Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 5: System

PE 0604270N I Electronic Warfare (EW) Dev

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	864.510	46.851	34.964	28.742	-	28.742	23.292	20.506	20.480	21.917	Continuing	Continuing
0556: EW Counter Response	409.287	18.298	19.739	15.782	-	15.782	15.542	16.439	16.602	17.957	Continuing	Continuing
1742.: EW Technical Development and T&E	27.057	1.630	1.352	1.152	-	1.152	1.642	1.665	1.596	1.626	Continuing	Continuing
2175: Tactical Air Electronic Warfare	428.166	26.923	13.873	11.808	-	11.808	6.108	2.402	2.282	2.334	-	493.896

MDAP/MAIS Code: 418

Note

Note: The Cost to Complete on Exhibit R2 and R2a for project unit 2175 should be \$4.104M. R-3 Exhibit reflects the correct Cost to Complete and Total Cost.

A. Mission Description and Budget Item Justification

This program 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.

This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	51.304	34.964	35.819	-	35.819
Current President's Budget	46.851	34.964	28.742	-	28.742
Total Adjustments	-4.453	-	-7.077	-	-7.077
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-0.073	-			
SBIR/STTR Transfer	-0.631	-			
Program Adjustments	-	-	-0.810	-	-0.810

PE 0604270N: Electronic Warfare (EW) Dev

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[#] The FY 2015 OCO Request will be submitted at a later date.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Na	avy			Date: Mai	rch 2014
Appropriation/Budget Activity		R-1 Program Eleme	ent (Number/Name)		
1319: Research, Development, Test & Evaluation, Navy I BA	5: System	PE 0604270N I Elec	tronic Warfare (EW) Dev		
Development & Demonstration (SDD)					
Rate/Misc Adjustments	0.001	-	-6.267	-	-6.267
 Congressional General Reductions 	-3.750	-	-	-	-
Adjustments					

Change Summary Explanation

Technical: Not Applicable.

Schedule:

Project Unit 0556 / EW COUNTER RESPONSE: Due to delays in analysis and reporting of operational test, fleet release of EA-6B ICAP III Block 5 delayed from 2nd quarter FY13 to 4th quarter FY13.

Project Unit 2175 / TACTICAL AIR EW:

IDECM Block 4 (IB-4):): IB-4 Initial Operational Capability (IOC) moved from 3rd Qtr FY 2014 to 2nd Qtr FY 2015 due to delays in operational testing completion. IB-4 Developmental Testing (DT) Flights completion changed from 2nd Qtr FY 2013 to 1st Qtr FY 2014 due to delays with Software Integration. IB-4 Operational Testing (OT) Flights changed from 2nd Qtr FY 2013 through 1st Qtr FY 2014 through 1st Qtr FY 2015 pending completion of DT. Verification of Correction of Deficiencies (VCD) DT Flight changed from 2nd Qtr FY 2016 through 3rd Qtr FY 2016 through 3rd Qtr FY 2017 through 3rd Qtr FY 2017 through 3rd Qtr FY 2017 through 3rd Qtr FY 2018 due to the changed completion of IDECM IB-4 VCD DT.

ALQ-214 Software Improvement: ALQ-214 SW Improvement IOC moved from 4th Qtr FY 2015 to 4th Qtr 2016. ALQ-214 SW Improvement Developmental Testing Lab/Ground completion changed from 4th Qtr FY 2014 to 3rd Qtr FY 2015 due to delays with Software Integration. ALQ-214 SW Improvement Development Testing (DT)/Operational Testing (OT) Flights changed from 2nd Qtr FY 2014 through 4th Qtr FY 2014 to 1st Qtr FY 2015 through 3rd Qtr FY 2015. ALQ-214 SW Improvement OT Flights changed from 1st Qtr FY 2015 through 3rd Qtr FY 2016 through 3rd Qtr FY 2016 pending completion Software Improvement Developmental Testing.

PE 0604270N: Electronic Warfare (EW) Dev

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014		
Appropriation/Budget Activity 1319 / 5		_		t (Number/ onic Warfare	•	Project (Number/Name) 0556 / EW Counter Response							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
0556: EW Counter Response	409.287	18.298	19.739	15.782	-	15.782	15.542	16.439	16.602	17.957	Continuing	Continuing	
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-			

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project develops upgrades to combat the increasingly complex and dense Electronic Warfare (EW) threat environment. Required improvements in Airborne Electronic Attack (AEA) will achieve application of state-of-the-art signal exploitation, processing, display techniques, improved tactics, and jamming capabilities against EW threats.

Efforts include continued development of Force Protection/Overseas Contingency Operations (classified discussion available upon request) Navigation and Information Operations applications and enhanced communications jamming. Efforts also include risk reduction activities to support the upgrade of the ALQ-99 low band capabilities to include technology studies, breadboard/demonstrator development, and testing in laboratory and relevant environments. The efforts under this project provide for electronic countermeasure responses to advanced threat weapon systems and C3 networks that are expanding in density and technical complexity. This project funds the continued development and integration of all EW and Electronic Attack systems for the US Navy electronic attack aircraft including improvements within precision Direction of Arrival, geo-location, Specific Emitter Identification, Auto-Electronic Support Measures, and selective reactive jamming.

The EA-6B Improved Capability (ICAP) III test aircraft will continue to serve as a test platform during government test and evaluation of Multi Functional Information Distribution Systems/Link-16, Low Band Transmitter, and other EW improvements. A requirement exists to allow the EA-6B ICAP III 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 improve present sensor and targeting information to the theatre commander via coordinated efforts between other airborne, ground and shipbased operations. A method of implementing this requirement is to include the EA-6B on the Link-16 EW Network. Incorporation of the Link-16 message set into the EA-6B and participation of the ICAP III within the Network Centric Warfare arena improves 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 to the Joint Mission Planning System, including development of EA-6B Unique Planning Modules.

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, EA-18G, and Next Jeneration Jammer (NGJ). JATO will continue to generate techniques, tactics, and procedures that will optimize the capabilities of existing weapon systems, and to assist in requirements definitions of emerging AEA systems.

