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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	91.418	105.193	80.819	0.000	80.819	77.804	37.650	29.151	30.001	Continuing	Continuing
0556: EW Counter Response	70.267	26.376	24.287	0.000	24.287	22.400	22.831	23.458	24.157	Continuing	Continuing
1742: EW Technical Development and T&E	5.308	4.967	4.799	0.000	4.799	4.876	4.958	5.087	5.212	Continuing	Continuing
2175: Tactical Air Electronic Warfare	10.183	65.193	51.733	0.000	51.733	50.528	9.861	0.606	0.632	Continuing	Continuing
2260: Specific Emitter ID	0.674	0.690	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.081
9999: Congressional Adds	4.986	7.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.054
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 radio frequency jammers, and development and testing of electronic warfare devices for emerging threats and emergency contingencies.											
B. Program Change Summary (\$ in Millions)											
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total						
Previous President's Budget	90.476	97.635	0.000	0.000	0.000						
Current President's Budget	91.418	105.193	80.819	0.000	80.819						
Total Adjustments	0.942	7.558	80.819	0.000	80.819						
• Congressional General Reductions		-0.439									
• Congressional Directed Reductions		0.000									
• Congressional Rescissions	0.000	-0.003									
• Congressional Adds		8.000									
• Congressional Directed Transfers		0.000									
• Reprogrammings	3.375	0.000									
• SBIR/STTR Transfer	-2.433	0.000									
• Program Adjustments	0.000	0.000	80.819	0.000	80.819						

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>	
<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2009	FY 2010
Project: 9999: Congressional Adds			
Congressional Add: <i>F/A18 Countermeasures Improvement</i>		0.000	3.983
Congressional Add: <i>Small Survivable Jammer</i>		0.000	0.797
Congressional Add: <i>PT MUGU ELECTRONIC WARFARE LAB UPGRADE</i>		1.596	3.187
Congressional Add: <i>Integrated Naval Electronic Warfare</i>		0.997	0.000
Congressional Add: <i>USMC Electronic Warfare(EW) Training</i>		2.393	0.000
Congressional Add Subtotals for Project: 9999		4.986	7.967
Congressional Add Totals for all Projects		4.986	7.967
<u>Change Summary Explanation</u>			
Technical:			
Project Unit 0556 / EW COUNTER RESPONSE: Not Applicable			
Project Unit 1742 / EW TECHNICAL DEVELOPMENT & T&E: Not Applicable			
Project Unit 2175 / TACTICAL AIR ELECTRONIC WARFARE: IDECM Block 3: IOT&E found IB-3 effective, not suitable. Required VCD is underway. IDECM Block 4: The IB-4 acquisition and contract strategy includes development of the Common On-Board-Jammer for the F/A-18 C/DE/F aircraft through sole source contract awards for modifications to the ALQ-214. The common jammer must meet the requirements of the IB-2 On-board Jammer (OBJ) Operational Requirements Document (ORD) and the IDECM Radio Frequency Countermeasure (RFCM) Off-board Capabilities Production Document (CPD).			
Project Unit 2260 / SPECIFIC EMITTER ID: Not Applicable			
Project Unit 9999 / CONGRESSIONAL ADD: Not Applicable			
Schedule:			
Project Unit 0556 / EW COUNTER RESPONSE: A shortage in availability of test aircraft resulted in ICAP III schedule delays. Test aircraft availability was reduced from two aircraft to one during Block 4 testing causing delays to Block 4 as well as the subsequent Block 5 and 6 DT/OT. The DT and OT portions of the schedule have been divided into separate events to allow more flexibility and detail in scheduling.			
Project Unit 1742 / EW TECHNICAL DEVELOPMENT & T&E: Not Applicable			
Project Unit 2175 / TACTICAL AIR ELECTRONIC WARFARE: Integrated Defensive Electronic Countermeasures (IDECM) Block 2 (IB-2): IB-2 is in Full Rate Production (FRP). The IB-2 schedule has been changed to reflect the continuation of annual production contracts through FY 2011. IDECM Block 3 (IB-3): IB-3			

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<p>Initial Operational Test & Evaluation (IOT&E) completed in September 2008 with a finding of effective, not suitable. The IB-3 schedule has been changed to reflect the impact of the reported deficiencies and required Verification of Correction to Deficiencies (VCD) Developmental and Operational testing scheduled to complete in September 2010. The start of the IB-3 Low Rate Initial Production (LRIP) 4 deliveries changed from 4th Qtr FY 2009 to 1st Qtr FY 2010 via contractual modification due to required failure analysis for reported deficiencies. The failure analysis affected the contractor's internal manufacturing plan and initial LRIP 4 deliveries. IDECM Block 4 (IB-4): IB-4 EMD Award has been changed to reflect the extended negotiation and definitization period. IB-4 EMD Award is planned for March 2010.</p> <p>Project Unit 2260 / SPECIFIC EMITTER ID: Not Applicable Project Unit 9999 / CONGRESSIONAL ADD: Not Applicable</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>				PROJECT 0556: <i>EW Counter Response</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0556: <i>EW Counter Response</i>	70.267	26.376	24.287	0.000	24.287	22.400	22.831	23.458	24.157	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<p>A. Mission Description and Budget Item Justification</p> <p>This project develops upgrades to cope with the increasingly complex and dense Electronic Warfare (EW) threat environment. The required improvements in airborne electronic attack (EA) will be achieved by applying state-of-the-art signal exploitation/processing/display techniques, improved tactics and jamming capabilities.</p> <p>These efforts include the continued development of Force Protection/Overseas Contingency Operations (OCO) (classified discussion upon request) Navigation (NAV) and Information Operations (I/O) applications and enhanced communications jamming. The efforts under this project provide for the electronic countermeasures response to advanced threat weapon systems and C3 networks that are expanding in density and technical complexity. This project funds the continuing development and integration of all EW and EA systems for the US Navy 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.</p> <p>The ICAP III test articles begun in FY 1999 were two EA-6B aircraft modified to support the Improved Capability (ICAP) III program and Low Band Transmitter (LBT) Engineering Development Models (EDMs). An EA-6B ICAP III aircraft will continue to be used as a test article during government test and evaluation of MIDS/Link-16, LBT and other EW improvements. 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. All efforts and system upgrades include the conversion of and transition from the Tactical EA-6B Mission Planning System (TEAMS) to the Joint Mission Planning System (JMPS), including development of EA-6B Unique Planning Modules.</p> <p>The ALQ-99 Low Band Transmitter (LBT) system provides 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 Milestone III) was approved in FY 2008.</p>											

