Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*				R-1 ITEM NOMENCLATURE PE 0603658N: *Cooperative Engagement*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	58.278	52.282	54.783	-	54.783	44.360	62.234	67.430	80.382	Continuing	Continuing
2039: *COOP Engagement*	54.295	52.282	54.783	-	54.783	44.360	62.234	67.430	80.382	Continuing	Continuing
9999: *Congressional Adds*	3.983	-	-	-	-	-	-	-	-	0.000	3.983

A. Mission Description and Budget Item Justification

Cooperative Engagement Capability (CEC) significantly improves Battle Force Anti-Air Warfare (AAW) capability by coordinating all Battle Force AAW sensors into a single, real-time, composite track picture capable of fire control quality. CEC distributes sensor data from each ship and aircraft, or cooperating unit (CU), to all other CUs in the battle force through a real-time, line of sight, high data rate sensor and engagement data distribution network. CEC is highly resistant to jamming and provides accurate gridlocking between CUs. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a fire control quality track picture which is the same for all CUs. CEC data is presented as a superset of the best AAW sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapons system. CEC significantly improves our Battle Force defense in depth, including both local area and ship defense capabilities against current and future AAW threats. Moreover, CEC provides critical connectivity and integration of over-land air defense systems capable of countering emerging air threats, including land attack cruise missiles, in a complex littoral environment.

CEC consists of the Data Distribution System (DDS), the Cooperative Engagement Processor (CEP) and Combat System modifications. The DDS encodes and distributes own-ship sensor and engagement data and is a high capacity, jam resistant, directive system providing a precision gridlocking and high throughput of data. The CEP is a high capacity
distributed processor that processes force levels of data in near real-time. The data is passed to the ship's combat system as high quality data for which the ship can cue its onboard sensors or use the data to engage targets without actually tracking them. CEC incorporates Advanced Capability Build-12 (ACB-12) into the CEC baseline for FY09 - FY13.

The Navy implemented a Signal Data Processor (SDP) approach to modify the current equipment to meet reduced size, weight, cost, power and cooling objectives. This SDP approach also supports continuity for interoperability improvements and program protection, as well as supporting open architecture initiatives, comms independence. SDP will provide hardware which complies with Category 3 Open Architecture Computing Environment (OACE) standards with rehosted existing software, which will be fielded fleet-wide to allow affordable replacement of obsolete computing system components and eliminate dependencies on "closed" equipment, operating systems, and middleware.

Additionally, CEC is working with the Army to engineer a Joint Track Management (JTM) and sensor measurement fusion capability, which will be implemented in their respective programs to achieve interoperability across the battle space.

In regard to SDP Backfit, COMOPTEVFOR found the AN/USG-3 (E-2C Airborne CEC) Operationally Effective, but not Operationally Suitable. Reliability and availability issues are addressed by the replacement of four Weapons replaceable Assemblies (WRAs) with the new SDP. Backfit of the SDP in the E-2C will resolve suitability

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy	DATE: February 2011
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issues and address National Security Agency (NSA) directed Crypto Modernization requirements with funding provided in FY10 and FY11. The SDP will also be used in E-2D.

Large Nets respond to emergent needs of operational forces and missions. Provides an extensible foundation for capability growth. Provides interoperability with legacy units in Global Mode. This will provide a 3X increase in DDS network size. This is needed to improve multiple battle group operations. Applicable ships and systems include all CEC deployed units and future fielding to include CG/DDG Modernization, and its Pathfinder Programs. Data Distribution System (DDS) must increase nodes to enable Joint Network Warfare Capabilities with funding provided in FY10 and FY11.
In support of Interoperability, CEC will work collaboratively with other Combat Systems programs (ACDS, AWS, E-2C, E-2D, SSDS, CDLMS, C2P, and SGS/AC) to develop the software and implement design corrections and system changes. CEC will analyze the interactions of interoperability issues and impacts and develop the design for the foundational design changes, and provide collaboration for development of other system changes. Develop the long term solutions, including the engineering process to mature those issues, validate small parts of developmental software ideas, and utilize M&S to validate design approaches in the systems engineering realm.