PE 0604270N: Electronic Warfare (EW) Dev

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	larch 2014					
Appropriation/Budget Activity 1319 / 5	PE 0604270N / Electronic Warfare (EW) Dev								
The Airborne Electronic Attack Expendable provides an expanded wa Defenses, Command and Control Communications, and Datalinks throtechnology insertion and threat set adaptability that will address AEA or	ough an open Electronic Attack Subsystem interface								
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	intities in Each)		FY 2013	FY 2014	FY 2015				
Title: ICAP III UPDATE	·		3.814	4.504	1.94				
	A	rticles:	-	-	-				
FY 2013 Accomplishments: Completed and delivered EA-6B Improved Capability (ICAP) III Block 5 ICAP III Block 6. Began first phase of Integrated Test and Evaluation 5		ram for							
FY 2014 Plans: Continue development, integration, and enhancement of Link-16 capa Management Rehost, Litening, Internet Relay Chat, USB ENTR and V Evaluation (OPEVAL) and Follow-On Test and Evaluation (FOT&E) re	ACM into ICAP III aircraft, as well as resolving Opera								
FY 2015 Plans: Continue development, integration, and enhancement of Link-16 capa ENTR, and VACM into ICAP III Aircraft, as well as resolving OPEVAL									
Title: MISSION PLANNING	A	rticles:	2.003	2.405	1.10				
FY 2013 Accomplishments: Developed all elements of the Mission Planning Environment (MPE) in Electronic Tactical Information & Report Management System (ETIRM Mission Planning Environment will continue the development of an upg framework to transition from legacy Windows XP platform to a Window Operating System (OS) obsolescence, as well as provided for Information	IS), and Electronic Warfare Database System (EWDS graded Joint Mission Planning System (JMPS) operates 7 platform. Addressed issues related to Microsoft								
FY 2014 Plans: Continue development of all elements of the mission planning environment Management System and Electronic Warfare Development System. Man upgrade operating framework and transition from a Windows XP placounter Microsoft Operating System obsolescence.	ment including UPCs, EA-6B Tactical Information & Rilission Planning Environment will continue developme	ent of							
FY 2015 Plans: Complete development of all elements and support Operational Test of Unique Planning Component (UPC), Electronic Tactical Information are									

PE 0604270N: Electronic Warfare (EW) Dev

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	larch 2014		
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604270N / Electronic Warfare (EW) Dev	Project (Number/Name) 0556 I EW Counter Response				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantiti	es in Each)	Γ	FY 2013	FY 2014	FY 2015	
Warfare Database System (EWDS), to conclude ICAP III Block 7 effort star Navy and Marines IA accreditation for product and support subsequent MP development of .NET 64 bit Operating System (OS) migration, synchronizin 64 bit evolution for continued Information Assurance (IA) sustainment and	E fielding. Begin Mission Planning Environment (Ing with new Joint Mission Planning System (JMPS)	MPE)				
Title: JAMMER TECHNIQUES OPTIMIZATION (JATO)	Art	icles:	10.222	10.994 -	11.242 -	
FY 2013 Accomplishments: Provide engineering development and test support required to address new support of existing and emerging systems such as the EA-6B, EA-18G, and Optimization (JATO) will continue to generate techniques, tactics, and produSQ-113, ALQ-218, ALQ-227, ALQ-231, ALE-43, and Airborne Electronic in requirements definitions of emerging Airborne Electronic Attack (AEA) sy Overseas Contingency Operation and Force Protection issues. (Classified	d Next Generation Jammer. Jammer Techniques redures to optimize the capabilities of ALQ-99, Attack Expendable (AEAE) systems, and to assist systems. JATO continues to lead efforts in support of					
FY 2014 Plans: Continue engineering development and test support required to address no support of existing and emerging systems such as the EA-6B, EA-18G, and Optimization (JATO) will continue to generate techniques, tactics, and produSQ-113, ALQ-218, ALQ-227, ALQ-231, ALE-43, and Airborne Electronic in requirements definitions of emerging Airborne Electronic Attack (AEA) sy Overseas Contingency Operation and Force Protection issues. (Classified	d Next Generation Jammer. Jammer Techniques redures to optimize the capabilities of ALQ-99, Attack Expendable (AEAE) systems, and to assist systems. JATO continues to lead efforts in support of					
FY 2015 Plans: Continue engineering development and test support required to address no support of existing and emerging systems such as the EA-6B, EA-18G, and Optimization (JATO) will continue to generate techniques, tactics, and produSQ-113, ALQ-218, ALQ-227, ALQ-231, ALE-43, and Airborne Electronic in requirements definitions of emerging Airborne Electronic Attack (AEA) sy Overseas Contingency Operation and Force Protection issues. (Classified	d Next Generation Jammer. Jammer Techniques redures to optimize the capabilities of ALQ-99, Attack Expendable (AEAE) systems, and to assist systems. JATO continues to lead efforts in support of					
Increase in funding in FY2015 is due to increased flight and ground testing stream funding. In prior years, JATO was funded by multiple resource spo have been consolidated.						
Title: AIRBORNE ELECTRONIC ATTACK EXPENDABLE (AEAE)			2.259	1.836	1.500	
			2.200	1.000		

PE 0604270N: Electronic Warfare (EW) Dev

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy	Date: March 2014		
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604270N / Electronic Warfare (EW) Dev	, ,	umber/Name) Counter Response