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev		PROJECT 0556: EW Counter Response		
Electronic Attack Jammer Techniques Optimization (JATO) and test support is required to address and counter new and evolving radar and communications threats in support of existing and emerging systems such as the EA-6B and EA-18G. JATO will continue to generate techniques, tactics, and procedures that will help to optimize the capabilities of existing weapon systems, and to assist in requirements definitions of emerging AEA systems.						
A Next Generation Jammer (NGJ) capability to replace the ALQ-99 system is required to keep pace with advances in threat weapons systems and continual expansion of AEA systems. NGJ capabilities will address AEA capability gaps, AEA sufficiency gaps and ALQ-99 availability gaps.						
Beginning in FY10, Airborne Electronic Attack (AEA) efforts are budgeted in PE 0604274N Project 0557 Next Generation Jammer. Prior to FY10 AEA was budgeted for in PE 0604270N 0556 EW Counter Response.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
ICAP III UPDATE		5.555	8.310	6.376	0.000	6.376
FY 2009 Accomplishments: Completed ICAP III Block 4 and operational test readiness review. Began coding and development of ICAP III block 5 culminating in successful completion of the critical design review.						
FY 2010 Plans: 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. ICAP III Block 4 weapon system includes integration of ALE-47 hardware and USQ-113 software improvements with a fleet release scheduled for FY09-Q4. ICAP III Block 5 includes a robust software package designed to enhance functionality of the ALQ-218 and related EA-6B weapons systems. Development will begin in FY09 and continue until fielded.						
FY 2011 Base Plans: 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. Efforts will continue fielding the improvements achieved in ICAP III Block 5 as well as begin the initial planning and development of ICAP III Block 6.						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MISSION PLANNING FY 2009 Accomplishments: Updated outdated hardware and increased the mission planning capability to keep pace with the block modifications. FY 2010 Plans: Joint Mission Planning Systems (JMPS) and associated EA-6B Unique Planning Components (UPC's) supports ICAP III Block upgrades. These efforts will continue development of the JMPS components in direct support of the ICAP III system. FY 2011 Base Plans: Joint Mission Planning Systems (JMPS) and associated EA-6B Unique Planning Components (UPC's) supports ICAP III Block upgrades. These efforts will continue development of the JMPS components in direct support of the ICAP III system.		3.720	4.270	3.893	0.000	3.893
LINK 16 MESSAGE SETS AND DATA LINKS FY 2009 Accomplishments: Continued development and testing of the Link-16 modification; significantly increased the amount and type of parametric data distributed across the link. FY 2010 Plans: Continue development and testing of the Link-16 modification. These data link enhancements will enable the EA-6B ICAP III continued participation within Force Net and facilitate the EA contributions to the greater situational awareness allowed by Network Centric Warfare efforts.		1.079	1.200	1.145	0.000	1.145

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue development and testing of the Link-16 modification. These data link enhancements will enable the EA-6B ICAP III continued 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 2009 Accomplishments: Completed and released five JATO Techniques Analysis and Tactics (JTATs) for EA-6B ICAP II and ICAP III operations, including OEF and OIF. Conducted tests of multiple Electronic Attack systems v/s radar and communications threats. Supported requirements definition for various programs including NGJ, Intrepid Tiger, and ITALD-J. FY 2010 Plans: Continue engineering development and test support required to address and counter new and evolving radar and communications threats in support of existing and emerging systems such as the EA-6B and EA-18G. JATO will continue to generate techniques, tactics, and procedures to optimize the capabilities of ALQ-99 , ALQ-218, and ITALD-J systems, and to assist in requirements definitions of emerging AEA systems. JATO also continues to lead efforts in support of OCO and Force Protection issues. (Classified discussion available upon request.) FY 2011 Base Plans: Continue engineering development and test support required to address and counter new and evolving radar and communications threats in support of existing and emerging systems such as the EA-6B and EA-18G. JATO will continue to generate techniques, tactics, and procedures to optimize the capabilities of ALQ-99 , ALQ-218, and ITALD-J systems, and to assist in requirements definitions of emerging AEA systems. JATO also continues to lead efforts in support of OCO and Force Protection issues. (Classified discussion available upon request.)		12.032	11.166	10.533	0.000	10.533

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
AIRBORNE ELECTRONIC ATTACK (AEA) FY 2009 Accomplishments: Four Broad Agency Announcement contracts were signed in Jan 2009 for 6 month studies to perform system-level trade studies defining notional requirements and technical baselines for a Next Generation Jammer (NGJ) system. Concurrently, an NGJ Analysis of Alternatives is being conducted with a planned completion in the 3rd qtr of FY2010. For FY2010 and beyond, refer to PE 0604274N. Beginning in FY10, Airborne Electronic Attack (AEA) efforts are budgeted in PE 0604274N Project 0557 Next Generation Jammer.	36.006	0.000	0.000	0.000	0.000
Intrepid Tiger Pod FA-18 E/F outfitting FY 2009 Accomplishments: Conducted engineering trade studies & component selection for common AEA payload design. Conducted performance analysis and design of additional system unique components to support podded system integration. Conducted ground testing of CORPORAL components on the EA-6B. Began CORPORAL Technology Demonstration 1A (TD1A) to be completed by the end of FY09.	8.445	0.000	0.000	0.000	0.000
Improved Tactical Air Launched Decoy Jammer (ITALD-J) FY 2009 Accomplishments: Began engineering trade space analysis by conducting requirements analysis and defining design parameters. Purchased long lead items for EDM development. FY 2010 Plans: The ITALD-J program will continue to address unmitigated IADS threats in the mid-term by converting ITALD platforms to an expendable active electronic attack variant capable of deception and jamming against multi-function phased array Target Engagement Radars (TERs). To support the requirement in the long-term this program will produce and field a tactical air launched decoy with jammer payload	3.430	1.430	2.340	0.000	2.340

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B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
capable of being supported and maintained in future years. This program covers modifications to ITALD-J and future Airborne Electronic Attack Expendables (AEAE) in order to improve reliability/maintainability/availability, enhance mission capability, resolve obsolescence issues, and correct deficiencies found in testing or in the field. For a mid-term effort, funding will develop Engineering Development Model (EDM) prototypes and conduct initial effectiveness testing.											
FY 2011 Base Plans: Funding will continue AEAE efforts begun in FY10, including ITALD-J EDM development. Funding will also continue additional long-term risk reduction efforts as well as initiate integrated and interoperability testing in preparation for an ITALD-J production decision.											
Accomplishments/Planned Programs Subtotals						70.267	26.376	24.287	0.000	24.287	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• APN/05110: EA-6 Series	33.161	84.854	14.891	15.000	29.891	15.186	11.585	4.983	0.000	0.000	3,360.632
D. Acquisition Strategy											
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 (FRP) contract for Lot 2, 4 ALQ-218 systems, was awarded in March 2006. The FRP Lot 3 contract for 7 ALQ-218 systems was awarded 11 April 2008. Contract for Lot 4, ALQ-218 systems was awarded 15 September 2008.											
E. Performance Metrics											
1. Successful completion of ICAP III Block 4 DT.											
2. Continued development of ICAP III Block 5 sufficient to conduct a successful and on time development test.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
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Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Develop - ICAP III	C/FFP	Various Various	252.271	7.339	Dec 2009	0.627	Dec 2010	0.000		0.627	0.000	260.237	260.237	
Studies & Analysis (Non FFRDC)	C/FFP	Various Various	1.043	0.000		0.000		0.000		0.000	0.000	1.043	1.043	
Systems Engineering NR	WR	Naval Research Lab Maryland	0.000	1.512	Nov 2009	0.531	Nov 2010	0.000		0.531	0.000	2.043	Continuing	
Systems Engineering NAWCAD	WR	NAWCAD Patuxent River, MD	11.993	2.709	Dec 2009	3.027	Dec 2010	0.000		3.027	0.000	17.729	Continuing	
Systems Eng/BLK Update	WR	NAWCWD Point Mugu, CA	41.573	5.321	Dec 2009	7.000	Dec 2010	0.000		7.000	0.000	53.894	Continuing	
Systems Engineering NSWC	WR	NSWC Det Crane, IN	6.371	0.975	Dec 2009	0.912	Dec 2010	0.000		0.912	0.000	8.258	Continuing	
Systems Engineering VAR	WR	Various Various	7.903	1.108	Dec 2009	1.733	Dec 2010	0.000		1.733	0.000	10.744	Continuing	
Subtotal			321.154	18.964		13.830		0.000		13.830	0.000	353.948	261.280	
Remarks Beginning in FY10, Airborne Electronic Attack (AEA) efforts are budgeted in PE 0604274N Project 0557 Next Generation Jammer. Prior to FY10 AEA was budgeted for in PE 0604270N 0556 EW Counter Response.														

