

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:	
APPROPRIATION/BUDGET ACTIVITY						February 2008	
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						R-1 ITEM NOMENCLATURE	
						0604270N, EW DEVELOPMENT	
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	68.746	43.179	106.932	193.770	173.899	37.933	35.730
0556 EW COUNTER RESPONSE	33.201	23.659	69.309	156.090	156.770	27.264	27.823
1742 EW TECHNICAL DEVELOPMENT & T&E	.650	7.722	5.451	6.064	6.180	6.277	6.376
2175 TACTICAL AIR ELECTRONIC WARFARE	33.241	8.073	31.496	30.915	10.236	3.666	.791
2260 SPECIFIC EMITTER ID	.680	.744	.676	.701	.713	.726	.740
9999 CONGRESSIONAL ADD	.974	2.981					

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

This element includes development of Electronic Warfare (EW) systems for the United States Navy (USN), United States Marine Corps (USMC), and United States Army tactical aircraft, USMC helicopters, surface combatants, data link vulnerability assessments, precision targeting, USN and USMC communications and non-communications jammers, and development and testing of electronic warfare devices for emerging threats and emergency contingencies.

**B. PROGRAM CHANGE SUMMARY**

Funding:	FY 2007	FY 2008	FY 2009
FY2008 President's Budget:	60.688	41.064	63.221
FY2009 President's Budget:	68.746	43.179	106.932
Total Adjustments	8.058	2.115	43.711

## Summary of Adjustments

Congressional Increases	6.245	3.000	
Congressional Reductions			
Congressional Undistributed Reductions	-0.984	-0.280	
Economic Assumptions	-0.019		-0.446
Miscellaneous Adjustments	2.816	-0.605	44.157
Subtotal	8.058	2.115	43.711

1. FY2007 funding total includes \$21.450 received in GWOT supplemental.
2. FY2008 funding totals do not include \$8.676 previously requested for current FY2008 GWOT requirements.

**Schedule:**

Project Unit 0556, EW Counter Response. Multiple items have affected the ability to maintain the LBT schedule including an Early Operational Capability (EOC) fielding in December 2006, non-availability of test aircraft, and a test philosophy change in Operational Test (OT). The total delay experienced due to these events is eight months, moving IOC and FRP to FY08. The ICAP III schedule change is based on actual execution and testing. The Block III DT-IIIIC/OT-IIIIB - Delay of test schedule is due to a T&E resource conflict and software development schedule delays. Blocks previously labeled as Block IVA and IVB have been recognized as separate blocks and redesignated as Block 4 and Block 5. The Block 4 DT-IIIIC/OT-IIIIC - Initial PLAs of Block IV is underway with Block 4. The Block 5 is planned to more efficiently provide capability to the warfighter. The FRP Delivery is based upon updated A/C induction and delivery date for Lot 2.

Project Unit 1742, EW Technical Development. Ariel was installed and tested on AC2 on schedule, however it had to be de-installed to gain access for another installation that required the aircraft to be rewired. Ariel was reinstalled in the 3rd Qtr FY07.

Project Unit 2175, Tactical Air Electronic Warfare. Upon the approval of the IDECM Block 3 rebaseline plan by the Assistant Secretary of the Navy for Research and Development and Acquisition (ASNRDA), the schedule will be revised. During Developmental Testing (DT), the program experienced delays due to aircraft unavailability. Deficiencies noted during DT required additional changes to Integrated Defensive Electronic Countermeasures (IDECM) Block 3 software prior to entry into Operational Testing (OT). Shortly after IDECM BLOCK 3 entered Integrated Developmental and Operational Testing (DT/OT), significant anomalies were reported by the operational test squadron.

Project Unit 2260, Specific Emmitter ID. Not Applicable.

Project Unit 9999, Congressional Add. Not Applicable.

**Technical:**

Project Unit 0556, EW Counter Response. Not Applicable.

Project Unit 2175, Tactical Air Electronic Warfare. Corrective actions developed to address anomalies reported during OT have been incorporated and successfully demonstrated in flight testing. Upon build-up of additional decoys, DT flights will resume.

Project Unit 1742, EW Technical Development. Not Applicable.

Project Unit 2260, Specific Emmitter ID. Not Applicable.

Project Unit 9999, Congressional Add. Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5			PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW DEVELOPMENT			PROJECT NUMBER AND NAME 0556, EW COUNTER RESPONSE		
COST (\$ in Millions)			FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
0556 EW COUNTER RESPONSE			33.201	23.659	69.309	156.090	156.770	27.264
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) This project develops upgrades to cope with the increasingly complex and dense threat environment. The required improvements in EA-6B Electronic Attack (EA) will be achieved by applying state-of-the-art signal exploitation/processing/display techniques, improved tactics and jamming capabilities. Tactical communications connectivity improvements include Joint Tactical Terminal and Tactical Receive Equipment (TRE) Related Applications (TRAP), Tactical Digital Information Exchange System-B, Tactical Digital Information Link-J, Tactical Information Broadcast Services (TIBS), Tactical Reconnaissance Information Exchange System (TRIXS), USN/USAF Advisory Support Network (ASN) Intelnet, and Demand Assigned Multiple Access-capabilities within Force Net. The EA-6B weapon system is ultimately designed for precision targeting, jamming and destruction of enemy land based, shipborne and airborne command, control and communications (C3), and radars associated with early warning, target acquisition surveillance, anti-aircraft artillery, air-to-surface, surface-to-surface, and surface-to-air missiles. In this capacity, the EA-6B will support both carrier based tactical aircraft strike group operations, and joint forces, in dense radar controlled environments. This PE is directly supporting emerging asymmetric threats currently being addressed by the United States Navy (USN) and the Department of Defense (DOD). These efforts include the continued development of Force Protection/Global War on Terror (GWOT) (classified discussion upon request), Navigation (NAV) and Information Operations (I/O) applications, increased night vision and tracking capabilities, and enhanced communications jamming. The efforts under this project provide for the electronic countermeasures response to these advanced threat weapon systems and C3 networks which are expanding in density and technical complexity. This project funds the continuing development and integration of all EW and EA systems for the EA-6B electronic attack aircraft including improvements within precision Direction of Arrival (DOA), geo-location, Specific Emitter Identification (SEI), auto-Electronic Support Measures (ESM), and selective reactive jamming.