Articles:	-	-	-
FY 2013 Accomplishments: Develop Instrumented Measurement Vehicles for carrier suitability and airborne flight test and evaluation. Characterize vibration and shock forces associated with F/A-18EF carrier catapult take-offs and arrested landings. Develop accurate mathematical models for wind tunnel simulation and test. Perform wind tunnel safe-separation and transition-to-flight tests for vehicle risk analysis and risk mitigation. Develop F/A-18EF AEAE Unique Planning Component for integration into the F/A-18EF Joint Mission Planning System Mission Planning Environment and H12 Software Cofiguration (SCS). Develop and evaluate Electronic Warfare payloads for integration into AEAE platform. Integrate standard payload interface into the vehicle baseline and develop documentation in support of the Joint Capabilities Integration and Development System (JCIDS) process to include a Capabilities Development Document (CDD).			
FY 2014 Plans: Continue development of Instrumented Measurement Vehicles for carrier suitability and airborne flight test and evaluation. Characterize vibration and shock forces associated with F/A-18EF carrier catapult take-offs and arrested landings. Develop accurate mathematical models for wind tunnel simulation and test. Perform wind tunnel safe-separation and transition-to-flight tests for vehicle risk analysis and risk mitigation. Develop F/A-18E AEAE Unique Planning Component for integration into the F/A-18EF Joint Mission Planning System Mission Planning Environment and H12 SCS. Develop and evaluate Electronic Warfare payloads for integration into AEAE platform. Integrate standard payload interface into the vehicle baseline and develop documentation in support of the JCIDS process to include a CDD.			
FY 2015 Plans: Continue integration onto the F/A-18E/F aircraft. Conduct test and evaluation with Instrumented Measurement Vehicles to capture data to be used for the analysis of captive carry airworthiness and carrier suitability. Characterize vibration and shock forces associated with F/A-18E/F captive carry and carrier catapult take-offs and arrested landings. Evaluate modified Stability Augmentation Device for F/A-18E/F specific airflow and aerodynamic effects. Develop accurate mathematical scale models for wind tunnel simulation and test. Perform wind tunnel safe-separation and transition-to-flight tests for vehicle risk analysis and mitigation. Develop F/A-18E/F Airborne Electronic Attack Expendable (AEAE) Unique Planning Component for integration into the F/A-18E/F Joint Mission Planning System Mission Planning Environment and H14 Software Configuration Set. Develop and			

PE 0604270N: Electronic Warfare (EW) Dev

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

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evaluate Electronic Warfare payload(s) for integration into AEAE platform. Conduct AEAE payload airworthiness, compatibility, and suitability analysis. Integrate standard payload interface into the vehicle baseline and develop documentation in support of the Joint Capabilities Integration and Development System process to include a Capabilities Development Document. Update the navigation system for sustained reliable performance in accordance with Navy mission requirements. Conduct Weapon Data Link

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FY 2013

FY 2014

FY 2015

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014	
1	3	- 3 (umber/Name) Counter Response

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
(WDL) requirements analysis and evaluate WDL integration. Develop, prototype, test, and evaluate AEAE containers for carrier transport and storage suitability.			
Accomplishments/Planned Programs Subtotals	18.298	19.739	15.782

C. Other Program Funding Summary (\$ in Millions)

		·	FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	<u>000</u>	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 APN/05110: EA-6 Series 	25.288	17.477	10.993	-	10.993	9.903	5.037	3.762	0.431	-	3,405.967
 APN/05130: AEA Systems 	42.310	44.802	34.768	-	34.768	20.074	39.176	38.974	39.131	204.599	575.800

Remarks

Navy

D. Acquisition Strategy

The Improved Capability (ICAP) III contract, an Engineering Manufacturing Development Cost Plus Incentive Fee/Award Fee basic contract with two Fixed Price Incentive production options, was awarded to a Northrop Grumman team in March 1998 following Milestone II after full and open competition. The contract was changed to a Cost Plus Award Fee contract in FY 1999. Low Rate Initial Production 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 Assistant Secretary of the Navy for Research Development Acquisition 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. The FRP Lot 4 contract for 9 ALQ-218 systems was awarded in August 2008.

E. Performance Metrics

- 1. Successful completion in the development of ICAP III Block 6 software for the Operational Flight Plan (OFP).
- 2. Successful completion of ICAP III Block 6 development and testing.
- 3. Jammer Techniques Optimization development counters enemy radar systems and communication systems to provide techniques to protect allied forces.
- 4. Airborne Electronic Attack Expendable continues risk reduction and system development.
- 5. Completion of Initial Systems Engineering Technical Review (SETR) events for Block 7 Development including System Requirement Review, Preliminary and Critical Design Reviews.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604270N I Electronic Warfare (EW)

Dev

Project (Number/Name)

0556 I EW Counter Response

Date: March 2014

Product Developmen	nt (\$ in Mi	illions)		FY 2	2013	FY 2	2014	FY 2 Ba		FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary HDW Develop - ICAP III	C/FFP	Various : Various	260.704	0.500	Dec 2012	0.500	Dec 2013	0.400	Dec 2014	-		0.400	-	262.104	262.104
Systems Engineering NRL	WR	Naval Research Lab : Maryland	4.779	2.293	Dec 2012	1.200	Dec 2013	1.550	Dec 2014	-		1.550	Continuing	Continuing	Continuing
Systems Engineering NAWCAD	WR	NAWCAD : Patuxent River, MD	20.023	2.191	Nov 2012	2.664	Nov 2013	1.740	Nov 2014	-		1.740	Continuing	Continuing	Continuing
Systems Eng/BLK Update	WR	NAWCWD : Point Mugu, CA	58.959	7.866	Nov 2012	9.617	Nov 2013	7.678	Nov 2014	-		7.678	Continuing	Continuing	Continuing
Systems Engineering NSWC	WR	NSWC Det : Crane, IN	9.013	0.918	Dec 2012	1.107	Dec 2013	0.536	Dec 2014	-		0.536	Continuing	Continuing	Continuing
Systems Engineering VAR	WR	Various : Various	13.887	0.448	Dec 2012	0.563	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Prior Year Development cost no longer Funded in the FYDP	Various	Various : Various	1.043	-		-		-		-		-	-	1.043	1.043
		Subtotal	368.408	14.216		15.651		11.904		-		11.904	-	-	-

Remarks

Cost growth in excess of OSD approved inflation indices between FY14 and FY15 for Systems Engineering NRL is due to consolidation of the funding for the JATO program into Project Unit 0556.

