

CLASSIFICATION:

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					R-1 ITEM NOMENCLATURE 0207163N AMRAAM			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		7.650	8.973	9.085	3.556	6.602	2.475	1.498
E0981 AMRAAM		7.650	8.973	9.085	3.556	6.602	2.475	1.498

(U) 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 AMRAAM into Navy aircraft with analysis of Navy unique applications, simulation capability development, aircraft missile integration tasks, pre-planned product improvement (P3I) efforts, and procurement of hardware to support Navy test and evaluation tasks.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0207163N AMRAAM			PROJECT NUMBER AND NAME E0981 AMRAAM			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		7.650	8.973	9.085	3.556	6.602	2.475	1.498
RDT&E Articles Qty								
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0207163N AMRAAM	PROJECT NUMBER AND NAME E0981 AMRAAM																	
(U) B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 10%;"></th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td style="text-align: center;">5.020</td><td style="text-align: center;">6.350</td><td style="text-align: center;">5.203</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>							FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost		5.020	6.350	5.203	RDT&E Articles Quantity				
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Accomplishments/Effort/Subtotal Cost		5.020	6.350	5.203															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 80px;">Continued FY03 system engineering activities in AMRAAM P3I Phase 3 EMD program which include conducting proof of Manufacturing (POM) testing of Phase 3 system hardware, developing, coding, and testing P3I Phase 3 software, and integrating hardware and software into missile test articles for use in ground and initial captive carriage flight testing. Initiate follow-on P3I engineering efforts in FY2004 to include GPS/Advanced Data Link/Kinematics improvements to meet remaining P3I ORD requirements. Continue systems engineering/aircraft integration activities in AMRAAM P3I program with emphasis on Navy unique compatibility requirements and aircraft integration/compatibility requirements. Efforts in consonance with USAF funding of \$39.334 in FY03, \$32.154 in FY04, and \$33.266 in FY05.</div>																			
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Accomplishments/Effort/Subtotal Cost		2.331	2.273	2.332															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 80px;">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.</div>																			
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RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 80px;">Continue aircraft integration activities and test and evaluation for Navy unique requirements.</div>																			

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 3 of 9)

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0207163N AMRAAM	PROJECT NUMBER AND NAME E0981 AMRAAM

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	7.928	9.297	7.972
Current BES/President's Budget	7.650	8.973	9.085
Total Adjustments	-0.278	-0.324	1.113
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.104	
Congressional rescissions			
SBIR/STTR Transfer	-0.185		
OSD			
Reprioritization		-0.220	1.135
Economic Assumptions			-0.022
Reprogrammings	-0.093		
Congressional increases			
Subtotal	-0.278	-0.324	1.113

Schedule:

Phase 3: The P3I Phase 3 EMD program was re-baselined in April 2003 to reduce flight test execution risk and to establish a high confidence overall program execution schedule (all with approved program baseline commitments). In consonance with this re-baselined EMD completion the F/A-18 IOC also had to be adjusted to coincide with execution of the re-baselined DT and OT completion schedules. CNO concurred with the new IOC date.

Phase 4: Prior to awarding the Phase 4 P3I SDD contract (in January 2004) testing schedules were adjusted jointly by Air Force and Navy to reflect a higher confidence of successful program execution. This was done in collaboration with CNO, USAF ACC/Commander Operational Test and Evaluation Force, and USAF/AFOTEC.

Technical:

Not Applicable.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0207163N AMRAAM			PROJECT NUMBER AND NAME E0981 AMRAAM			

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
WPN/P1#6 \$	49.962	37.368	33.914	82.522	100.602	85.090	87.015	104.104	1,711.800
Quantity	76	42	46	101	150	140	150	122	2,419
<u>Related RDT&E</u>									
PE 0207130F F-15									
PE 0204126N F/A-18 Squadrons									
PE 0207163F AMRAAM P3I									
PE 0207133F F-16									
PE 0604239F F-22									
PE 0207134F F-15E									

(U) E. ACQUISITION STRATEGY:

With the December 1997 merger of Raytheon and Hughes into the Raytheon Systems Company, the government implemented a new acquisition strategy labeled AMRAAM Vision 2000. The Vision 2000 strategy capitalizes on a multi-year hardware pricing agreement between Raytheon and the government under the auspices of the Department of Justice which supported the Raytheon/Hughes merger and a shift in government business practices toward a more "commercial" business arrangement. The lot 16 procurement contract award again includes an overarching price control strategy with Total System Performance Responsibility (TSPR) with the prime contractor, Raytheon Defense Systems Segment in Tucson, Arizona. The purchase includes missiles, warranties, spares, missile performance tracking, and reliability tests. Raytheon assumes responsibility for all specifications below missile performance. Also included in the Lot 16 contract are pre-priced options for Lots 17 thru 21 (FY2003 thru FY2007).

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Exhibit R-2a, RDTEN Project Justification
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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			0207163N AMRAAM			E0981 AMRAAM						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	SS/CPAF	Raytheon, Tucson AZ	26.090	4.168	11/02	5.303	12/03	4.326	11/04	1.857	41.744	41.744
Primary Hardware Development	WX	NAWC-AD Patuxent River MD		0.020	11/02	0.020	11/03	0.021	11/04		0.061	
Primary Hardware Development	WX	NAWC-WD Pt Mugu CA		0.073	11/02	0.070	11/03	0.072	11/04		0.215	
Primary Hardware Development	WX	NSWC Dahlgren VA		0.020	11/02	0.021	11/03	0.021	11/04		0.062	
Award Fees	SS/CPAF	Raytheon, Tucson AZ	3.095	0.739	11/02	0.936	12/03	0.763	11/04	0.328	5.861	5.861
Prior Years Development/Acft Integ	Various	Various	19.650								19.650	
Subtotal Product Development			48.835	5.020		6.350		5.203		2.185	67.593	
Remarks: Percentage of award fees actually awarded in past award fee periods is 15%.												
Development Support	SS/FFP	JHU/APL Laurel MD		0.284	01/03	0.384	01/04	0.390	01/05	0.600	1.658	1.658
Development Support	RX	NSMA VA		1.131	12/02	0.900	12/03	0.926	12/04	1.050	4.007	
Development Support	WX	NAWC-WD Pt Mugu CA	8.577	0.040	10/02	0.050	10/03	0.050	10/04		8.717	
Subtotal Support			8.577	1.455		1.334		1.366		1.650	14.382	
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-7			PROGRAM ELEMENT 0207163N AMRAAM			PROJECT NUMBER AND NAME E0981 AMRAAM						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	NAWC WD Pt Mugu CA	0.956	0.168	11/02	0.350	11/03	0.350	11/04	4.025	5.849	
Developmental Test & Evaluation	MIPR	Raytheon, Tucson AZ		0.131	12/02						0.131	
Developmental Test & Evaluation	WX	NAWC WD Pt Mugu CA						1.200	11/04	4.100	5.300	
Subtotal T&E			0.956	0.299		0.350		1.550		8.125	11.280	
Remarks:												
Program Management Support	WX	NAWC-AD Patuxent River M	2.188	0.676	10/02	0.680	10/03	0.703	10/04	1.377	5.624	
Travel	MIPR	PMA-259 Eglin AFB FL	0.950	0.200	10/02	0.259	10/03	0.263	10/04	0.794	2.466	
Subtotal Management			3.138	0.876		0.939		0.966		2.171	8.090	
Remarks:												
Total Cost			61.506	7.650		8.973		9.085		14.131	101.345	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R4, Schedule Profile																								DATE:				February 2004				
APPROPRIATION/BUDGET ACTIVITY									PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-7									0207163N AMRAAM												E0981 AMRAAM											
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Pre-Planned Product Improvement (P3I) Phase 3																																
EMD Completion																																
Test Readiness Reviews																																
Development Test Flight Test																																
IOC C7																																
Pre-Planned Product Improvement (P3I) Phase 4																																
SDD																																
SYSTEM DT/OT Start																																
IOC																																
Phase 4 SWUP																																
Production Milestones																																
Contract awards																																
Deliveries	24	55	12	8	16	16	23	0	2	19	24	16	18	18	20	17	9	10	12	11	12	12	12	17	27	25	24	28	36	37	39	38

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Exhibit R-4, Schedule Profile
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