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Support (\$ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 - JATO	SS/FP	Johns Hopkins Univ Maryland	12.555	3.799	Dec 2009	4.288	Dec 2010	0.000		4.288	0.000	20.642	20.642
Eng & Tech Srvs (Non FFRDC)	Various/ Various	Various Various	0.964	2.145	Oct 2009	5.563	Oct 2010	0.000		5.563	0.000	8.672	Continuing
DFCS Installs	Various/ Various	Various Various	0.000	0.559	May 2010	0.000		0.000		0.000	0.000	0.559	Continuing
ILS Pubs - ICAP III	WR	FRC Jacksonville, FL	0.000	0.809	Jan 2010	0.464	Dec 2010	0.000		0.464	0.000	1.273	Continuing
Subtotal			13.519	7.312		10.315		0.000		10.315	0.000	31.146	20.642

Remarks

Beginning in FY10, Airborne Electronic Attack (AEA) efforts are budgeted in PE 0604274N Project 0557 Next Generation Jammer. Prior to FY10 AEA was budgeted for in PE 0604270N 0556 EW Counter Response.

Management Services (\$ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Promram Management Support	WR	Various Various	0.530	0.100	Dec 2009	0.142	Dec 2010	0.000		0.142	0.000	0.772	Continuing
Subtotal			0.530	0.100		0.142		0.000		0.142	0.000	0.772	

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Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			335.203	26.376		24.287		0.000		24.287	0.000	385.866	281.922
Remarks													
Beginning in FY10, Airborne Electronic Attack (AEA) efforts are budgeted in PE 0604274N Project 0557 Next Generation Jammer. Prior to FY10 AEA was budgeted for in PE 0604270N 0556 EW Counter Response.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy																								DATE: February 2010							
APPROPRIATION/BUDGET ACTIVITY												R-1 ITEM NOMENCLATURE												PROJECT							
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)												PE 0604270N: Electronic Warfare (EW) Dev												0556: EW Counter Response							
Fiscal Year		2009				2010				2011				2012				2013				2014				2015					
		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		
Acquisition Milestones																															
ICAP III	 Fleet Release ICAP III Block 3							 Fleet Release ICAP III Block 4				 Fleet Release ICAP III Block 5							 Fleet Release ICAP III Block 6												
Test & Evaluation Milestones																															
ICAP III																															
Development Test/ Operational Test																															
Production Milestones																															
ICAP III	 Lot 4																														
FRP Aircraft Deliveries																															

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>	PROJECT 0556: <i>EW Counter Response</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Fleet Release - ICAP III BLOCK 3	1	2009	1	2009
Fleet Release - ICAP III BLOCK 4	3	2010	3	2010
Fleet Release - ICAP III BLOCK 5	3	2011	3	2011
Fleet Release - ICAP III BLOCK 6	3	2013	3	2013
ICAP III Block 4 OT	2	2010	2	2010
ICAP III Block 4 DT	2	2009	3	2009
ICAP III Block 5 DT	3	2010	4	2010
ICAP III Block 5 OT	1	2011	2	2011
ICAP III Block 6 DT	3	2012	4	2012
ICAP III Block 6 OT	1	2013	2	2013
ICAP III - Lot 3 FRP Deliveries (Qty 7)	2	2010	4	2010
ICAP III - Lot 4 FRP Deliveries (Qty 9)	2	2011	1	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev				PROJECT 1742: EW Technical Development and T&E			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
1742: EW Technical Development and T&E	5.308	4.967	4.799	0.000	4.799	4.876	4.958	5.087	5.212	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Project Unit 1742 EW Technical Development and T & E. Funds efforts that focus on the quick reaction prototyping of tactical information and electronic warfare systems. This program directly addresses various fleet requirements across mulitple platforms (airborne, surface and subsurface), airborne and surface cryptologic operational requirements documents and the joint oversight council missions needs statement for information warfare and electronic warfare systems and capabilities. These systems/capabilities provide information dominance to friendly forces during conflict, which is necessary for successful mission accomplishment.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
EW Technical Development and T&E <i>FY 2009 Accomplishments:</i> Conducted airborne jammer development,test and evaluation on ancillary equipment,cabling,hardware,antennas for the prototype aircraft. <i>FY 2010 Plans:</i> Continue airborne Information Warfare jammer development, test, and evaluation to include ancillary equipment, cabling, hardware, antennas and installation on prototype aircraft. <i>FY 2011 Base Plans:</i> Continue airborne Information Warfare jammer development, test, and evaluation to include ancillary equipment, cabling, hardware, antennas and installation on prototype aircraft.							0.662	0.680	0.420	0.000	0.420
EW Technical Development Studies & Analysis							2.773	2.662	2.715	0.000	2.715

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev		PROJECT 1742: EW Technical Development and T&E		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Conducted studies and vulnerability analysis on emerging threats/targets for Electronic Warfare (EW) programs.						
FY 2010 Plans: Continue studies and vulnerability analysis on emerging/chaning threats/targets for EW programs.						
FY 2011 Base Plans: Continue studies and vulnerability analysis on emerging/chaning threats/targets for EW programs.						
EW Technical Development/Develop and Systems Integration		1.237	1.116	1.152	0.000	1.152
FY 2009 Accomplishments: Developed Electronic Warfare (EW) capabilites in accordance with Fleet Forces Command and prioritized signals to be integrated into existing MCS-21 EW systems and deployed on air and surface platforms.						
FY 2010 Plans: Continue developing EW capabilites in accordance with Fleet Forces Command and prioritize signals that are first to be intregrated into existing MCS-21 EW systems and deployed on air and surface platforms.						
FY 2011 Base Plans: Continue developing EW capabilites in accordance with Fleet Forces Command and prioritize signals that are first to be intregrated into existing MCS-21 EW systems and deployed on air and surface platforms.						
EW Technical Development/Program Management Support		0.636	0.509	0.512	0.000	0.512

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>		PROJECT 1742: <i>EW Technical Development and T&E</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2009 Accomplishments:</i> Funded travel expenses and required training to support the Research & Development projects as well as acquisition expenses in support of the program.								
<i>FY 2010 Plans:</i> Continue funding necessary travel expenses and training to support the Research & Development projects as well as acquisition expenses in support of the program management office.								
<i>FY 2011 Base Plans:</i> Continue funding necessary travel expenses and training to support the Research & Development projects as well as acquisition expenses in support of the program management office.								
Accomplishments/Planned Programs Subtotals				5.308	4.967	4.799	0.000	4.799
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
Not Applicable.								
E. Performance Metrics								
Successful quick reaction prototyping.								

