

CLASSIFICATION: Unclassified

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					R-1 ITEM NOMENCLATURE 0207161N-Tactical Air Intercept			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	17.856	1.909	2.322	4.110	9.411	7.928	2.518	1.264
E0457 AIM-9X	17.856	1.909	2.322	4.110	9.411	7.928	2.518	1.264
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The AIM-9X is a long-term evolution of the AIM-9, a fielded system, qualifying this as a research category operational systems development. The AIM-9X (Sidewinder) short range air-to-air missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracing 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 (fuse, rocket motor and warhead). Anti-Tamper features are being incorporated to protect improvements inherent in AIM-9X design.								

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0207161N-Tactical Air Intercept			PROJECT NUMBER AND NAME E0457-AIM-9X			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	17.856	1.909	2.322	4.110	9.411	7.928	2.518	1.264
RDT&E Articles Qty	10	13						
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: AIM-9X is a long-term evolution of the AIM-9, a fielded system, qualifying this as a research category operational systems development. The AIM-9X (Sidewinder) 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 (fuse, rocket motor and warhead). Anti-Tamper features are being incorporated to protect improvements inherent in AIM-9X design.								

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Exhibit R-2a, RDTEN Project Justification
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0207161N-Tactical Air Intercept	PROJECT NUMBER AND NAME E0457-AIM-9X																	
(U) B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</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 style="text-align: center;">9.752</td><td style="text-align: center;">1.045</td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td style="text-align: center;">13</td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Continue EMD efforts to include OT-IIB, including correction of issues identified during OT.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	9.752	1.045			RDT&E Articles Quantity	13			
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	9.752	1.045																	
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	FY 02	FY 03	FY 04	FY 05															
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<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</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></td><td style="text-align: center;">2.322</td><td style="text-align: center;">3.945</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Begin P3I efforts for AIM-9X fuse.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost			2.322	3.945					
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost			2.322	3.945															

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0207161N-Tactical Air Intercept	PROJECT NUMBER AND NAME E0457-AIM-9X		

(U) C. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
(U) Funding:				
Previous President's Budget:	16.257	1.957	0.716	1.142
Current BES/President's Budget	17.856	1.909	2.322	4.110
Total Adjustments	1.599	-0.048	1.606	2.968
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions		-0.012		
Congressional rescissions	-0.035			
SBIR/STTR Transfer				
Economic Assumptions	-0.050	-0.036	-0.059	-0.094
Reprogrammings	1.234			
Other Navy/OSD Adjustments	0.45		1.665	3.062
Congressional increases				
Subtotal	1.599	-0.048	1.606	2.968

(U) Schedule:

(U) Schedule: the OT-IIB completion date was extended to the forth quarter of FY03 due to 1) A bit-false alarm issue with the control activation system (CAS) that has been resolved; 2) Stand-down of US Navy drones (QF-4) due to an accident in April - AIM-9X flight tests with drones resumed in January 2003.

(U) Technical:

(U) Technical: The control activation system BIT false alarm issue was resolved with minor hardware/software changes.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0207161N-Tactical Air Intercept	PROJECT NUMBER AND NAME E0457-AIM-9X	

(U) D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost*</u>
220900 AIM-9X Missile*	25.779	52.230	35.818	35.582	38.716	49.586	50.305	46.059	849.095	1181.469
231500 AIM-9M Mods	0.792	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.375
AIM-9X Spares	0.973	0.901	1.413	1.916	2.264	2.460	3.273	3.456	0.000	
AIM-9X Mods/Missile (Air Force)	33.197	54.148	69.072	52.706	55.277	53.806	54.49	55.764	714.461	

(U) RELATED AIR FORCE RDT&E:

Program Element: 0207161F	6.946	2.912	0.375	5.573	15.045	5.554	5.634	5.710
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* Includes \$1.7M Congressional add for AIM-7 Sparrow DSM-156 Test Set Upgrade.