Support (\$ in Million	ıs)			FY 2	2013	FY 2	2014		FY 2015 FY 2015 Base OCO		FY 2015 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Development Support - JATO	SS/FP	Johns Hopkins Unv : Maryland	24.677	2.600	Dec 2012	2.719	Dec 2013	3.428	Dec 2014	-		3.428	16.630	50.054	50.094
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	13.039	1.334	Dec 2012	1.219	Dec 2013	0.400	Dec 2014	-		0.400	Continuing	Continuing	Continuing
Prior year Support costs no longer funded in the FYDP	Various	Various : Various	2.256	-		-		-		-		-	-	2.256	-
	Į.	Subtotal	39.972	3.934		3.938		3.828		-		3.828	-	-	-

PE 0604270N: *Electronic Warfare (EW) Dev* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
1	` ` ` '	, ,	umber/Name) Counter Response

Support (\$ in Millio	Support (\$ in Millions)				2013	FY	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Cost growth in excess of OSD approved inflation indices between FY14 and FY15 for Development Support - JATO is due to consolidation of the funding for the JATO program into Project Unit 0556.

Management Service	t Services (\$ in Millions)			FY	2013	FY 2	2014		2015 ase	FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	Various : Various	0.907	0.148	Dec 2012	0.150	Dec 2013	0.050	Dec 2014	-		0.050	Continuing	Continuing	Continuing
		Subtotal	0.907	0.148		0.150		0.050		-		0.050	-	-	-
															Target

	Prior Years	FY 20	013	FY 2	014	FY 2 Ba	FY 2	2015 CO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	409.287	18.298		19.739		15.782	-		15.782	-	-	-

Remarks

PE 0604270N: *Electronic Warfare (EW) Dev* Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy			Date: March 2014
• • • • • • • • • • • • • • • • • • • •	, ,	• `	umber/Name) Counter Response

EW Counter Response		FY	′ 20°	13	l	F	FY 20	14		FΥ	2015			F	Y 2016			FΥ	2017			FY	2018			FY	2019)
	102	2Q 3	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	10	2Q	3Q	4Q	1Q	2Q	3Q	4
Acquisition Milestones		\neg			\Box					T				T				T										Ť
Milestones				Fleet Release - ICAP III BLOCK 5				Fleet Release - ICAP III BLOCK 6							Fleet Release - ICAP III BLOCK 7													
Systems Development	$ \cdot $	\dagger			H	\dashv			\parallel	┪				┪			\dashv	\dashv			-				-			t
Hardware Devlopment	!!	-				- !			!!	ļ				ļ				ļ			ļ				ļ			ļ
Software Development	!!	ļ				ļ			ļ ļ	ļ				ļ				ļ			ļ	ļ			ļ			ļ
Reviews		E	SC				JATO ESC				JATO ESC				JATO ESC				JATO ESC				JATO ESC				JATO ESC	
Test & Evaluation	\vdash	╅			H	寸			H	寸			H	寸			\dashv	一			┪	H			i	H		t
Technical Evaluation	İΪ	İ			İΙ	i			İΪ	j			İİ	İ		İ	İ	j		İ	İ	İ	İ	İ	İ	İΪ		İ
Operational Evaluation		ic	CAP	III Block	6 D	T/C	т				AP III 7 DT/		ck															
Production Milestones	\sqcap	$\neg \neg$			П	\neg				\neg			一	一			\dashv	一							\vdash	П		†
Contract Awards										ĺ				ĺ														
Deliveries	\Box				П				П	П				\neg								Ι				$ \Box $		T

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
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Schedule Details

	St	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
EW Counter Response				
Acquisition Milestones: Milestones: Fleet Release - ICAP III BLOCK 5	4	2013	4	2013
Acquisition Milestones: Milestones: Fleet Release - ICAP III BLOCK 6	4	2014	4	2014
Acquisition Milestones: Milestones: Fleet Release - ICAP III BLOCK 7	3	2016	3	2016
Systems Development: Reviews: JATO Executive Steering Committee 2013	3	2013	3	2013
Systems Development: Reviews: JATO Executive Steering Committee 2014	3	2014	3	2014
Systems Development: Reviews: JATO Executive Steering Committee 2015	3	2015	3	2015
Systems Development: Reviews: JATO Executive Steering Committee 2016	3	2016	3	2016
Systems Development: Reviews: JATO Executive Steering Committee 2017	3	2017	3	2017
Systems Development: Reviews: JATO Executive Steering Committee 2018	3	2018	3	2018
Systems Development: Reviews: JATO Executive Steering Committee 2019	3	2019	3	2019
Test & Evaluation: Operational Evaluation: ICAP III Block 6 DT/OT	2	2013	3	2014
Test & Evaluation: Operational Evaluation: ICAP III Block 7 DT/OT	2	2015	1	2016

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Exhibit R-2A, RDT&E Project Ju	stification:	PB 2015 N	Navy							Date: Marc	ch 2014	
Appropriation/Budget Activity 1319 / 5						am Elemen 70N / Electro	•	umber/Name) Technical Development and				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
1742.: EW Technical Development and T&E	27.057	1.630	1.352	1.152	-	1.152	1.642	1.665	1.596	1.626	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

^{*}The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This program 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.

This project funds efforts that focus on the quick reaction prototyping of tactical information and electronic warfare systems. This program directly addresses various Fleet requirements across multiple platforms (airborne, surface and subsurface), airborne and surface cryptologic operational requirements documents and the joint oversight council missions needs statement to research, assess, and develop 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.

Project Unit 1742 EW Technical Development and Test and Evaluation (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 multiple platforms (airborne, surface and subsurface), airborne and surface crypotologic operational requirements documents and the joint oversight council missions needs statement to research, assess, and develop 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 Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Electronic Warfare Technical Development Studies and Test & Evaluation	-	1.352	1.152
Articles:	-	-	-
Description: This project funds efforts that focus on the quick reaction prototyping of tactical information and electronic warfare systems.			
FY 2013 Accomplishments: Continue studies and vulnerability analysis on emerging/changing threats/targets for EW programs.			
FY 2014 Plans: Continue studies and vulnerability analysis on emerging/changing threats/targets for EW programs.			
FY 2015 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
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	Dev	T&E

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
Continue studies and vulnerability analysis on emerging/changing threats/targets for EW programs.				
Title: EW Technical Development Studies & Analysis Ar	ticles:	1.500 -		-
FY 2013 Accomplishments: Continued studies and vulnerability analysis on emerging/changing threats/targets for EW programs.				
FY 2014 Plans: N/A				
FY 2015 Plans: N/A				
Title: EW Technical Development/Program Management Ar	ticles:	0.130		-
FY 2013 Accomplishments: Continued funding necessary travel expenses and training to support the Research & Development projects.				
FY 2014 Plans: N/A				
FY 2015 Plans: N/A				
Accomplishments/Planned Programs Sub	totals	1.630	1.352	1.152

C. Other Program Funding Summary (\$ in Millions)

N/A

Navy

Remarks

D. Acquisition Strategy

BSO 60: Development of classified prototypes and special capabilities.