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev				PROJECT 1742: EW Technical Development and T&E					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Hardware Development	Various/ Various	Various Various	3.293	0.311	Sep 2010	0.305	Sep 2011	0.000		0.305	Continuing	Continuing	Continuing
Aircraft Integration	Various/ Various	Various Various	1.005	0.390	Sep 2010	0.111	Sep 2011	0.000		0.111	Continuing	Continuing	Continuing
Subtotal			4.298	0.701		0.416		0.000		0.416			
Remarks Continue airborne Information Warfare jammer development, test and evaluation to include ancillary equipment, cabling, hardware, antennas and installation on prototype aircraft.													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	Various/ Various	Various Various	1.682	0.507	Sep 2010	0.519	Sep 2011	0.000		0.519	Continuing	Continuing	Continuing
Software Development	Various/ Various	Various Various	2.060	0.806	Sep 2010	1.136	Sep 2011	0.000		1.136	Continuing	Continuing	Continuing
Studies & Analyses	Various/ Various	Various Various	3.832	1.940	Dec 2009	2.219	Dec 2010	0.000		2.219	Continuing	Continuing	Continuing
Subtotal			7.574	3.253		3.874		0.000		3.874			
Remarks Conduct studies and vulnerability analysis on emerging threats/targets for Electronic Warfare (EW) programs.													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev				PROJECT 1742: EW Technical Development and T&E						
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
Developmental Test & Evaluation	Various/ Various	Various Various	2.390	0.500	Sep 2010	0.000		0.000		0.000	Continuing	Continuing	Continuing	
Subtotal			2.390	0.500		0.000		0.000		0.000				
Remarks Supports the development of technical test plans and techniques for developed capabilities at various test facilities for multiple navy platforms.														
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
Program Management Support	Various/ Various	Various Various	0.485	0.211	Sep 2010	0.209	Sep 2011	0.000		0.209	Continuing	Continuing	Continuing	
Travel	Various/ Various	Various Various	0.779	0.302	Sep 2010	0.300	Sep 2011	0.000		0.300	Continuing	Continuing	Continuing	
Acquisition Workforce Fund - 2009	Various/ Various	Various Various	0.026	0.000	Sep 2010	0.000	Sep 2011	0.000		0.000	0.000	0.026	Continuing	
Subtotal			1.290	0.513		0.509		0.000		0.509				
Remarks Provides for official travel and training expenses and miscellaneous consumables for the program management office.														

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy							DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>			PROJECT 1742: <i>EW Technical Development and T&E</i>			
	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	15.552	4.967	4.799	0.000	4.799				
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy																			DATE: February 2010									
APPROPRIATION/BUDGET ACTIVITY									R-1 ITEM NOMENCLATURE									PROJECT										
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)									PE 0604270N: Electronic Warfare (EW) Dev									1742: EW Technical Development and T&E										
Fiscal Year	2009				2010				2011				2012				2013				2014				2015			
	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
Electronic Warfare																												
Airborne Sys Development																												
Airbrone Testing	AC6 ▲				AC4 △																							
Test Support (NRL)																												
Fixed Site Delivery	MCS-21 Ground Component (V1) Site Acceptance Test				MCS-21 Ground Component (V12) Site Acceptance Test				MCS-21 Ground Component (V3) Site Acceptance Test																			
				▲				△				△																
Countermeasure Test Date	FAT (Incr. F) DT (Incr. F)				FAT (Incr. F) DT (Incr. F)																							
			▲	▲				△	△																			
SWW Spiral Capability Delivery				▲								△				△				△				△				△
Computer Network Ops																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>	PROJECT 1742: <i>EW Technical Development and T&E</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Airborne System Development	1	2009	3	2010
Aircraft Developmental Testing	1	2009	1	2010
Test Support	1	2009	4	2015
Fixed Site Delivery #1	4	2009	4	2009
Countermeasure Delivery #1	4	2009	4	2009
Fixed Site Delivery #2	4	2010	4	2010
Countermeasure Delivery #2	4	2010	4	2010
Fixed Site Delivery #3	4	2011	4	2011
Countermeasure Delivery #3	4	2011	4	2011
Countermeasure Test #1	3	2009	4	2009
Countermeasure Test #2	4	2010	4	2010
Coumputer Network Operations	1	2009	4	2009
Computer Network Operations-Spiral Capability Delivery #1	4	2009	4	2009
Computer Network Operations-Spiral Capability Delivery #2	3	2011	3	2011
Computer Network Operations-Spiral Capability Delivery #3	3	2012	3	2012
Computer Network Operations-Spiral Capability Delivery #4	3	2013	3	2013
Computer Network Operations-Spiral Capability Delivery #5	3	2014	3	2014
Computer Network Operations-Spiral Capability Delivery #6	3	2015	3	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>				PROJECT 2175: <i>Tactical Air Electronic Warfare</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2175: <i>Tactical Air Electronic Warfare</i>	10.183	65.193	51.733	0.000	51.733	50.528	9.861	0.606	0.632	Continuing	Continuing
Quantity of RDT&E Articles	0	6	6	0	6	0	0	0	0		
A. Mission Description and Budget Item Justification <p>Integrated Defensive Electronic Countermeasures (IDECM) Block 3 (IB-3) introduced the new Fiber Optic Towed Decoy (FOTD) capability to the IDECM Block 2 Electronic Warfare (EW) Suite as a replacement for the ALE-50 decoy. The FOTD, when integrated with the rest of the F/A-18E/F EW suite (i.e., ALQ-214, ALR-67(V)3, ALE-47 and ALE-50), the associated cockpit controls, displays and other avionics significantly improves the survivability of the host aircraft in a Radio Frequency (RF) threat environment. Initial Operational Test & Evaluation (IOT&E) found IB-3 effective, not suitable. Verification of Correction to Deficiencies (VCD) identified during IOT&E is required. VCD activities are underway and are planned to conclude in FY10.</p> <p>IDECM Block 4 (IB-4) is an Engineering Change Proposal (ECP) to the ALQ-214 to render it suitable for operation on F/A-18C/D aircraft (replacing the ALQ-126B and significantly improving F/A-18C/D survivability) while retaining all IDECM suite functionality when installed on F/A-18E/F aircraft. The IB-4 acquisition and contract strategy includes development of the Common On-Board-Jammer for the F/A-18 C/D/E/F aircraft through sole source contract awards for modifications to the ALQ-214. IB-4, ALQ-214 ECP, efforts include hardware and software design, development and test, delivery of Engineering Development Models (EDMs), integration and testing on the host aircraft. The F/A-18C/D EW Suite includes the ALR-67(V)2 Radar Warning Receiver (RWR), the ALE-47 Countermeasures Dispensing Set (CMDS), the mission computer and other avionics. In addition to performing the RWR function, the ALR-67(V)2 is the EW Bus Controller. The EW Bus is the primary interface between the EW Systems (Jammer, RWR, and CMDS). The mission computer is the Avionics Bus Controller, the interface between the EW suite and other avionics.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Tactical Air Electronic Warfare						10.183	65.193	51.733	0.000	51.733	
<i>FY 2009 Accomplishments:</i> FY09: Risk Reduction efforts in support of IDECM Block 4, ALQ-214 ECP continued in FY09. In preparation for a 1st Quarter FY 2010 non-recurring engineering contract, ITT Electronic Systems											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy									DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev				PROJECT 2175: Tactical Air Electronic Warfare					
B. Accomplishments/Planned Program (\$ in Millions)													
									FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
completed preliminary and detailed/final hardware designs for the Weapons Replacement Assemblies (WRAs) as well as associated preliminary software design efforts. A Preliminary Design Review (PDR) was conducted in FY09 to review the technical status and associated ECP design changes as part of the Risk Reduction effort. FY 2010 Plans: FY10: The IDECM Block 4, ALQ-214 ECP engineering effort will be awarded in FY10 to ITT Electronic Systems and will include the final design, development, integration and test of Engineering and Manufacturing Development (EMD) units. The contract is planned to continue through FY15. FY 2011 Base Plans: FY11 Base: The IDECM Block 4, ALQ-214 ECP engineering effort will continue into FY11. In addition, engineering and logistics support with laboratory testing will begin in FY11.													
Accomplishments/Planned Programs Subtotals									10.183	65.193	51.733	0.000	51.733
C. Other Program Funding Summary (\$ in Millions)													
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost		
• APN/0576 1: IDECM	40.374	41.924	19.823	0.000	19.823	0.000	0.000	0.000	0.000	0.000	102.121		
• APN/0576 2: Common On-Board Jammer	0.000	0.000	0.000	0.000	0.000	68.945	76.004	85.615	90.845	140.699	462.108		
• PANMC/0182: Airborne Expendable CM	17.189	25.839	19.041	0.000	19.041	20.248	21.270	21.912	22.614	742.731	890.844		
D. Acquisition Strategy													
Integrated Defensive Electronic Countermeasures (IDECM) Block 3 (IB-3) sole source award of Verification of Correction to Deficiencies (VCD) and LRIP efforts in FY 2009, FY 2010 and FY 2011. In April 2009 ASN(RD&A) approved the requested restructure of IB-4 to reflect the Engineering Change Proposal (ECP) strategy, replacing Milestones with In-Process Reviews (IPRs) in the program schedule. IB-4 sole source award of ALQ-214 ECP efforts in FY 2010.													

