012 FY 2016 FY 2016 FY 2016 FY 2016 FY 2017 FY 2017 FY 2018 FY 2019 FY 2018 FY 2019 FY 2018 FY 2019 FY 201

PE 0207163N: *AMRAAM*

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE : February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207163N: AMRAAM	PROJECT 0981: AMRAAM
D. Acquisition Strategy AMRAAM production procurements will continue across the FY Air Dominance Division, previously the 328th Armanent System achieve monthly deliveries of 30 - 35 AIM-120Ds.		
E. Performance Metrics The AIM-120 AMRAAM program is meeting cost, schedule, per Contractor is meeting the production schedule.	formance, funding and life cycle sustainment in	accordance with the Acquisition Program Baseline.

PE 0207163N: AMRAAM

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

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207163N: AMRAAM

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Product Development	oduct Development (\$ in Millions)		FY 2					2013 CO	FY 2013 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
Primary Hdw Development (EGLIN)	SS/CPAF	RAYTHEON COMPANY:Tucson AZ	43.911	1.014	Jan 2012	0.725	Jan 2013	-		0.725	8.345	53.995	53.995
Award Fees (EGLIN)	SS/CPAF	Various:Various	6.253	0.179	Jan 2012	0.128	Jan 2013	-		0.128	1.475	8.035	8.035
Primary Hdw Development (DAHLGREN)	WR	NSWC DAHLGREN D C XDM1:Dahlgren VA	0.117	0.026	Nov 2011	0.026	Nov 2012	-		0.026	0.334	0.503	
Primary Hdw Development (NAWCAD)	WR	NAWCAD:Patuxent River MD	0.990	0.207	Nov 2011	0.467	Nov 2012	-		0.467	5.578	7.242	
Primary Hdw Development (NAWCWD)	WR	NAWCWD:China Lake CA	0.716	0.086	Nov 2011	0.089	Dec 2012	-		0.089	1.110	2.001	
Prior Years Hardware Dev	Various	Various:Various	22.670	-		-		-		-	0.000	22.670	
		Subtotal	74.657	1.512		1.435		-		1.435	16.842	94.446	

Remarks

Remarks: Percentage of award fees actually awarded in past award fee periods is 15%

Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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
Development Support (NSMA)	WR	NAVY SYST MGT ACT:Arlington VA	3.047	0.204	Mar 2012	0.201	Mar 2013	-		0.201	2.595	6.047	
Studies & Analyses - JHU/APL	SS/FFP	NAVSEASYSCOM:Wash	nington 1.260	0.200	May 2012	0.201	May 2013	-		0.201	2.618	4.279	4.279
Prior Years Dev/Acft Integ	Various	Various:Various	17.420	-		-		-		-	0.000	17.420	
		Subtotal	21.727	0.404		0.402		-		0.402	5.213	27.746	

PE 0207163N: AMRAAM

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

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207163N: AMRAAM

DATE: February 2012

PROJECT

0981: *AMRAAM*

BA 1. Operational System	ris Develop	omeni											
Test and Evaluation (\$	in Millions	s)		FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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
Dev Test & Eval (NAWCWD)	WR	NAWCWD:China Lake CA	7.992	0.822	Nov 2011	0.850	Nov 2012	-		0.850	11.944	21.608	
		Subtotal	7.992	0.822		0.850		-		0.850	11.944	21.608	
Management Services	(\$ in Millio	ons)		FY	2012		2013 se		2013 CO	FY 2013 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
Travel	MIPR	PMA-259:Eglin AFB FL	2.769	0.175	Oct 2011	0.170	Oct 2012	-		0.170	1.968	5.082	
Prior Years Management	Various	Various:Various	4.002	-		-		-		-	0.000	4.002	
		Subtotal	6.771	0.175		0.170		-		0.170	1.968	9.084	
			Total Prior Years Cost	FY	2012		2013 se		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	111.147	2.913		2.857		_		2.857	35.967	152.884	

Remarks

PE 0207163N: AMRAAM

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0207163N: <i>AMRAAM</i>	0981: <i>AMRAAM</i>
BA 7: Operational Systems Development		

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PE 0207163N: AMRAAM Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207163N: AMRAAM

PROJECT

0981: *AMRAAM*

DATE: February 2012

Schedule Details

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
AMRAAM					
Pre-Planned Product Improvement (P3I) Phase 4: Phase 4 SIP/SWUP: Phase 4 SIP/SWUP Start (P3I Follow-0n)	1	2011	4	2017	
Pre-Planned Product Improvement (P3I) Phase 4: System OT: F/A-18E/F Operational Test		2012	4	2013	
Pre-Planned Product Improvement (P3I) Phase 4: IOC: IOC F/A18 E/F (Threshold)	1	2014	1	2014	
Pre-Planned Product Improvement (P3I) Phase 4: IOC: IOC F/A18 C/D	2	2014	2	2014	
Production Milestones: Contract Awards: Production Lot 25 Contract Award	4	2011	4	2011	
Production Milestones: Contract Awards: Production Lot 26 Contract Award	2	2012	2	2012	
Production Milestones: Contract Awards: Production Lot 27 Contract Award	2	2013	2	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 Deliveries: Production Deliveries - Lot 23	3	2011	3	2012	
Production Deliveries: Production Deliveries - Lot 24	3	2012	2	2013	
Production Deliveries: Production Deliveries - Lot 25	2	2013	1	2014	
Production Deliveries: Production Deliveries - Lot 26	2	2014	2	2015	
Production Deliveries: Production Deliveries - Lot 27	2	2015	2	2016	
Production Deliveries: Production Deliveries - Lot 28	2	2016	2	2017	
Production Deliveries: Production Deliveries - Lot 29	2	2017	4	2017	

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