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	60.334	52.282	45.559	-	45.559
Current President's Budget	58.278	52.282	54.783	-	54.783
Total Adjustments	-2.056	-	9.224	-	9.224
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-0.071	-			
• SBIR/STTR Transfer	-1.894	-			
• Program Adjustments	-	-	10.178	-	10.178
• Section 219 Reprogramming	-0.090	-	-	-	-
• Rate/Misc Adjustments	-	-	-0.954	-	-0.954
• Congressional General Reductions Adjustments	-0.001	-	-	-	-

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Project: 9999: *Congressional Adds*		
Congressional Add: *Cooperative Engagement Capability Tech Refresh, I*	3.983	-
Congressional Add Subtotals for Project: 9999	3.983	-

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy	DATE: February 2011
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Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Congressional Add Totals for all Projects	3.983	-

Change Summary Explanation

Technical: Not Applicable.

Schedule: Not Applicable.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
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COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2039: *COOP Engagement*	54.295	52.282	54.783	-	54.783	44.360	62.234	67.430	80.382	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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distributed processor that is able to process force levels of data in near real-time. This data is passed to the ship's combat system as high quality data for which the ship can cue its onboard sensors or use the data to engage targets without actually tracking them. CEC is also incorporating Advanced Capability Build-12 (ACB-12) into the CEC baseline for FY09 - FY13.

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Additionally, CEC is working with the Army to engineer a Joint Track Management (JTM) and sensor measurement fusion capability, which will be implemented in their respective Programs of Record to achieve interoperability across the battle space.

In regard to SDP Backfit, COMOPTEVFOR found the AN/USG-3 (E-2C Airborne CEC) Operationally Effective, but not Operationally Suitable. Reliability and availability issues are addressed by the replacement of four Weapons Replaceable Assemblies (WRAs) with the new SDP. Backfit of the SDP in the E-2C will resolve suitability issues and address National Security Agency (NSA) directed Crypto Modernization requirements with funding provided in FY10 and FY11. The SDP will also be used in E-2D.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011
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In support of Interoperability, CEC will work collaboratively with other Combat Systems programs (ACDS, AWS, E-2C, E-2D, SSDS, CDLMS, C2P, and SGS/AC) to develop the software and implement design corrections and system changes. CEC will analyze the interactions of interoperability issues and impacts and develop the design for the foundational design changes, and provide collaboration for development of other system changes. Develop the long term solutions, including the engineering process to mature those issues, validate small parts of developmental software ideas, and utilize M&S to validate design approaches in the systems engineering realm.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: E-2D	3.650	2.400	0.500
Articles:	0	0	0
FY 2010 Accomplishments: Completed AN/USG-3B hardware and software integration design and developmental efforts. Commence E-2D AN/USG-3B engineering ground and flight testing leading to Developmental Testing (DT) in FY11.			
FY 2011 Plans: Complete E-2D and AN/USG-3B laboratory and aircraft engineering ground and flight testing. Analyze related data, and develop and implement trouble report corrective actions. Prepare for entry into E-2D AN/USG-3B initial operational testing. Support installation and check out of AN/USG-3B system components into test aircraft supporting NIFC-CA, and prepare for NIFC-CA demonstration events. Continue CEC E-2D software flight testing, leading to early FY12 Operational Evaluation (OPEVAL).			
FY 2012 Plans: Commence preparation for the E-2D and AN/USG-3B initial operational test and provide technical support to that event. Support NIFC-CA demonstration events. Provide analysis, debug and fixes.			
Title: B/L 2.1 INTEGRATION AND FOT&E TESTING	10.200	14.800	7.789
Articles:	0	0	0
FY 2010 Accomplishments: Continued development, integration and testing of computer program Baseline 2.1 for AEGIS and SSDS platforms in support of ACB-12. Performed CEC Developmental Testing (DT) of AN/USG-2A on DDG-51 class, Crytpo Modernization software upgrade testing and Engineering Testing (ET)of AN/USG-3 on E-2C.			
FY 2011 Plans:			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Continue development, integration and testing of computer program Baseline 2.1 for AEGIS and SSDS platforms in support of ACB-12. Perform Engineering and Developmental Testing (DT) of AN/USG-3B on E-2D. Perform Operational Testing (OT) of AN/USG-2A on DDG-51 class and Engineering Testing of AN/USG-2B for DDG-51 and CG-47 class. ***FY 2012 Plans:*** Continue development, integration and testing of computer program Baseline 2.1 for AEGIS and SSDS platforms. Perform Operational Testing (OT) of AN/USG-3B on E-2D, Engineering and Developmental testing of AN/USG-2B with AEGIS ACB12 Engineering and Developmental testing of CEC as part of NIFC-CA.			
Title: NIFC-CA	2.080	2.080	3.390
Articles:	0	0	0
FY 2010 Accomplishments: Completed the design, code and laboratory tests for CEC kernel modifications to support NIFC-CA integration with CEC. ***FY 2011 Plans:*** Support NIFC-CA From-The-Sea (FTS) System-of-Systems (SoS) Systems Engineering (SE) leading to tests beginning in FY11. Establish CEC capability at White Sands Missile Range Desert Ship in support of NIFC-CA. ***FY 2012 Plans:*** Support NIFC-CA FTS SoS SE leading to FY12 live fire testing. Provide CEC test support, model updates, post test analysis, debug and fix leading to deployable CEC baseline with NIFC-CA capability.			
Title: SYSTEMS ENIGNEERING/INTEGRATION AGENT	1.612	1.662	1.712
Articles:	0	0	0
FY 2010 Accomplishments: Continued Systems Engineering/Integration Agent (SE/IA) for development and execution of systems engineering processes by NSWC, Dahlgren. ***FY 2011 Plans:*** Continue Systems Engineering/Integration Agent (SE/IA) for development and execution of systems engineering processes by NSWC, Dahlgren. ***FY 2012 Plans:*** Continue Systems Engineering/Integration Agent (SE/IA) for development and execution of systems engineering processes by NSWC, Dahlgren.			
Title: SYSTEM IMPROVEMENTS	24.327	23.428	30.741