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>	PROJECT 2175: <i>Tactical Air Electronic Warfare</i>
<p>E. Performance Metrics</p> <p>IDECM Block 3: Successfully complete Verification of Correction to Deficiencies (VCD) Developmental and Operational Test. Successfully achieve Milestone III. Successfully achieve Initial Operational Capability (IOC).</p> <p>IDECM Block 4: Successfully conduct In-Process Review 1 (Post-Preliminary Design Review (PDR) Assessment). Successfully conduct Critical Design Review (CDR). Successfully conduct In-Process Review 2 (Post-CDR Assessment).</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev				PROJECT 2175: Tactical Air Electronic Warfare				
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Aircraft Integration- IDECM	Various/ Various	Various Various	70.761	0.000		0.000		0.000		0.000	0.000	70.761	Continuing
Aircraft Integration- IDECM Boeing	SS/CPFF	Boeing St. Louis, MO	1.410	0.000		0.000		0.000		0.000	0.000	1.410	1.410
Primary Hdw Dev AAR-47 FY07 SUPP ATK	SS/CPFF	ATK Missile Clearwater, FL	16.000	0.000		0.000		0.000		0.000	0.000	16.000	16.000
Primary Hdw Dev AAR-47 FY07 SUPP AFB	MIPR	AFB Eglin, FL	2.100	0.000		0.000		0.000		0.000	0.000	2.100	Continuing
Primary Hdw Dev AAR-47 FY07 SUPP NVS	MIPR	NVS Fort Belvoir, VA	0.064	0.000		0.000		0.000		0.000	0.000	0.064	Continuing
Primary Hdw Dev - IDECM ITT	SS/FFP	ITT Clifton, NJ	0.000	53.171	Jan 2010	40.959	Dec 2010	0.000		40.959	32.189	126.319	126.319
Ship Suitability AAR-47	WR	NAWCAD Pax River, MD	0.050	0.000		0.000		0.000		0.000	0.000	0.050	Continuing
Studies & Analysis DRFM (CONG)	MIPR	NUWC Keyport, WA	0.018	0.000		0.000		0.000		0.000	0.000	0.018	Continuing
Systems Eng - IDECM BAE	SS/CPFF	BAE Systems Nashua, NY	14.552	0.000		0.000		0.000		0.000	0.000	14.552	14.552
Systems Eng - IDECM	SS/CPFF	Various Various	62.439	7.497	Apr 2010	6.426	Apr 2011	0.000		6.426	7.154	83.516	83.516
Systems Eng - IDECM Raytheon	SS/CPFF	Raytheon Goleta, CA	0.268	0.000		0.000		0.000		0.000	0.000	0.268	0.268
	SS/CPFF	ITT	1.810	0.000		0.000		0.000		0.000	0.000	1.810	1.810

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy										DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev					PROJECT 2175: Tactical Air Electronic Warfare			
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Risk Reduction DRFM (CONG)		Clifton, NJ											
Risk Reduction IDECM ITT1	SS/CPFF	ITT Clifton, NJ	2.495	0.000		0.000		0.000		0.000	0.000	2.495	2.495
Risk Reduction IDECM ITT2	SS/FP	ITT Clifton, NJ	7.883	0.000		0.000		0.000		0.000	0.000	7.883	7.883
Subtotal			179.850	60.668		47.385		0.000		47.385	39.343	327.246	254.253
Remarks													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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/Eng Supt AAR-47 (Non-FFRDC)	WR	NRL Washington, DC	0.343	0.000		0.000		0.000		0.000	0.000	0.343	Continuing
Dev/Eng Supt AAR-47	WR	Various Various	0.220	0.000		0.000		0.000		0.000	0.000	0.220	Continuing
Software Dev - IDECM	WR	Various Various	6.843	0.000		0.000		0.000		0.000	0.000	6.843	Continuing
Integrated Log Supt AAR-47	SS/CPFF	ATK Missile Clearwater, FL	0.650	0.000		0.000		0.000		0.000	0.000	0.650	0.650