The test articles begun in FY 1999 are two EA-6B aircraft modified to support the Improved Capability (ICAP) III program and Low Band Transmitter (LBT) Engineering Development Models (EDMs). The two EA-6B ICAP III aircraft will be used as test articles during government test and evaluation of MIDS/Link-16, LBT and other EW improvements. The LBT EDMs are broken out as LBT Antenna Set EDMs and Amplifier Set EDMs. The ALQ-99 LBT Antenna Group will provide an expanded war fighting capability against the early warning/acquisition radars and communication links of modern integrated air defense systems. The LBT entered Engineering and Manufacturing Development (E&MD) in September 1996, followed by Low Rate Initial Production (LRIP) in FY 2005 and Full Rate Production (FRP) approval (Milestone III) anticipated in FY 2008. All efforts and system upgrades include the conversion of and transition from the Tactical EA-6B Mission System (TEAMS) mission planner software to the Joint Mission Planning System (JMPS), including development of EA-6B Unique Planning Modules.

A requirement exists to allow the EA-6B to participate in various coordinated targeting scenarios such as Network Centric Warfare, Force Net, Improved Suppression of Enemy Air Defenses/Destruction of Enemy Air Defenses, and other strategic and theatre-based DOD networks and strategies. Likewise, the ICAP III system shall be matured to enable the fusion and correlation of both organic and non-organic threat information to better present sensor and targeting information to the theatre commander via coordinated efforts with other airborne, ground and ship-based operations. A method of implementing this requirement is to include the EA-6B on the Link-16 EW Network. Incorporation of the full EW Link-16 message set into the EA-6B and participation of the ICAP III within the Network Centric Warfare arena will greatly improve the Strike Group Commander's situational awareness.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

ICAP III UPDATE	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	16.510	7.785	7.760
RDT&E Articles Qty			

(U) Efforts will concentrate on completing the integration and enhancement of LINK-16 and ALQ-218 capabilities into the ICAP III aircraft as well as resolving the OPEVAL/Verification of Correction of FOT&E related deficiencies issues associated with the integration of LINK-16 and enhance the reactive assignment capability for supporting the EA-6B/EA-18G development. Continue optimizing the ICAP III weapon system performance to include integration of both software upgrades and avionics items which include the second Embedded Global Positioning System/Inertial Navigation System (EGI), HARM, ALE-47, Low Band Transmitter, Band 7/8, Night Vision Devices (NVDs), USQ-113 software improvements, Reactive Assignments and data fusion with national assets in an electronic warfare battle management architecture. The course of maturing ICAP III to full potential in the ForceNet environment will consist of Block upgrades to deliver approximately 18 months apart.

MISSION PLANNING	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	4.235	3.886	4.094
RDT&E Articles Qty			

(U) Replacement of the Tactical EA-6B Mission System (TEAMS) with the Joint Mission Planning Systems (JMPS) and associated EA-6B Unique Planning Components (LPCs).

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW DEVELOPMENT	PROJECT NUMBER AND NAME 0556, EW COUNTER RESPONSE

LINK - 16 MESSAGE SETS AND DATA LINKS	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.802	1.290	1.278
RDT&E Articles Qty			

(U) Complete testing and correction of deficiencies of the Link-16 modification. Mature the ICAP III weapon system and Link 16 network participation to its full potential by incorporating additional Electronic Warfare message sets enabling full integration with other EW national assets. These data link enhancements will enable the EA-6B ICAP III participation within Force Net and facilitate the EA contributions to the greater situational awareness allowed by Network Centric Warfare efforts.

JAMMER TECHNIQUES OPTIMIZATION (JATO)	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	11.654	10.698	12.077
RDT&E Articles Qty			

(U) Continue software development and test support required to address and counter new and evolving radar and communications threats in support of existing weapons systems, EA-6B and emerging systems, EA-18G. JATO will continue to generate techniques, tactics, and procedures that will help to optimize the capabilities of ALQ-99 and ALQ-218 systems, and to assist in requirements definitions of emerging AEA systems. JATO also continues to lead efforts in support of GWOT and Force Protection issues. (classified discussion available upon request to PMA234).

AIRBORNE ELECTRONIC ATTACK (AEA)	FY2007	FY2008	FY2009
Accomplishments / Effort / Sub-total Cost			44.100
RDT&E Articles Qty			

(U) Conduct Next Generation Jammer (NGJ) technical maturation analysis/studies and complete concept refinement phase activities needed to support a Milestone A decision. Initiate NGJ technology development activities to reduce technological risk and determine appropriate set of technologies for use in NGJ.

C. OTHER PROGRAM FUNDING SUMMARY:	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	To Complete	Total Cost
P-1 # 25, EA-6 Series	227.646	30.395	33.436	32.128	32.679	36.848	37.534	449.148	3422.775

D. ACQUISITION STRATEGY:

The LBT development contract occurred following a full and open competition and was awarded to BAE Systems (formerly MARCONI). Following development and successful DT/OA, sole source LRIP contracts were awarded in FY05 and FY06. Following successful OT, a Sole Source Production contract was awarded in FY07.