(U) E. ACQUISITION STRATEGY:

After a full and open competition, a Cost Plus Incentive Fee/Award Fee contract was awarded to Hughes Missile System Company (now Raytheon Systems Corporation) (RSC) to complete missile system development and prepare for production. This Engineering and Manufacturing Development (EMD) contract includes three Fixed Price options for Low Rate Initial Production (LRIP) Lots I, II and III. The FY01 LRIP I option was exercised in Nov 2000, LRIP II option was exercised in Nov 2001 and LRIP III option was exercised in Nov 2002. The EMD contract and production options provide strong incentives for the contractor to control costs, achieve reliability performance and deliver on schedule.

The Navy Acquisition Executive will make the Full Rate Production (FRP) decision with advice from the Air Force Acquisition Executive subsequent to the successful completion of the associated exit criteria. FRP Lots 4 through 7 contracts will be Firm Fixed-Price (FFP). Rewards or penalties are provided depending on RSC's performance relative to the Procurement Price Commitment Curve (PPCC). A Service review of RSC's Lot 4 through 7 proposals relative to the PPCC will be held prior to award of those contracts.

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Exhibit R-2a, RD TEN Project Justification
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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			0207161N-Tactical Air Intercept			E0457-AIM-9X						
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 (DEI)	C/CPIF	HUGHES, TUCSON, AZ	6.685								6.685	6.685
Primary Hardware Development (DEI)	C/CPIF	RAYTHEON, BEDFORD, MA	8.587								8.587	8.587
PRIMARY HARDWARE (EMD)	C/CPIF	RAYTHEON, TUCSON, AZ	120.434								120.434	278.694
EMD AWARD FEE	C/CPIF/A	RAYTHEON, TUCSON, AZ	14.145								14.145	14.145
AIRCRAFT INTEGRATION	C/CPFF	BOEING, ST LOUIS, MO	24.397								24.397	24.397
Systems Engineering	WX	NAWCWD	33.413			0.403	11/03	0.363	10/04	0.871	35.050	
Systems Engineering	WX	NAWCAD	3.826							0.422	4.248	
MISC HDWR/SFTW (EFFORTS <1.0)	VARIOUS	VARIOUS	7.765							0.435	8.200	
ANCILLARY HWD (LAU-7 Launcher)	C/CPFF	BOEING, ST LOUIS, MO	4.552								4.552	4.552
PRIMARY HARDWARD -P3I Fuse Contr	TBD	TBD				1.364	12/03	2.956	12/04	15.034	19.354	
Award Fees											0.000	
ENGINEERING SERVICES	MIPR	ENGLIN, AFB, FLA	1.810								1.810	
Subtotal Product Development			225.614	0.000		1.767		3.319		16.762	247.462	

Remarks:

EMD Contract Target Value includes both Navy and Air Force Funding. All other fields represent Navy share only. New target value for EMD reflects March 2002 DAES.

Total Prior Years - FY95 and prior under P.E. 0603715D. FY96 and out are funded under P.E. 0207161N.

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDTE, N / BA-7			0207161N-Tactical Air Intercept			E0457-AIM-9X						
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	NAWCWD	26.097	0.335	11/02	0.335	11/03	0.561	11/04	2.177	29.505	
Developmental Test & Evaluation	WX	NAWCAD	4.683								4.683	
Operational Testing	WX	OPTEVFOR		1.368	02/03						1.368	
Subtotal T&E			30.780	1.703		0.335		0.561		2.177	35.556	
Remarks:												
Contractor Engineering Support	ID/IQ,T&M	Endmark, Arlington, Va	3.670								3.670	
Government Engineering Support	ID/IQ,T&M	MSTTm Arlington, Va	0.986								0.986	
Program Management Support	ID/IQ,T&M	NSM, Arlington, Va	1.440								1.440	
Travel	WX	PMA259 IPT	1.263	0.020	10/02	0.020	10/03	0.030	10/04		1.333	
Contractor Engineering Support	ID/IQ,T&M	Various	1.020	0.186	various	0.200	various	0.200	various	0.876	2.482	
SBIR Assessment												
Subtotal Management			8.379	0.206		0.220		0.230		0.876	9.911	
Remarks:												
Total Cost			264.773	1.909		2.322		4.110		19.815	292.929	
Remarks:												