The Navy Cyber Warfare Development Group (NCWDG) (formerly known as the Navy Information Operations Command (NIOC) Suitland) is granted streamlined acquisition authority for the development of classified prototypes and special capabilities under the DASN(C4I).

E. Performance Metrics

BSO 60: Research, assess and develop EW/IW capabilities.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
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The NCWDG serves as the Program Management Office of the EW Technical Navy's principal technical agent to research, assess, and develop EW/IW capa		program. As such, NCWDG is tasked as the

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2015 Navy	,		-						Date:	March 20	14	
Appropriation/Budg 1319 / 5	et Activity	1	•				ogram Ele 4270N / E				_	(Numbei EW Techi	r /Name) nical Deve	lopment	and
Product Developme	nt (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPFF	Classified : Various	3.604	-		-		-		-		-	-	3.604	-
Aircraft Integration	WR	NAWC CL : China Lake, CA	1.600	-		-		-		-		-	-	1.600	-
		Subtotal	5.204	-		-		-		-		-	-	5.204	-
Support (\$ in Million	ıs)			FY 2	2013	FY 2	2014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Studies and Analysis	Various	Classified : Various	0.000	-		1.140	Oct 2013	0.997	Oct 2014	-		0.997	Continuing	Continuing	Continuin
Development Support	C/CPFF	Classified : Various	2.987	-		-		-		-		-	-	2.987	-
Software Development	C/CPFF	Classified : Various	3.944	-		-		-		-		-	-	3.944	-
Studies & Analyses	Various	Classified : Various	9.513	1.500	Nov 2012	-		-		-		-	-	11.013	-
		Subtotal	16.444	1.500		1.140		0.997		-		0.997	-	-	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	NRL : Washington, DC	2.890	-		-		-		-		-	-	2.890	-
		Subtotal	2.890	-		-		-		-		-	-	2.890	-
Management Servic	es (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Management Personnel	Various	Classified : Various	0.000	-		0.100	Oct 2013	0.070	Oct 2014	-		0.070	-	0.170	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

Date: March 2014

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Project (Number/Name)

1742. I EW Technical Development and

T&E

Management Service	es (\$ in M	illions)		FY 2013		FY 2	2014	FY 2 Ba	2015 ise	FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	WR	NCWDG : Washington, DC	0.000	-		0.112	Oct 2013	0.085	Oct 2014	-		0.085	-	0.197	-
Program Management	Various	Classified : Various	0.990	0.084	Oct 2012	-		-		-		-	-	1.074	-
Travel	WR	NCWDG : Washington DC	1.503	0.046	Oct 2012	-		-		-		-	-	1.549	-
Acquisition Workforce Fund - 2009	Various	Various : Various	0.026	-		-		-		-		-	-	0.026	-
		Subtotal	2.519	0.130		0.212		0.155		-		0.155	-	3.016	-

Remarks

Provides for official travel and training in direct support of Research & Development projects.

	Prior Years	FY 2	013	FY 2	014	FY 2 Ba	 FY 2	 FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	27.057	1.630		1.352		1.152	-	1.152	-	-	-

Remarks

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xhibit R-4, RDT&E Schedule Prof	ıle:	PB 2	2015	Nav	У																					arch 2		-	
Appropriation/Budget Activity 319 / 5										P								er/Na fare (2. /	(Nu i EW					oment	and
Proj 1742.L60		FY 2	2013			FY 2014 FY			Y 20	2015 FY 2016			FY 2017			FY 2018			FY 2019			9							
	1Q	2Q	3Q	4Q	1Q	2Q 3	Q 4	ıQ ·	1Q 2	a :	3Q	4Q	1Q	2Q	3Q	4Q	10	2Q	30	40	10	20	30	40	2 10	Q 20	Q 3	Q 4Q	
BSO 60: Vulnerability Analysis Discovery																													
								1	1			١												l	1		ı		
												İ																	
2015DON - 0604270N - 1742.L60	I	I	I	I	l	1 1	1	ı	ı	ı	1	1		l	I	I	ı	ı	ı	ı	ı	1	ı	ı	ı	ı	ı	1	l

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
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	Dev	T&E	

Schedule Details

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 1742.L60				
BSO 60: Vulnerability Analysis Discovery: Vulnerability Analysis Discovery	1	2014	4	2019
ELECTRONIC WARFARE: Vulnerability Analysis Discovery: VAD 1 2013	1	2013	1	2013
ELECTRONIC WARFARE: Vulnerability Analysis Discovery: VAD 2 2013	2	2013	2	2013
ELECTRONIC WARFARE: Vulnerability Analysis Discovery: VAD 3 2013	3	2013	3	2013
ELECTRONIC WARFARE: Vulnerability Analysis Discovery: VAD 4 2013	4	2013	4	2013

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2015 N	Navy							Date: Marc	ch 2014	
Appropriation/Budget Activity 1319 / 5							t (Number/ onic Warfare	Number/Name) ctical Air Electronic Warfare				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
2175: Tactical Air Electronic Warfare	428.166	26.923	13.873	11.808	-	11.808	6.108	2.402	2.282	2.334	-	493.896
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

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 threat environment. IB-3 MS III (Full Rate Production Decision) was approved in the 4th Qtr FY2011. IB-3 Initial Operational Capability (IOC) achieved 4th Qtr FY2011.

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 17 Engineering Development Models, 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.