The ICAP III contract, an E&MD Cost Plus Incentive Fee/Award Fee basic contract with two Fixed Price Incentive (FPI) production options, was awarded to a Northrop Grumman team in March 1998 following Milestone II and a full and open competition. The contract was changed to a Cost Plus Award Fee contract in FY 1999. LRIP contract award was completed in FY 2003. A Milestone III Navy Program Decision Meeting was held on 23 September 2005. The Acquisition Decision Memorandum was signed by ASN RDA on 21 November 2005. A Firm Fixed Price Full Rate Production contract was awarded in March 2006.

Exhibit R-3 Cost Analysis										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E,N / BA-1			0604270N, EW DEVELOPMENT			0556, EW COUNTER RESPONSE						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total FY s Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
ENGINEERING & TECH SRVC	VARIOUS	TBD	2.941			1.715	10/07	2.272	10/08	12.760	19.688	19.688
ESAD (SUPP) SYSTEMS ENG	VARIOUS	VARIOUS	.900								.900	.900
MGT & PROF SUPPT SRVC	TBD	TBD	.060			.062	10/07	.862	10/08	.310	1.294	1.294
PHD - ICAP III Blk Updates/MIDS	C-BOA	NORTHROP GRUMMAN SYS, NY	3.986			.470	10/07	.281	10/08	5.280	10.017	10.017
PRIMARY HDW DEVELOP-ICAP III	C-BOA	VARIOUS	250.597	.874	10/06	.800	10/07	.425	10/08	2.000	254.696	254.696
SYSTEMS ENGINEERING	C-BOA	NORTHROP GRUM PRB SYS, INC, HOLLYWD, MD		2.722	10/06						2.722	2.722
PRIMARY HDW DEVELOP	VARIOUS	NORTHROP GRUMMAN SYS, BETHPAGE NY		.202	05/07						.202	.202
STUDIES & ANALYSIS	TBD	TBD	.539			.504	10/07	39.625	10/08	2.520	43.188	43.188
STUDIES & ANALYSIS	TBD	TBD						1.500	10/08		1.500	1.500
SYSTEMS ENGINEERING	WX	NAWCAD, PATUXENT RIVER MD	8.132	2.588	10/06	1.273	10/07	2.012	10/08	Continuing	Continuing	
SYSTEMS ENGINEERING/BLK UPDATE	WX	NAWCWD, PT MUGU CA	15.732	10.949	10/06	7.992	10/07	8.847	10/08	Continuing	Continuing	
SYSTEMS ENGINEERING	WX	NSWC DET, CRANE IN	3.084	2.687	10/06	.600	10/07	.600	10/08	Continuing	Continuing	
SYSTEMS ENGINEERING	WX	VARIOUS	3.900	2.081	10/06	1.922	10/07	2.381	10/08	Continuing	Continuing	
SYSTEMS ENGINEERING												
SUBTOTAL PRODUCT DEVELOPMENT			289.871	22.103		15.339		58.805		Continuing	Continuing	

Remarks: Dollars may not add due to rounding.

SUPPORT												
DEVELOPMENT SUPPORT - AEA	TBD	TBD						.500	01/09		.500	
DEVELOPMENT SUPPORT -JATO	SS/FP	JOHNS HOPKINS UNIV, COLUMBIA, MD	4.665	3.150	01/07	4.100	01/08	4.100	01/09	16.400	32.415	32.415
ENGINEERING & TECH SRVC	TBD	TBD						1.500	01/09		1.500	
ENGINEERING & TECH SRVC	VARIOUS	VARIOUS		1.809	VARIOUS					.060	1.869	1.869
ENGINEERING & TECH SRVC	FPF	TITAN SYSTEM CORP., MT. LAUREL, NJ		.535	12/06						.535	.535
SUBTOTAL SUPPORT			4.665	5.494		4.100		6.100		16.460	36.819	

Remarks:

TEST & EVALUATION												
OPER TEST & EVAL- ICAP III	WX	OPER T & E FOR CD 30, NORFOLK VA	.085	.872	10/06					.957	1.914	1.914
DEV TEST & EVAL - ICAP III UPDATE	WX	NAWCAD, PATUXENT RIVER MD	8.143	4.422	10/06	1.000	10/07	1.200	10/08	Continuing	Continuing	
DEVELOPMENTAL TESTING - MP	WX	VARIOUS	.378			1.550	10/07	.950	10/08	Continuing	Continuing	
OPER TEST & EVAL - ICAP III UPDATE	WX	OPER T & E FOR CD 30, NORFOLK VA	2.785			.500	10/07	.500	10/08	Continuing	Continuing	
OPERATIONAL TEST & EVAL- MP	WX	OPER T & E FOR CD 30, NORFOLK VA	.200			.400	10/07	.374	10/08	Continuing	Continuing	
SUBTOTAL TEST & EVALUATION			11.591	5.294		3.450		3.024		Continuing	Continuing	

Remarks: Funding is required to conduct ICAP III Blocks 3 and 4 and LBT developmental/operational test planning, execution and reporting.