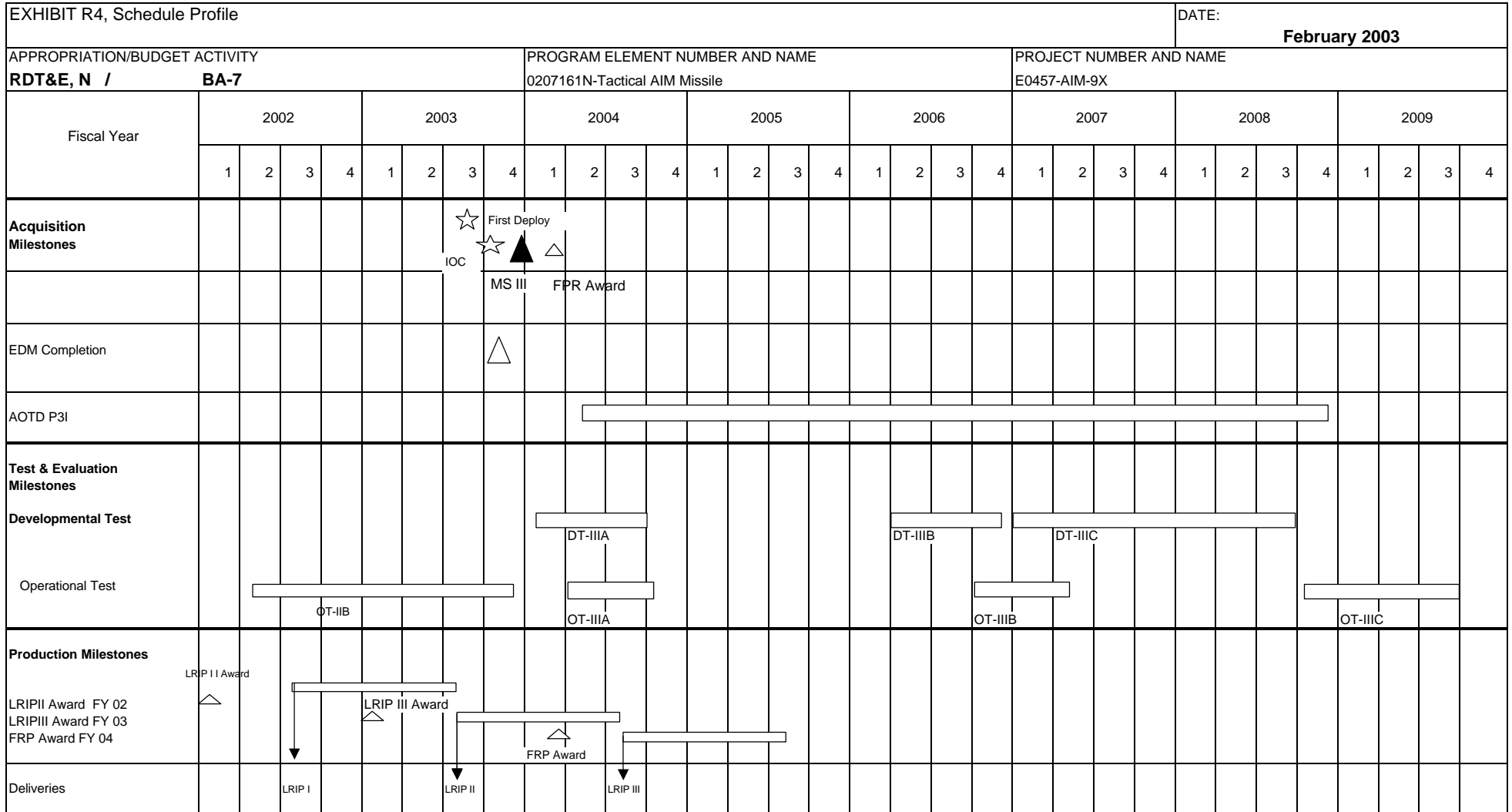
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* Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4, Schedule Profile
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Exhibit R-4a, Schedule Detail
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