ALQ-214 Software Improvement will provide the ALQ-214 with Digital Radio Frequency Memory deny-delay, technique capability significantly improving F/A-18C/D/E/F survivability. Acquisition and contract strategy includes development, integration and test of the ALQ-214 software improvements through sole-source contract award. Minor modification to other avionics are required in order to integrate this new capability. These other avionics may include, but are not limited to, the ALR-67(V)2, ALR-67(V)3, ALE-47, ALE-50, ALE-55, Mission Computer and Fire Control Radar.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Tactical Air EW	26.923	13.873	11.808
Articles:	-	-	-
FY 2013 Accomplishments: The Integrated Defensive Electronic Countermeasures (IDECM) Block 4, ALQ-214 Engineering Change Proposal (ECP) engineering effort continued into FY 2013. IDECM Block 4 In-Process Review (IPR) 4 was conducted 3rd quarter FY 2013. The			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
, · · · · · · · · · · · · · · · · · · ·	,	-,	umber/Name) tical Air Electronic Warfare

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) ALQ-214 Software Improvement effort continued to develop and integrate the ALQ-214 with Digital Radio Frequency Memory deny-delay, technique capability. Successfully completed Software Improvement Design Review 2 in 1st quarter FY 2013.	FY 2013	FY 2014	FY 2015
FY 2014 Plans: The IDECM Block 4 ALQ-214 ECP engineering effort will conclude in FY 2014. Flight testing for the ALQ-214-ECP will continue and is scheduled to be completed. The ALQ-214 Software Improvement contract will continue into FY 2014 and will include engineering and logistics support. The IDECM Block 4 IPR 5 was completed in 2nd Quarter FY 2014.			
FY 2015 Plans: The IDECM Block 4 In-Process Review (IPR) 6 is planned for the 2nd quarter FY 2015. The ALQ-214 Software Improvement Contract will continue into FY 2015 and will include software improvement and include flight testing.			
Accomplishments/Planned Programs Subtotals	26.923	13.873	11.808

C. Other Program Funding Summary (\$ in Millions)

	- ,	•	FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	000	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 APN/0576 004-12: 	53.638	72.291	96.711	-	96.711	122.679	47.214	48.294	37.424	86.469	603.904
Common On-Board Jammer											
 PANMC/0182: Airborne 	18.466	20.076	21.574	-	21.574	21.933	22.372	24.996	25.485	Continuing	Continuing
Expendable CM											

Remarks

Navy

D. Acquisition Strategy

IDECM Block 3 (IB-3) sole source award of Full Rate Production (FRP) in FY 2013. Annual IB-3 production contracts will continue through FY 2046. The ALQ-214 ECP Engineering Manufacturing & Development contract effort was awarded sole source to ITT/EXELIS in December 2009. The contract will conclude in FY 2015. ALQ-214 Software Improvement acquisition awarded to ITT/EXELIS in FY 2012. ITT is the original developer/manufacturer and current sustainer of the ALQ-214.

E. Performance Metrics

IDECM Block 3: Successfully award FRP 5 Contract in 2nd Qtr FY 2015.

IDECM Block 4: Successfully conduct In-Process Review 5 (Production Cut-In 3) in 2nd Qtr FY 2014. Successfully award FRP 11 Contract in 2nd Qtr FY 2014.

ALQ-214 Software Improvement: Successfully achieve Initial Operational Capability (IOC) in 4th Qtr FY 2016.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

R-1 Program Element (Number/Name)

Project (Number/Name)

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Dev

Product Developmen	ıt (\$ in Mi	llions)		FY 2	2013	FY 2	2014		2015 ise	FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Aircraft Integration -IDECM Boeing	Various	Various : Various	7.269	-		0.800	Mar 2014	0.800	Mar 2015	-		0.800	3.202	12.071	12.071
Primary Hdw Dev - IDECM ITT	SS/FFP	ITT : Clifton, NJ	111.932	4.192	Jun 2013	-		-		-		-	-	116.124	116.124
Systems Eng - IDECM	SS/CPFF	Various : Various	62.809	2.081	Mar 2013	1.425	Mar 2014	1.037	Mar 2015	-		1.037	1.190	68.542	68.542
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various : Various	119.050	-		-		-		-		-	-	119.050	-
		Subtotal	301.060	6.273		2.225		1.837		-		1.837	4.392	315.787	-

Remarks

Due to delays in Flight Testing, the Aircraft Integration effort was moved to the right.

Decrease in funding to Systems Eng in Product Development applied to Software Development Support.

Support (\$ in Million	s)			FY 2	2013	FY 2	2014		2015 ise	FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Log Supt- IDECM	WR	NAWCAD : Pax River, MD	0.000	-		0.113	Dec 2013	0.116	Dec 2014	-		0.116	0.465	0.694	-
Software Dev-ALQ-214 SW Dev	SS/CPFF	ITT : Clifton, NJ	17.395	4.267	Jun 2013	0.338	Dec 2013	-		-		-	-	22.000	22.000
Software Dev-ALQ-214 SW Dev	SS/CPFF	Various : Various	0.000	1.098	Apr 2013	-		-		-		-	-	1.098	1.098
Engineering Support	WR	Various : Various	0.000	-		4.092	Dec 2013	2.908	Dec 2014	-		2.908	4.219	11.219	-
Prior Year Support costs no longer funded in FYDP	Various	Various : Various	8.925	-		-		-		-		-	-	8.925	-
Studies and Analysis	SS/CR	Johns Hopkins : Baltimore, MD	0.000	0.500	Sep 2013	-		-		-		-	-	0.500	0.500
		Subtotal	26.320	5.865		4.543		3.024		-		3.024	4.684	44.436	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

R-1 Program Element (Number/Name)

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Support (\$ in Millions)			FY	2013	FY	2014		2015 ase		2015 CO	FY 2015 Total			
Contra Metho Cost Category Item & Typ	d Performing	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Due to the Enterprise Cost Management Framework (ECMF) initiative, beginning in FY 2014 Engineering Support Funding moved from the Management Services section to the Support Section to better capture the type of work being performed.