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev				PROJECT 2175: Tactical Air Electronic Warfare				
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
Software Dev AAR-47	SS/CPFF	ATK Missile Clearwater, FL	0.171	0.000		0.000		0.000		0.000	0.000	0.171	0.171	
Integrated Log Supt - IDECM	WR	FRC-SE Jacksonville, FL	0.105	0.180	Dec 2009	0.139	Dec 2010	0.000		0.139	0.291	0.715	Continuing	
ILS - IDECM (Non-FFRDC)	SS/CPFF	FRC-SE Jacksonville, FL	0.000	0.188	Jan 2010	0.190	Jan 2011	0.000		0.190	0.000	0.378	0.378	
Subtotal			8.332	0.368		0.329		0.000		0.329	0.291	9.320	1.199	
Remarks														
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Supt AAR-47	WR	NRL Washington, DC	0.270	0.000		0.000		0.000		0.000	0.000	0.270	Continuing	
IDECM Test Supt (OPTEVFOR)	WR	Oper T&E for CD 30 VA	4.030	0.000		0.000		0.000		0.000	0.000	4.030	Continuing	
IDECM Test Supt (Non-FFRDC)	SS/CPFF	Various Various	1.486	0.000		0.000		0.000		0.000	0.000	1.486	1.486	
Live Fire Test & Eval AAR-47	WR	NRL Washington, DC	0.508	0.000		0.000		0.000		0.000	0.000	0.508	Continuing	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>				PROJECT 2175: <i>Tactical Air Electronic Warfare</i>					
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Operational Test & Eval AAR-47	WR	NRL Washington, DC	0.100	0.000		0.000		0.000		0.000	0.000	0.100	Continuing
Studies & Analysis (Non-FFRDC) (CONG)	SS/CPFF	John Hopkins Un Laurel, MD	0.774	0.000		0.000		0.000		0.000	0.000	0.774	0.774
Flight Test - IDECM	WR	Various Various	0.000	0.053	Jan 2010	0.926	Jan 2011	0.000		0.926	26.521	27.500	Continuing
Subtotal			7.168	0.053		0.926		0.000		0.926	26.521	34.668	2.260
Remarks													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
AAR-47 Travel	Allot	NAVAIR Pax River, MD	0.050	0.000		0.000		0.000		0.000	0.000	0.050	Continuing
Prog Mgmt DRFM	WR	NAWCAD Pax River, MD	0.002	0.000		0.000		0.000		0.000	0.000	0.002	Continuing
PM Supt DRFM (Non-FFRDC)	C/TBD	TBD TBD	0.146	0.000		0.000		0.000		0.000	0.000	0.146	0.146
Prog Mgmt Supt DRFM (CONG)	WR	NAWCAD Pax River, MD	0.234	0.000		0.000		0.000		0.000	0.000	0.234	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>					R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>					PROJECT 2175: <i>Tactical Air Electronic Warfare</i>	

Management Services (\$ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Mgt & Prof Supt Srvs- IDECM (Non-FFRDC)	SS/CPFF	Amelex California, MD	0.210	0.223	Dec 2009	0.230	Dec 2010	0.000		0.230	0.000	0.663	0.663
Prog Mgmt Supt - IDECM	WR	Various Various	19.386	0.350	Dec 2009	0.360	Dec 2010	0.000		0.360	0.537	20.633	Continuing
Prog Mgmt Supt (Non- FFRDC)	SS/CPFF	DPA, Inc. Arlington, VA	0.077	0.000		0.000		0.000		0.000	0.000	0.077	0.077
Travel - IDECM	Allot	Various Various	0.104	0.000		0.000		0.000		0.000	0.000	0.104	Continuing
Travel - IDECM NAWCAD	Allot	NAWCAD Pax River, MD	0.224	0.000		0.000		0.000		0.000	0.000	0.224	Continuing
Travel	Allot	NAWCAD Pax River, MD	0.005	0.100	Oct 2009	0.100	Oct 2010	0.000		0.100	0.000	0.205	Continuing
Impact Fees	WR	NAWCAD Pax River, MD	0.032	0.000		0.000		0.000		0.000	0.000	0.032	Continuing
Eng Supt - IDECM NAWCAD	WR	NAWCWD China Lake, CA	9.547	0.000		0.000		0.000		0.000	0.000	9.547	Continuing
Eng Supt - IDECM	WR	Various Various	32.505	0.000		0.000		0.000		0.000	0.000	32.505	Continuing
Eng/Log Supt - DRFM (CONG) VAR	WR	Various Various	0.524	0.000		0.000		0.000		0.000	0.000	0.524	Continuing
Eng/Log Supt - DRFM (CONG) NAWCAD	WR	NAWCAD Pax River, MD	0.713	0.000		0.000		0.000		0.000	0.000	0.713	Continuing
Eng/Log Supt - DRFM (CONG) DTIC	MIPR	DTIC Fort Belvoir, VA	0.067	0.000		0.000		0.000		0.000	0.000	0.067	Continuing
	WR	NAWCAD	0.120	0.000		0.000		0.000		0.000	0.000	0.120	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010																																																																																																																																																																			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>					R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>				PROJECT 2175: <i>Tactical Air Electronic Warfare</i>																																																																																																																																																																					
Management Services (\$ in Millions) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td>Eng/Log Supt - DRFM NAWCAD</td> <td></td> <td>Pax River, MD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Eng/Log Supt - DRFM</td> <td>WR</td> <td>Various Various</td> <td>0.420</td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.420</td> <td>Continuing</td> </tr> <tr> <td>Eng/Log Supt - IDECM NAWCAD</td> <td>WR</td> <td>NAWCAD Pax River, MD</td> <td>0.050</td> <td>1.591</td> <td>Dec 2009</td> <td>1.174</td> <td>Dec 2010</td> <td>0.000</td> <td></td> <td>1.174</td> <td>2.454</td> <td>5.269</td> <td>Continuing</td> </tr> <tr> <td>Eng/Log Supt - IDECM</td> <td>WR</td> <td>Various Various</td> <td>0.840</td> <td>1.386</td> <td>Dec 2009</td> <td>0.895</td> <td>Dec 2010</td> <td>0.000</td> <td></td> <td>0.895</td> <td>1.770</td> <td>4.891</td> <td>Continuing</td> </tr> <tr> <td>Eng/Log Supt - DRFM (CONG) NRL</td> <td>WR</td> <td>NRL Washington, DC</td> <td>0.375</td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.375</td> <td>Continuing</td> </tr> <tr> <td>Eng/Log Supt - DRFM (CONG) FRCSE</td> <td>WR</td> <td>FRC-SE Jacksonville, FL</td> <td>0.050</td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.050</td> <td>Continuing</td> </tr> <tr> <td>Eng/Log Supt - IDECM FRCSE</td> <td>WR</td> <td>FRC-SE Jacksonville, FL</td> <td>0.000</td> <td>0.229</td> <td>Dec 2009</td> <td>0.102</td> <td>Dec 2010</td> <td>0.000</td> <td></td> <td>0.102</td> <td>0.210</td> <td>0.541</td> <td>Continuing</td> </tr> <tr> <td>Eng & Tech Svcs (Non-FFRDC) L3</td> <td>SS/CPFF</td> <td>L-3/Titan California, MD</td> <td>0.448</td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.448</td> <td>0.448</td> </tr> <tr> <td>Eng & Tech Svcs (Non-FFRDC) NRL</td> <td>SS/CPFF</td> <td>NRL Washington, DC</td> <td>0.000</td> <td>0.225</td> <td>Dec 2009</td> <td>0.232</td> <td>Dec 2010</td> <td>0.000</td> <td></td> <td>0.232</td> <td>0.485</td> <td>0.942</td> <td>0.942</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td><td>66.129</td><td>4.104</td><td></td><td>3.093</td><td></td><td>0.000</td><td></td><td>3.093</td><td>5.456</td><td>78.782</td><td>2.276</td> </tr> </tbody> </table>														Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Eng/Log Supt - DRFM NAWCAD		Pax River, MD												Eng/Log Supt - DRFM	WR	Various Various	0.420	0.000		0.000		0.000		0.000	0.000	0.420	Continuing	Eng/Log Supt - IDECM NAWCAD	WR	NAWCAD Pax River, MD	0.050	1.591	Dec 2009	1.174	Dec 2010	0.000		1.174	2.454	5.269	Continuing	Eng/Log Supt - IDECM	WR	Various Various	0.840	1.386	Dec 2009	0.895	Dec 2010	0.000		0.895	1.770	4.891	Continuing	Eng/Log Supt - DRFM (CONG) NRL	WR	NRL Washington, DC	0.375	0.000		0.000		0.000		0.000	0.000	0.375	Continuing	Eng/Log Supt - DRFM (CONG) FRCSE	WR	FRC-SE Jacksonville, FL	0.050	0.000		0.000		0.000		0.000	0.000	0.050	Continuing	Eng/Log Supt - IDECM FRCSE	WR	FRC-SE Jacksonville, FL	0.000	0.229	Dec 2009	0.102	Dec 2010	0.000		0.102	0.210	0.541	Continuing	Eng & Tech Svcs (Non-FFRDC) L3	SS/CPFF	L-3/Titan California, MD	0.448	0.000		0.000		0.000		0.000	0.000	0.448	0.448	Eng & Tech Svcs (Non-FFRDC) NRL	SS/CPFF	NRL Washington, DC	0.000	0.225	Dec 2009	0.232	Dec 2010	0.000		0.232	0.485	0.942	0.942	Subtotal			66.129	4.104		3.093		0.000		3.093	5.456	78.782	2.276
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																																																																																																																																																	
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Eng/Log Supt - DRFM (CONG) FRCSE	WR	FRC-SE Jacksonville, FL	0.050	0.000		0.000		0.000		0.000	0.000	0.050	Continuing																																																																																																																																																																	
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy							DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>			PROJECT 2175: <i>Tactical Air Electronic Warfare</i>					
	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	261.479	65.193		51.733		0.000		51.733	71.611	450.016	259.988
Remarks											