MANAGEMENT												
PROGRAM MGMT SUPT - AEA	WX	TBD						.500	10/08		.500	
TRAVEL - AEA	TO	TBD						.100	10/08		.100	
TRAVEL - PMA-234	TO	TRAVEL VENDOR 1001 1003 1050, LEX PK MD		.260	10/06	.270	10/07	.280	10/08	1.120	1.930	
TRAVEL - NATEC	TO	NAV AIR TEC EN SV CMD, SAN DIEGO CA	.021	.050	10/06					.071	.142	
GOV ENGINEERING SUPT - MP	WX	NAWCWD, PT MUGU CA	2.385			.500	10/07	.500	10/08	Continuing	Continuing	
SUBTOTAL MANAGEMENT			2.406	.310		.770		1.380		Continuing	Continuing	

Remarks:

Total Cost			308.533	33.201		23.659		69.309		Continuing	Continuing	
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EXHIBIT R4, Schedule Profile																	DATE: <b>February 2008</b>												
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME														
<b>RDT&amp;E, N / BA-5</b>					0604270N, EW DEVELOPMENT										0556, EW COUNTER RESPONSE														
Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				
	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	
<b>Acquisition Milestones</b>																													
LBT																													
AEA NGJ																													
ICAP III																													
<b>Test &amp; Evaluation Milestones</b>																													
ICAP III Development Test/Operational Test																													
<b>Production Milestones</b>																													
LBT																													
LRIP IA Start - FY05																													
LRIP IB Start - FY06																													
LRIP 3 Start - FY07																													
FRP1 Start - FY08																													
FRP2 Start - FY09																													
ICAP III FRP Award - FY06																													
<b>Deliveries</b>																													
LBT - LRIP IA (17)																													
LBT - LRIP IB (16)																													
ICAP III - FRP (4)																													
LBT - LRIP 3 (36)																													
LBT FRP1 (10)																													
LBT FRP2 (22)																													

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Exhibit R-4a, Schedule Detail

DATE:  
**February 2008**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N / BA 5</b>	0604270N, EW DEVELOPMENT			0556, EW COUNTER RESPONSE				
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY2012	FY2013	
<b>Low Band Transmitter</b>								
IOC LBT		2Q-3Q						
Full Rate Production (FRP) Decision LBT (MS III)		2Q						
Start Low-Rate Initial Production IA (LRIP)	1Q-4Q							
Start Low-Rate Initial Production IB (LRIP) Del		1Q-3Q						
Start Low-Rate Initial Production 3 (LRIP) Del			2Q-4Q	1Q-2Q				
Full Rate Production Start		3Q						
Full Rate Production 1 Deliveries				2Q-3Q				
Full Rate Production 2 Deliveries				4Q	1Q-3Q			
<b>ICAP III</b>								
First Deployment - ICAP III BLOCK 2 / LINK 16	1Q							
First Deployment - ICAP III BLOCK 3/LBT		3Q						
First Deployment - ICAP III BLOCK 4			2Q					
First Deployment - ICAP III BLOCK 5				2Q				
Block 3 DT- IIIC/OT-III B	3Q-4Q	1Q-2Q						
Block 4 DT- IIID/OT-III C		3Q-4Q						
Block 5 DT- IIID/OT-III C			1Q-3Q					
ICAP III FRP Deliveries		3Q-4Q						
AEA Next Gen Jammer (MS A)			4Q					
AEA Next Gen Jammer (MS B)							1Q	

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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2008</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development			PROJECT NUMBER AND NAME 1742 EW Technical Development			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1742 EW Technical Development		<b>0.650</b>	<b>7.722</b>	<b>5.451</b>	<b>6.064</b>	<b>6.180</b>	<b>6.277</b>	<b>6.376</b>
RDT&E Articles Qty		<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

Skunkworks is a CNO N6 funded effort that focuses on the quick reaction prototyping of tactical information warfare systems. This program directly addresses various fleet requirements, airborne and surface cryptologic operational requirements documents and the joint requirements oversight council mission needs statement for information warfare systems and capabilities across the spectrum of conflict. The projects developed under this program are designed to deny, degrade, disrupt or destroy enemy command and control communications. These systems provide information dominance to friendly forces during conflict, which is necessary for successful mission accomplishment.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2008</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development	PROJECT NUMBER AND NAME 1742 EW Technical Development

**B. Accomplishments/Planned Program**

Test and Evaluation Equipment		FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost		0.650	0.660	0.500
RDT&E Articles Quantity		1	1	1

-(U) Continue airborne Information Warfare jammer development, test and evaluation to include ancillary equipment, cabling, hardware, antennas and installation on prototype aircraft.

Studies & Analysis		FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost			2.040	2.116
RDT&E Articles Quantity			N/A	N/A

-(U) Conduct studies and vulnerability analysis on emerging threats/targets for Electronic Warfare (EW) programs.

Software and Hardware Integration and Installation		FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost			3.000	
RDT&E Articles Quantity			1	

-(U) Provide software integration, hardware installation and refurbishment of fixed site EW asset.

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development	PROJECT NUMBER AND NAME 1742 EW Technical Development

**B. Accomplishments/Planned Program (Cont.)**

Develop and Integrate Systems		FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost			1.547	1.834
RDT&E Articles Quantity			N/A	N/A

-(U) Develops and fields EW capabilities in accordance with Fleet Forces Command prioritized signals first to be integrated into existing MCS-21 EW systems and deployed on air and surface platforms.

Computer Network Operations		FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost				0.500
RDT&E Articles Quantity				N/A

-(U) Funds CNO directed efforts towards computer network attack initiatives. Details held at a higher classification level.

Program Management Support		FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost			0.475	0.501
RDT&E Articles Quantity			N/A	N/A

-(U) Funds official travel expenses and required training to support Research & Development projects as well as consumable/simplified acquisitions expenses in support of the program management office.