Decrease in funding to Systems Eng in Product Development applied to Software Development Support.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014		2015 ise	FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Dev Test & Eval Supt ALQ-214 SW Imp	WR	Various : Various	0.000	-		2.356	Dec 2013	5.458	Dec 2014	-		5.458	1.888	9.702	-
Oper Test & Eval ALQ-214 SW Imp	WR	Various : Various	0.000	-		-		-		-		-	2.311	2.311	-
Development Flight Test - IDECM	WR	Various : Various	4.120	0.805	Dec 2012	-		-		-		-	-	4.925	-
Development Flight Test- IDECM	WR	NAWCWD : China Lake, CA	8.646	5.250	Dec 2012	-		-		-		-	-	13.896	-
Oper Test & Eval IDECM	WR	NAWCWD : China Lake, CA	0.000	-		3.287	Dec 2013	-		-		-	-	3.287	-
Eng Test & Eval IDECM	WR	Various : Various	0.000	-		0.850	Dec 2013	0.928	Dec 2014	-		0.928	2.926	4.704	-
Eng & Tech Srvcs (Non-FFRDC)	SS/CPFF	Various : Various	0.000	-		0.517	Dec 2013	0.476	Dec 2014	-		0.476	0.762	1.755	1.755
Prior Year T&E costs no longer funded in FYDP	Various	Various : Various	7.186	-		-		-		-		-	-	7.186	-
		Subtotal	19.952	6.055		7.010		6.862		-		6.862	7.887	47.766	-

Remarks

Navy

Due to the Enterprise Cost Management Framework (ECMF) initiative, beginning in FY 2014 Eng Test & Eval IDECM and Eng & Tech Srvcs (Non-FFRDC) funding moved from Management Services section to the Test and Evaluation Section to better capture the type of work being performed.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

R-1 Program Element (Number/Name)

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Management Service	es (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Mgt & Prof Supt Srvcs- IDECM (Non-FFRDC)	SS/CPFF	Amelex : California, MD	0.809	0.374	Dec 2012	-		-		-		-	-	1.183	1.183
Travel	Allot	NAWCAD : Pax River, MD	0.548	0.062	Oct 2012	0.095	Oct 2013	0.085	Oct 2014	-		0.085	0.267	1.057	-
Eng/Log Supt - IDECM NAWCAD	WR	NAWCAD : Pax River, MD	3.567	1.630	Dec 2012	-		-		-		-	-	5.197	-
Eng/Log Supt - IDECM	WR	Various : Various	8.367	4.906	Dec 2012	-		-		-		-	-	13.273	-
Eng & Tech Srvcs (Non- FFRDC) Pax	SS/CPFF	Various : Various	0.000	0.800	Dec 2012	-		-		-		-	-	0.800	0.800
Eng & Tech Srvcs (Non- FFRDC) NRL	SS/CPFF	Alaire Tech : Lorton, VA	0.729	0.258	Dec 2012	-		-		-		-	-	0.987	0.987
Eng & Tech Srvcs (Non-FFRDC)	SS/CPFF	Various : Various	1.033	0.700	Dec 2012	-		-		-		-	-	1.733	1.733
Prior Year Mgmt costs no longer funded in FYDP	Various	Various : Various	65.781	-		-		-		-		-	-	65.781	-
		Subtotal	80.834	8.730		0.095		0.085		-		0.085	0.267	90.011	-

Remarks

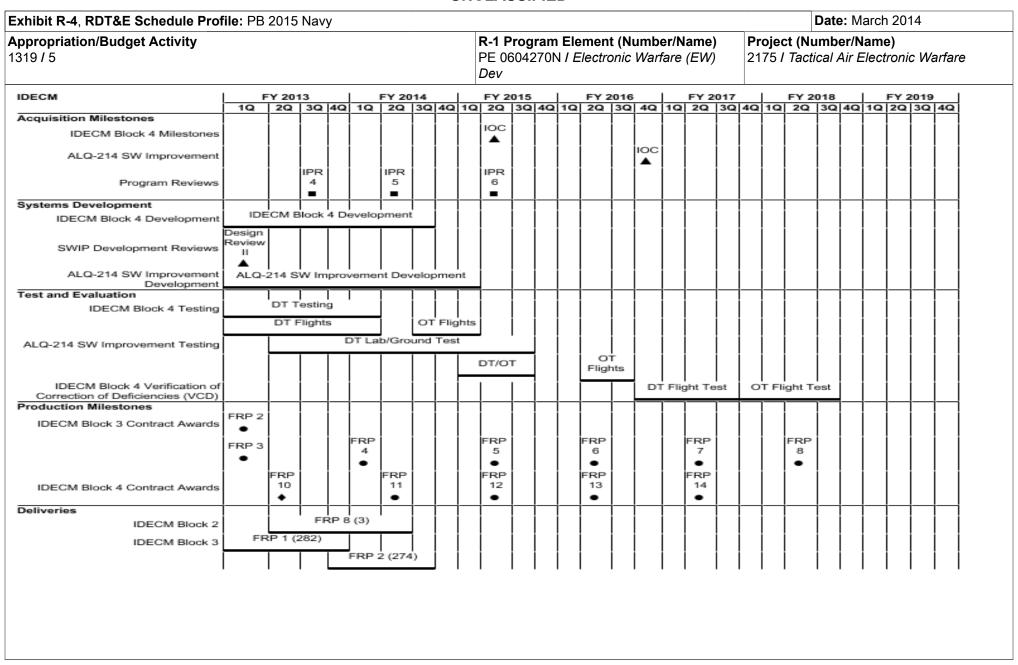
Due to the Enterprise Cost Management Framework (ECMF) initiative, beginning in FY 2014 Engineering Support funding and Eng Test & Eval/ Eng & Tech Srvcs (Non FFRDC) funding moved from Management Services section to the Support Section and the Test and Evaluation Section to better capture the type of work being performed.