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

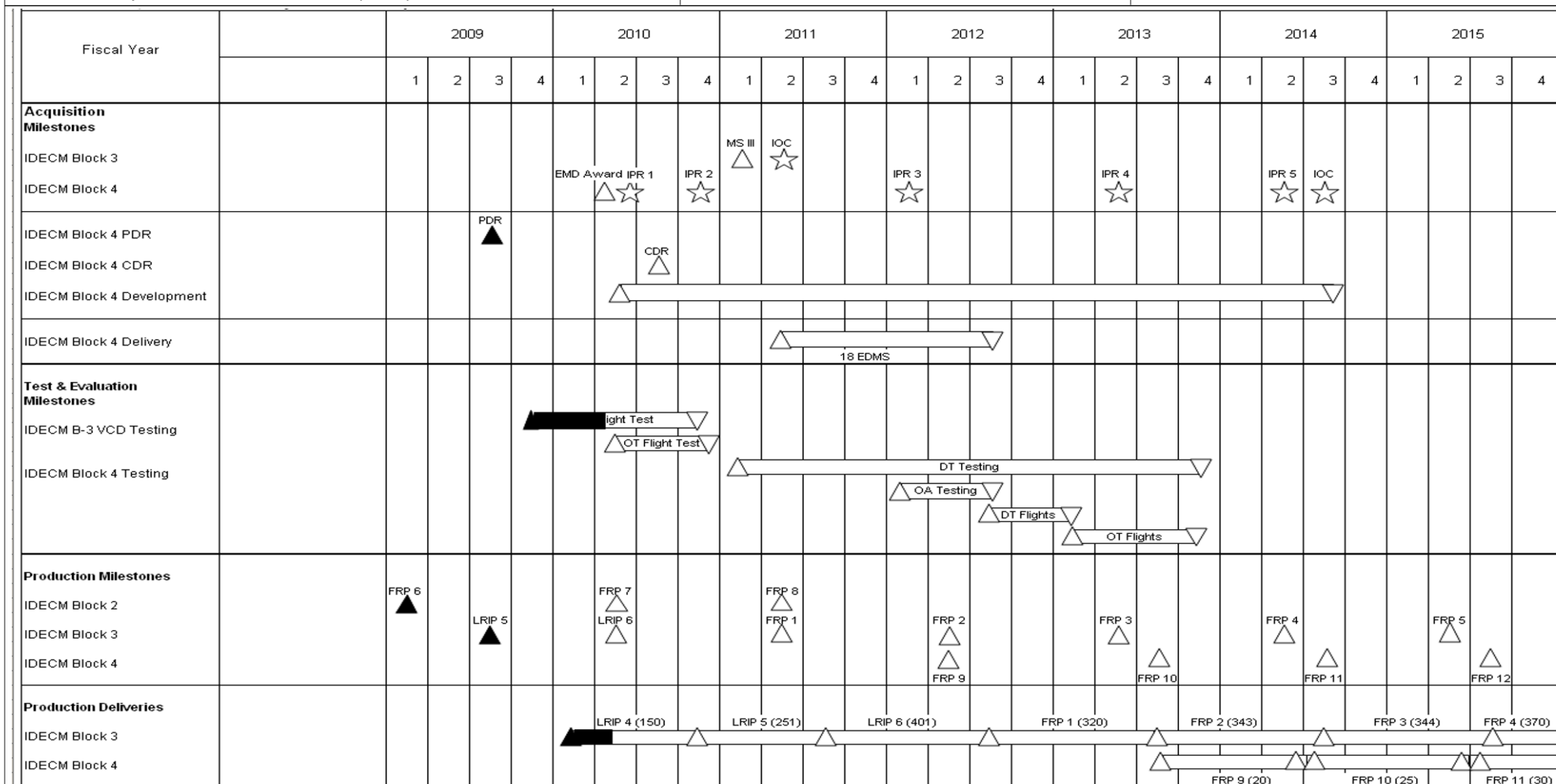
1319: Research, Development, Test & Evaluation, Navy
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604270N: Electronic Warfare (EW) Dev