**C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable**

**D. ACQUISITION STRATEGY: Not Applicable**

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604270N Electronic Warfare Development				1742 EW Technical Development					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	Various	Various	2.447	0.200	Various	0.344	Various	0.342	Various		3.333	
Ancillary Hardware Development											0.000	
Aircraft Integration	Various	Various		0.300	Various	0.345	Various	0.410	Various		1.055	
ES/EA Integration	WX	NRL, Washington DC				3.000	1Q FY08				3.000	
Ship Suitability											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			2.447	0.500		3.689		0.752		0.000	7.388	
Remarks:												
Development Support	WR	NAWC,WD China Lake	0.806			0.315	1Q FY08	0.347	1Q FY09		1.468	
Software Development	Various	Various				0.929	Various	1.235	Various		2.164	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses	Various	Various				2.040	1Q FY08	2.116	1Q FY09		4.156	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.806	0.000		3.284		3.698		0.000	7.788	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-5			0604270N Electronic Warfare Development				1742 EW Technical Development					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various	1.490	0.150	Various	0.250	Various	0.500	Various		2.390	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			1.490	0.150		0.250		0.500		0.000	2.390	
Remarks: Supports the development of technical test plans and techniques for developed capabilities at various test facilities for multiple Navy platforms.												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support						0.186	Various	0.184	Various		0.370	
Travel	Various	Various	0.000	0.000		0.313	Various	0.317	Various		0.630	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.499		0.501		0.000	1.000	
Remarks: Provides for official travel and training expenses and miscellaneous consumables for the program management office.												
Total Cost			4.743	0.650		7.722		5.451		0.000	18.566	
Remarks:												

CLASSIFICATION: UNCLASSIFIED

EXHIBIT R4, Schedule Profile																								DATE: <b>February 2008</b>								
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>								PROGRAM ELEMENT NUMBER AND NAME 0604270N Electronic Warfare Development								PROJECT NUMBER AND NAME 1742 EW Technical Development																
Fiscal Year	2007				2008				2009				2010				2011				2012				2013							
	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				
<b>Electronic Warfare</b>																																
Airborne Sys Development																																
Airborne Integration					AC2	AC3			AC4				AC5				AC6															
Vulnerability Analysis																																
Fixed Site Development Fixed Site Delivery																																
Countermeasure Dev																																
Countermeasure Delivery																																
Computer Network Ops																																
S/W Sprial Capability Delivery																																



EXHIBIT R-2a, RDT&E Project Justification

DATE:  
February 2008

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW DEVELOPMENT			PROJECT NUMBER AND NAME 2175, TACTICAL AIR ELECTRONIC WARFARE			
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
2175 TACTICAL AIR ELECTRONIC WARFARE	33.241	8.073	31.496	30.915	10.236	3.666	.791
RDT&E Articles Qty	8						

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project developed the new Fiber Optic Towed Decoy (FOTD) capability and integrated this new capability with the rest of the Electronic Warfare (EW) suite (i.e., Technique Generator (ALQ-214), Radar Warning Receiver (ALR-67(V)3) and Countermeasures Dispensing Set (ALE-47), the associated cockpit controls, displays and other avionics for the lead aircraft (F/A-18E/F).

FY 2007, Title IX funding was for the AAR-47(V)2 Missile Warning System, a passive, non-imaging missile detection system to protect helicopters and transports from Surface-to-Air Missiles (SAMs) infrared (IR) homing missiles and laser-aided laser-guided threats. Over 2500 systems are currently fielded on United States Navy (USN), United States Marine Corps (USMC), United States Air Force (USAF), United States Army (USA) and coalition Foreign Military Sales (FMS) uses. Current AAR-47A(V)2 UltraViolet (UV) Missile Warning Sensors require upgrade to provide improved warning of fielded SAMs in the current theaters of operation. Funds will complete engineering development effort of new AAR-47B(V)2 sensors for installation into USN, USMC, USAF, USA and Coalition FMS assault support aircraft. Redesign will be a form-fit replacement at the organizational (o-level) and be compatible with existing aircraft wiring (A-Kit).

FY 2008 begins development of a Digital Radio Frequency Memory (DRFM) Jammer for the F/A-18A+/C/D aircraft. Effort includes hardware and software development, integration, and testing to qualify the DRFM Jammer in the aircraft. In addition, this project will include development and qualification of the BOL Countermeasures Dispenser for the F/A-18A+/C/D aircraft. Project satisfies requirements contained within the Air Dominance Interface Control Document and is critical to ensure aircraft survivability and viability as a strike asset in threat environments for the next twenty years.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

DRFM Analysis of Alternatives (AOA)	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	4.879		
RDT&E Articles Qty - Not Applicable			

FY 2007 Congressional Add

Fund DRFM Analysis of Alternatives, development of functional performance specification and documentation necessary for the release of a competitive Request For Proposal (RFP) and initiation of required acquisition Milestone B documentation. Development of required interfaces and structural analysis of the installation site to define mounting requirements.

Block 3 Fiber Optic Towed Decoy	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	8.814		
RDT&E Articles Qty - Not Applicable			

Fund IDECM Block 3 FOTD. Efforts include Completion of Block 3 FOTD Development, Integration, Combined Developmental Testing and Operational Testing, and Milestone III decision.

Integrate DRFM & BOL	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		8.073	31.496
RDT&E Articles Qty - Not Applicable			

Fund development and engineering efforts to produce the DRFM Jammer Engineering Development Models to conduct laboratory and flight testing to support incorporation into the F/A-18A+/C/D. Fund hardware and software development and integration. In addition, fund development and engineering efforts to produce BOL Dispenser Engineering Development Model units to conduct flight testing to support integration into the FA-18A+/C/D. Fund BOL development and integration effort in the F/A-18A+/C/D to include aircraft compatibility and effectiveness testing.