	Prior Years	FY 2	2013	FY 2	2014	FY 2 Ba		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract
									. ota.	- Complete		00
Project Cost Totals	428.166	26.923		13.873		11.808	_		11.808	17.230	498.000	_

Remarks

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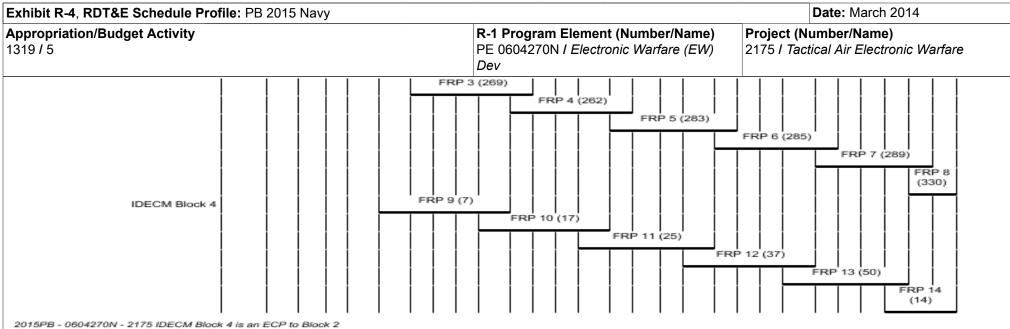


Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
, , ,		- 3 (umber/Name)
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Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
IDECM				
Acquisition Milestones: IDECM Block 4 Milestones: IDECM Block 4 IOC	2	2015	2	2015
Acquisition Milestones: ALQ-214 SW Improvement: ALQ-214 SW Improvement (IOC)	4	2016	4	2016
Acquisition Milestones: Program Reviews: IDECM Block 4 In-Process Review (IPR) 4	3	2013	3	2013
Acquisition Milestones: Program Reviews: IDECM Block 4 In-Process Review (IPR) 5	2	2014	2	2014
Acquisition Milestones: Program Reviews: IDECM Block 4 In-Process Review (IPR) 6	2	2015	2	2015
Systems Development: IDECM Block 4 Development: IDECM Block 4 Development	1	2013	3	2014
Systems Development: SWIP Development Reviews: ALQ-214 SW Improvement Development Design Review 2	1	2013	1	2013
Systems Development: ALQ-214 SW Improvement Development: ALQ-214 SW Improvement Development	1	2013	1	2015
Test and Evaluation: IDECM Block 4 Testing: IDECM Block 4 Development Testing (DT)	1	2013	1	2014
Test and Evaluation: IDECM Block 4 Testing: IDECM Block 4 Development Testing Flights	1	2013	1	2014
Test and Evaluation: IDECM Block 4 Testing: IDECM Block 4 Operational Testing Flights	3	2014	1	2015
Test and Evaluation: ALQ-214 SW Improvement Testing: ALQ-214 SW Improvement Development Testing (DT) Lab/Ground	2	2013	3	2015
Test and Evaluation: ALQ-214 SW Improvement Testing: ALQ-214 SW Improvement Development Testing(DT)/Operational Testing (OT) Flights	1	2015	3	2015
Test and Evaluation: ALQ-214 SW Improvement Testing: ALQ-214 SW Improvement Operational Testing (OT) Flights	2	2016	3	2016

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy

Appropriation/Budget Activity

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R-1 Program Element (Number/Name)
PE 0604270N / Electronic Warfare (EW)
Dev

PE 0604270N / Electronic Warfare (EW)

	St	art	Е	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Test and Evaluation: IDECM Block 4 Verification of Correction of Deficiencies (VCD): IDECM Block 4 Verification of Correction of Deficiencies DT (VCD)	4	2016	3	2017
Test and Evaluation: IDECM Block 4 Verification of Correction of Deficiencies (VCD): IDECM Block 4 Verification of Correction of Deficiencies OT(VCD)	4	2017	3	2018
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 2	1	2013	1	2013
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 3	1	2013	1	2013
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 4	1	2014	1	2014
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 5	2	2015	2	2015
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 6	2	2016	2	2016
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 7	2	2017	2	2017
Production Milestones: IDECM Block 3 Contract Awards: IDECM Block 3 Full Rate Production (FRP) 8	2	2018	2	2018
Production Milestones: IDECM Block 4 Contract Awards: IDECM Block 4 Full Rate Production (FRP) 10	2	2013	2	2013
Production Milestones: IDECM Block 4 Contract Awards: IDECM Block 4 Full Rate Production (FRP) 11	2	2014	2	2014
Production Milestones: IDECM Block 4 Contract Awards: IDECM Block 4 Full Rate Production (FRP) 12	2	2015	2	2015
Production Milestones: IDECM Block 4 Contract Awards: IDECM Block 4 Full Rate Production (FRP) 13	2	2016	2	2016
Production Milestones: IDECM Block 4 Contract Awards: IDECM Block 4 Full Rate Production (FRP) 14	2	2017	2	2017
Deliveries: IDECM Block 2: IDECM Block 2 FRP 8 Deliveries (3)	2	2013	2	2014

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
1	R-1 Program Element (Number/Name) PE 0604270N / Electronic Warfare (EW) Dev	- 3 (umber/Name) tical Air Electronic Warfare

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Deliveries: IDECM Block 3: IDECM Block 3 FRP 1 Deliveries (282)	1	2013	4	2013
Deliveries: IDECM Block 3: IDECM Block 3 FRP 2 Deliveries (274)	4	2013	3	2014
Deliveries: IDECM Block 3: IDECM Block 3 FRP 3 Deliveries (269)	3	2014	3	2015
Deliveries: IDECM Block 3: IDECM Block 3 FRP 4 Deliveries (262)	3	2015	3	2016
Deliveries: IDECM Block 3: IDECM Block 3 FRP 5 Deliveries (283)	3	2016	3	2017
Deliveries: IDECM Block 3: IDECM Block 3 FRP 6 Deliveries (285)	3	2017	3	2018
Deliveries: IDECM Block 3: IDECM Block 3 FRP 7 Deliveries (289)	3	2018	3	2019
Deliveries: IDECM Block 3: IDECM Block 3 FRP 8 Deliveries (330)	3	2019	4	2019
Deliveries: IDECM Block 4: IDECM Block 4 FRP 9 Deliveries (7)	2	2014	2	2015
Deliveries: IDECM Block 4: IDECM Block 4 FRP 10 Deliveries (17)	2	2015	2	2016
Deliveries: IDECM Block 4: IDECM Block 4 FRP 11 Deliveries (25)	2	2016	2	2017
Deliveries: IDECM Block 4: IDECM Block 4 FRP 12 Deliveries (37)	2	2017	2	2018
Deliveries: IDECM Block 4: IDECM Block 4 FRP 13 Deliveries (50)	2	2018	2	2019
Deliveries: IDECM Block 4: IDECM Block 4 FRP 14 Deliveries (14)	2	2019	4	2019