PROJECT

2175: Tactical Air Electronic Warfare



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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>	PROJECT 2175: <i>Tactical Air Electronic Warfare</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
IDECM Block 3 Milestone III	1	2011	1	2011
IDECM Block 3 Initial Operating Capability (IOC)	2	2011	2	2011
IDECM Block 4 Eng & Mfg Development (EMD) Award	2	2010	2	2010
IDECM Block 4 In-Process Review (IPR) 1	2	2010	2	2010
IDECM Block 4 In-Process Review (IPR) 2	4	2010	4	2010
IDECM Block 4 In-Process Review (IPR) 3	1	2012	1	2012
IDECM Block 4 In-Process Review (IPR) 4	2	2013	2	2013
IDECM Block 4 In-Process Review (IPR) 5	2	2014	2	2014
IDECM Block 4 IOC	3	2014	3	2014
IDECM Block 4 Preliminary Design Review (PDR)	3	2009	3	2009
IDECM Block 4 Critical Design Review (CDR)	3	2010	3	2010
IDECM Block 4 Development	2	2010	3	2014
IDECM Block 3 EDM Deliveries (18)	2	2011	3	2012
IDECM Block 3 VCD DT Flight Testing	4	2009	4	2010
IDECM Block 3 VCD OT Flight Test	2	2010	4	2010
IDECM Block 4 DT Testing	1	2011	4	2013
IDECM Block 4 OA Testing	1	2012	3	2012
IDECM Block 4 DT Flights	3	2012	1	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604270N: Electronic Warfare (EW) Dev		PROJECT 2175: Tactical Air Electronic Warfare	
	Start		End	
Event	Quarter	Year	Quarter	Year
IDECM Block 4 OT Flights	1	2013	4	2013
IDECM Block 2 Full Rate Production (FRP) 6	1	2009	1	2009
IDECM Block 2 Full Rate Production (FRP) 7	2	2010	2	2010
IDECM Block 2 Full Rate Production (FRP) 8	2	2011	2	2011
IDECM Block 3 Low Rate Initial Production (LRIP) 5	3	2009	3	2009
IDECM Block 3 Low Rate Initial Production (LRIP) 6	2	2010	2	2010
IDECM Block 3 Full Rate Production (FRP) 1	2	2011	2	2011
IDECM Block 3 Full Rate Production (FRP) 2	2	2012	2	2012
IDECM Block 3 Full Rate Production (FRP) 3	2	2013	2	2013
IDECM Block 3 Full Rate Production (FRP) 4	2	2014	2	2014
IDECM Block 3 Full Rate Production (FRP) 5	2	2015	2	2015
IDECM Block 4 Full Rate Production (FRP) 9	2	2012	2	2012
IDECM Block 4 Full Rate Production (FRP) 10	3	2013	3	2013
IDECM Block 4 Full Rate Production (FRP) 11	3	2014	3	2014
IDECM Block 4 Full Rate Production (FRP) 12	3	2015	3	2015
IDECM Block 3 LRIP 4 Deliveries (150)	1	2010	4	2010
IDECM Block 3 LRIP 5 Deliveries (251)	4	2010	3	2011
IDECM Block 3 LRIP 6 Deliveries (401)	3	2011	3	2012
IDECM Block 3 FRP 1 Deliveries (320)	3	2012	3	2013
IDECM Block 3 FRP 2 Deliveries (343)	3	2013	3	2014

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010																																			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>		R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>		PROJECT 2175: <i>Tactical Air Electronic Warfare</i>																																		
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Event	Start		End																																			
	Quarter	Year	Quarter	Year																																		
IDECM Block 3 FRP 3 Deliveries (344)	3	2014	3	2015																																		
IDECM Block 3 FRP 4 Deliveries (370)	3	2015	4	2015																																		
IDECM Block 4 FRP 9 Deliveries (20)	3	2013	2	2014																																		
IDECM Block 4 FRP 10 Deliveries (25)	3	2014	2	2015																																		
IDECM Block 4 FRP 11 Deliveries (30)	3	2015	4	2015																																		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0604270N: <i>Electronic Warfare (EW) Dev</i>				PROJECT 2260: <i>Specific Emitter ID</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2260: <i>Specific Emitter ID</i>	0.674	0.690	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.081
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
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.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
SENSOR FUSION 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. <i>FY 2009 Accomplishments:</i> - 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. <i>FY 2010 Plans:</i> Continue all efforts of FY09. Project moves to PE 0304270N starting FY 2011.						0.175	0.198	0.000	0.000	0.000	

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SYSTEM AUTOMATION This effort supports development of an autonomous surveillance system capable of providing emitter signal information to a central location. FY 2009 Accomplishments: - 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. FY 2010 Plans: Continue all efforts of FY09. Project moves to PE 0304270N starting FY 2011.		0.229	0.245	0.000	0.000	0.000
TECHNOLOGY REFRESH & COMMUNICATION ENHANCEMENT This effort improves SEI system performance, real-time communication and tactical use of SEI which will be expanded with next generation SEI technology. FY 2009 Accomplishments: - 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. - Continued task to expand collection capability to support additional radar types. FY 2010 Plans: Continue all efforts of FY09. Project moves to PE 0304270N starting FY 2011.		0.270	0.247	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		0.674	0.690	0.000	0.000	0.000

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<p><u>C. Other Program Funding Summary (\$ in Millions)</u> N/A</p> <p><u>D. Acquisition Strategy</u> N/A</p> <p><u>E. Performance Metrics</u> 1. SEI information on thirty to fifty thousand ships per year are entered into the intelligence database. 2. System reliability increases of 10% each year are anticipated under the current funding level. 3. Two technical and software upgrades are accomplished each year that significantly enhance the SEI system's overall effectiveness. 4. It is estimated that one collection site per year can be fully automated increasing the systems effectiveness. 5. Continue developing and deploying techniques to increase capability for evolving radar types 6. Additional details can be described in a classified environment.</p>		

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	4.986	7.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.054
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification Congressional Add.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010			
Congressional Add: F/A18 Countermeasures Improvement <i>FY 2010 Plans:</i> Additional funding to integrate improved countermeasure equipment and Mission Computer upgrades so that Navy and Marine Corps aircrew have the combat capabilities they need to survive and succeed against modern threats.							0.000	3.983			
Congressional Add: Small Survivable Jammer <i>FY 2010 Plans:</i> These funds to be used for investigation of EW and jamming technology that could potentially be incorporated into an Unmanned Aerial System.							0.000	0.797			
Congressional Add: PT MUGU ELECTRONIC WARFARE LAB UPGRADE							1.596	3.187			

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B. Accomplishments/Planned Program (\$ in Millions)		
	FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> Upgraded laboratory equipment and facilities necessary to develop a NAWCWD Point Mugu laboratory facility modernization. <i>FY 2010 Plans:</i> Upgrade laboratory equipment and facilities necessary to develop a NAWCWD Point Mugu laboratory facility modernization.		
Congressional Add: Integrated Naval Electronic Warfare <i>FY 2009 Accomplishments:</i> Provided subject matter expertise to support Integrated Naval Electronic Warfare efforts to integrate electronic warfare into the Navy's various missions.	0.997	0.000
Congressional Add: USMC Electronic Warfare(EW) Training <i>FY 2009 Accomplishments:</i> Developed airborne electronic attack training and tactics procedures for the USMC Electronic Warfare Training Program.	2.393	0.000
Congressional Adds Subtotals	4.986	7.967
C. Other Program Funding Summary (\$ in Millions)		
N/A		
D. Acquisition Strategy		
Not required for Congressional Adds.		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
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E. Performance Metrics Not required for Congressional Adds.		