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2008

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW DEVELOPMENT	PROJECT NUMBER AND NAME 2175, TACTICAL AIR ELECTRONIC WARFARE
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Engineering Development Effort, AAR-47 (V) 2 FY 2007 FY 2008 FY 2009

Accomplishments / Effort / Sub-total Cost	19.548		
RDT&E Articles Qty	8		

Complete engineering development effort of new AAR-47B(V)2 sensors for installation into USN, USMC, USAF, USA and Coalition FMS assault support aircraft. Eight (8) PDX Upgrade B Kits will be purchased as engineering articles for Contractor use in laboratory and environmental stress screening, (required for avionic systems).

C. OTHER PROGRAM FUNDING SUMMARY:

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
APN-5, Line 50, Common ECM, OSIP 007-03, 057600	34.867	35.854	36.215	36.499	38.344	39.613	40.875	100.706	362.973
APN-5, Line 50, Common ECM, OSIP 009-10, 057600				4.734	31.278	68.202	59.020	209.993	373.227
APN-5, Line 50, Common ECM, OSIP 006-00, 057600	10.900		4.452	4.438	3.901	6.437	6.725	6.524	43.377
PANMC, Line 8, Airborne Expendable CM, 018200	0.399	28.758	25.276	25.839	26.041	26.857	27.712	388.070	548.952
(QA120 and allocated support under QA830 and QA800)									

D. ACQUISITION STRATEGY:

IDECM Fiber Optic Towed Decoy sole source Full Rate Production (FRP) in FY 2008. DRFM Jammer will be a competitive System Development and Demonstration award in 3Q FY 2008, an Low Rate Initial Production (LRIP) award in FY 2011 and an FRP award in FY 2012. DRFM Jammer Engineering Development Model units will be procured as part of the development effort for use in laboratory and flight testing. BOL Countermeasures System will be full and open competition. An LRIP is planned for FY 2011. An FRP contract is planned for FY 2010.

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Exhibit R-3 Cost Analysis										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E,N / BA-5		0604270N, EW DEVELOPMENT				2175, TACTICAL AIR ELECTRONIC WARFARE						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Aircraft Integration - DRFM	TBD	TBD				.100	Mar 2008	1.410	Feb 2009	5.330	6.840	
Aircraft Integration - IDECM	VARIOUS	VARIOUS	70.761								70.761	
Primary Hdw Dev - AAR-47 (FY07 SUPP)	CPFF	ATK MISSILE SYSTEMS COMPANY, CLEARWATER, FL		16.000	May 2007						16.000	16.000
Primary Hdw Dev - AAR-47 (FY07 SUPP)	MP	EGLIN AFB, FL		2.100	Jul 2007						2.100	
Primary Hdw Dev - AAR-47 (FY07 SUPP)	MP	NIGHT VISION SENSOR , FORT BELVOIR, VA		.064	Sep 2007						.064	
Primary Hdw Dev - BOL	TBD	TBD				1.704	Mar 2008	3.650	Dec 2008		5.354	
Primary Hdw Dev - DRFM	CPFF	VARIOUS		2.121	VARIOUS	3.597	Mar 2008	15.522	Dec 2008	18.991	40.231	40.231
Ship Suitability AAR-47	WX	NAWCAD, PATUXENT RIVER MD		.050	Sep 2007						.050	
Studies & Analysis - DRFM (CONG)	MP	NUWC KEYPORT DIV. KEYPORT, WA		.018	Jul 2007						.018	
Systems Eng - IDECM	CPFF	BAE SYSTEMS INFO.&ELEC.SYS.INTEGRATION INC, NASHUA,NH	10.541	1.759	VARIOUS						12.300	12.300
Systems Eng - IDECM	CPFF	VARIOUS	62.359	.200	Nov 2006						62.559	62.559
Systems Eng - IDECM	CPFF	RAYTHEON COMPANY, GOLETA, CA		.450	VARIOUS						.472	.472
SUBTOTAL PRODUCT DEVELOPMENT			143.683	22.762		5.401		20.582		24.321	216.749	

Remarks:

SUPPORT												
Development /Eng Spt AAR-47 - (Non-FFRDC)	WX	NRL, WASHINGTON DC		.343	Sep 2007						.343	
Development/Eng Spt AAR-47	WX	VARIOUS		.220	VARIOUS						.220	
Integrated Log Spt - BOL	WX	NAWCAD, PATUXENT RIVER MD				.200	Mar 2008	.250	Nov 2008		.450	
Software Development - IDECM	WX	VARIOUS	6.843								6.843	
Software Development - DRFM	CPFF	TBD				1.260	Mar 2008	7.866	Nov 2008	8.234	17.360	17.360
SUBTOTAL SUPPORT			6.843	.563		1.460		8.116		8.234	25.216	

Remarks:

TEST & EVALUATION												
Dev Test & Eval Spt AAR-47	WX	NRL, WASHINGTON DC		.270	VARIOUS						.270	
Eng Spt - IDECM	WX	NAWCWD, CHINA LAKE CA	7.025	1.604	Oct 2006						8.629	
Eng Spt - IDECM	WX	VARIOUS	30.863	1.025	VARIOUS						31.888	
Eng/Log Spt - BOL	WX	TBD				.250	Mar 2008	.750	Nov 2008		1.000	
Eng/Log Spt - DRFM	WX	NAWCWD, CHINA LAKE CA		1.150	VARIOUS	.183	Mar 2008	.288	Dec 2008	5.569	7.190	
Eng/Log Spt - DRFM	WX	NAWCAD, PATUXENT RIVER MD		.515	VARIOUS	.308	Mar 2008	.757	Dec 2008	5.986	7.566	
Eng/Log Spt - DRFM	MP	DEFENSE TECHNICAL INFORMATION CENTER		.067	Aug 2007						.067	
IDECM Test Spt (OPTEVFOR)	WX	OPER T & E FOR CD 30, NORFOLK VA	1.413	3.236	Aug 2007						4.649	
IDECM Test Spt - (NON-FFRDC)	CPFF	VARIOUS	.712	.361	VARIOUS						1.074	1.074
Live Fire Test & Eval AAR-47	WX	NRL, WASHINGTON DC		.508	Nov 2006						.508	
Operational Test & Eval AAR-47	WX	NRL, WASHINGTON DC		.100	Nov 2006						.100	
Studies & Analysis - NON-FFRDC	CPFF	JOHN HOPKINS UNIVERSITY, LAUREL, MD		.774	Jul 2007						.774	.774
SUBTOTAL TEST & EVALUATION			40.014	9.610		.741		1.795		11.555	63.715	

Remarks: Totals may not add due to rounding.

MANAGEMENT												
AAR-47 Travel	TO	NAVAIR, PAXTUXENT RIVER MD		.050	Nov 2006						.050	
PM Spt DRFM (NON-FFRDC)	TBD	TBD				.146	Mar 2008	.676	Dec 2008	1.165	1.987	
Prog Mgmt Spt (BOL)	WX	NAWCAD, PATUXENT RIVER MD				.150	Mar 2008	.150	Nov 2008		.300	
Prog Mgmt Spt (DRFM)	WX	NAWCAD, PATUXENT RIVER MD				.075	Mar 2008	.077	Dec 2008	.333	.485	
Prog Mgmt Spt (IDECM)	WX	VARIOUS	19.261	.153	VARIOUS						19.414	
Program Management (Non-FFRDC)	CPFF	D P ASSOCIATES INC, ARLINGTON, VA		.077	Nov 2006						.077	.077
Travel (BOL)	TO	NAWCAD, PATUXENT RIVER MD				.100	Mar 2008	.100	Oct 2008		.200	
Travel (IDECM)	TO	VARIOUS		.085	VARIOUS						.111	
Travel (IDECM)	TO	NAWCAD, PATUXENT RIVER MD		.256							.256	
SUBTOTAL MANAGEMENT			19.602	.306		.471		1.003		1.498	22.880	

Total Cost			210.142	33.241		8.073		31.496		45.608	328.560	
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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																			DATE: February 2008													
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME																	
RDT&E, N / BA-5					0604270N, EW DEVELOPMENT										2175, TACTICAL AIR ELECTRONIC WARFARE																	
Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013							
	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				
<b>Acquisition Milestones</b>																																
IDECM Block 3 *			△					☆																								
AAR-47B(V)2								☆																								
DRFM / BOL						△	△																									☆
IDECM IB-3 Development* Envelope Expansion	Combined DT/OT																															
DRFM PDR												△																				
DRFM CDR												△																				
DRFM Development																																
EDM DRFM Jammer Delivery																																
Software - IDECM IB-2 / IB-3 UPDATES*	█																															
Software - DRFM/BOL																																
AAR-47B(V)2 Sensor Development																																
AAR-47B(V)2 Prototypes Delivery																																
AAR-47B(V)2 Software Changes to 30.X OFP Delivery																																
<b>Test &amp; Evaluation Milestones</b>																																
IDECM IB-3 Integrated DT/OT*	█																															
AAR-47B(V)2 Development Test (Aircraft Certification PAX River)																																
AAR-47B(V)2 OP Test (Live Fire)																																
DRFM Testing																																
BOL Testing																																

\* Upon approval of the IDECM Block III rebaseline plan by the Assistant Secretary of the Navy for Research and Development and Acquisition (ASNRDA), the schedule will be revised.

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**CLASSIFICATION:**

Exhibit R-4a, Schedule Detail				DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NUMBER AND NAME			
<b>RDT&amp;E, N / BA-5</b>	0604270N, EW DEVELOPMENT			2175, TACTICAL AIR ELECTRONIC WARFARE			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
IDECM Milestone III IB-3*	3Q						
IDECM IOC IB-3*		4Q					
AAR-47B(V)2 IOC			1Q				
DRFM/BOL MS B		2Q					
DRFM/BOL System Design Development (SDD) Award		3Q					
DRFM/BOL MS C					1Q		
DRFM/BOL FRP Decision Review						2Q	
DRFM/BOL IOC							3Q
IDECM IB-3 COMBINED DT/OT*	1Q-3Q						
Preliminary Design Review (PDR) Jammer			1Q				
Critical Design Review (CDR) - Jammer			3Q				
DRFM Development		3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q	
Eng Dev Model (EDM) DRFM Jammer Delivery				1Q-2Q			
IDECM Software IB-2/IB-3 Updates*	1Q-4Q						
DRFM/BOL Software			1Q-4Q	1Q-4Q	1Q-4Q	1Q	
AAR-47B(V)2 Sensor Development PDR	4Q						
AAR-47B(V)2 Sensor Development CDR		2Q					
AAR-47B(V)2 Prototypes Delivery	4Q	2Q					
AAR-47B(V)2 Software Changes to 30.X OFP Delivery	3Q-4Q	1Q-3Q					
IDECM IB-3 Integrated DT/OT*	1Q-3Q						
AAR-47B(V)2 Developmental Test, Aircraft Certification		3Q					
AAR_47B(V)2 Op Test (Live Fire)		3Q-4Q	1Q				
DRFM Testing DT				1Q-4Q	1Q		
DRFM Testing IDT/OT					2Q-4Q		
BOL Testing DT			2Q				
BOL Testing OT			4Q				

\* Upon approval of the IDECM Block III rebaseline plan by the Assistant Secretary of the Navy for Research and Development and Acquisition (ASNRDA), the schedule will be revised.

**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2008</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW Development				PROJECT NUMBER AND NAME 2260 SPECIFIC EMITTER		
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	<b>0.680</b>	<b>0.744</b>	<b>0.676</b>	<b>0.701</b>	<b>0.713</b>	<b>0.726</b>	<b>0.740</b>
RDT&E Articles Qty							

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

This project supports systems development and collection of Specific Emitter Identification (SEI) information from National Technical Means (NTM) to track commercial ships over 200 gross registered tons world-wide. Research and development will cover improvements and enhancements to Electronic Intelligence technology. This will include improved/next generation SEI technology for miniaturization and automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Propagation in a multi-path signal environment will also be assessed. All work on this project will be undertaken in pursuit of goals stated by the Office of Naval Intelligence and the National Security Agency in support of the Worldwide Ship Tracking Program.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2008</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW Development	PROJECT NUMBER AND NAME 2260 SPECIFIC EMITTER	
<b>B. Accomplishments/Planned Program</b>			
<b>SENSOR FUSION</b>			
	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.275	0.253	0.175
RDT&E Articles Quantity			
<p><b>SENSOR FUSION.</b> This effort supports systems development and information fusion of improved SEI technology for automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. FY07: Continued task to fuse additional sources of data with SEI data for automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Work toward increasing sensor fusion, collection and reporting automation helped reduce staffing and support remote access and control capability. Completed task to fuse Automatic Identification System (AIS) information with SEI both within WINSEI (Windows SEI) operational display and within the SEI database. This has provided a robust source of data intelligence on collected signals. FY08: Continue all efforts of FY07 less those noted as completed above. FY09: Continue all efforts of FY08 less those noted as completed above.</p>			
<b>SYSTEM AUTOMATION</b>			
	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.203	0.200	0.231
RDT&E Articles Quantity			
<p><b>SYSTEM AUTOMATION.</b> This effort supports development of a autonomous surveillance system capable of providing emitter signal information to a central location. FY07 Initiated and completed capability to automatically monitor for Critical Contacts of Interest. Initiated and completed capability to automate system SEI certification testing. Continued task to develop an unmanned, autonomous, remote collection and surveillance system. Continued task to automate fusion of other sensor information with SEI data collection. FY08: Continue all efforts of FY 2007 less those noted as completed above. FY09: Continue all efforts of FY 2008 less those noted as completed above.</p>			
<b>TECHNOLOGY REFRESH &amp; COMMUNICATION ENHANCEMENT</b>			
	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost	0.202	0.291	0.270
RDT&E Articles Quantity			
<p><b>TECHNOLOGY REFRESH &amp; COMMUNICATION ENHANCEMENT.</b> This effort improves SEI system performance, real-time communication and tactical use of SEI which will be expanded with next generation SEI technology. FY07: Continued task to incorporate other SEI algorithms into deployed processing software. Continued task on integrating advanced SEI hardware with WINSEI software to support improved SEI system performance and capabilities for tactical and technical use, and which can be expanded with next generation SEI algorithms. Continued task to incorporate further message reporting formats for dissemination of SEI data and improve SEI interoperability. FY08: Continue all efforts of FY 2007 less those noted as completed above. Initiate task to expand collection capability to support additional radar types. FY09: Continue all efforts of FY 2008 less those noted as completed above.</p>			

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2008</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>			PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW Development			PROJECT NUMBER AND NAME 2260 SPECIFIC EMITTER				
<b>C. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</u>	<u>FY 2006</u>	<u>0.749</u>	<u>0.673</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
Not applicable										
<b>D. ACQUISITION STRATEGY:</b>										
Not applicable										

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604270N, EW DEVELOPMENT			PROJECT NUMBER AND NAME 9999, CONGRESSIONAL ADD			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
9999, CONGRESSIONAL ADD		.974	2.981					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional Add.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

9499C IR Signature Reduction	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.974		
RDT&E Articles Qty			

The proliferation of fourth generation shoulder-launched infrared sensing missiles provides one of the greatest challenges to national security at the present time. The Navy is looking for ways to reduce the threat IR missiles to aircraft from sources such as Man Portable Air Defense Weapon Systems especially against those slow climbing aircraft that contribute to the transportation of armed forces around the world. The resulting product of this research could give the military a more sure and dependable capability to guard against this threat.

This funding will be used to focus on research and lab equipment necessary to develop a laboratory for working with IR signature reduction. Crane Naval Surface Warfare Center along with Purdue University will provide the technology evaluation and testing for the research carried out to counteract these threats. Research will include candidate design assessments against various current and incoming-in-service IR missiles, including the effect of various atmospheric condition and clutter background.

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional Add.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

9999C Band 4 Traveling Wave Tube (TWT)	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		2.981	
RDT&E Articles Qty			

The FY 2008 Congressional Add is for the Band 4 traveling wave tube (TWT) replacement development program.

This funding will be used to focus on research and lab equipment necessary to develop a Point Mugu laboratory facility modernization.