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Articles:	0	0	0
FY 2010 Accomplishments: Continued CEC system improvements including enhanced communications, expansion of networking capability, development of system protection/multi-level secure operational-level secure operations, Cryptologic Modernization, design agent and engineering services. ***FY 2011 Plans:*** Continue CEC system improvements including enhanced communications, expansion of networking capability, development of system protection/multi-level secure operational-level secure operations, Cryptologic Modernization, design agent and engineering services. ***FY 2012 Plans:*** Continue CEC system improvements including enhanced communications, expansion of networking capability, development of system protection/multi-level secure operational-level secure operations, Cryptologic Modernization, design agent and engineering services, Common Array Block development.			
Title: JOINT OPERATIONS	1.500	-	1.000
Articles:	0		0
FY 2010 Accomplishments: Continued participation in system interoperability exercises and Joint Integrated Demonstrations. ***FY 2012 Plans:*** Continue participation in system interoperability exercises and Joint Integrated Demonstrations.			
Title: FIELD ACTIVITIES	10.926	7.912	7.441
Articles:	0	0	0
FY 2010 Accomplishments: Continued field activity support of CEC development efforts (i.e. Technical Direction Agent, In-Service Engineering, Integrated Logistics Support Planning) and program management support. ***FY 2011 Plans:*** Continue field activity support of CEC development efforts (i.e. Technical Direction Agent, In-Service Engineering, Integrated Logistics Support Planning) and program management support. ***FY 2012 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Continue field activity support of CEC development efforts (i.e. Technical Direction Agent, In-Service Engineering, Integrated Logistics Support Planning) and program management support.			
Title: LINK 16/INTEROPERABILITY ***Articles:*** ***FY 2012 Plans:*** Collaborate Link 16/interoperability efforts with other Combat Systems programs (ACDS, AWS, E-2C, E-2D, SSDS, CDLMS, C2P, and SGS/AC) to develop and analyze impacts of software and implement foundational design corrections and other system changes.	- -	- -	2.210 0
Accomplishments/Planned Programs Subtotals	54.295	52.282	54.783

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• Various/OPN: *Navy, OPN*	50.605	58.110	39.606	0.000	39.606	65.750	60.700	59.692	50.404	Continuing	Continuing
• Various/SCN: *Navy, SCN*	8.450	17.006	16.367	0.000	16.367	28.994	10.058	18.774	10.457	Continuing	Continuing
• Various/APN: *Navy, APN*	12.565	16.831	21.057	0.000	21.057	29.479	33.691	33.691	33.691	Continuing	Continuing
• Various/RDTEN: *Navy, RDT&E*	7.484	1.637	1.300	0.000	1.300	0.000	0.535	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy

CEC Acquisition Strategy (AS) was approved by OSD (AT&L) on 19 January 2010. CEC Acquisition Plan was updated April 2010 to incorporate competition into the CEC program.

Contracts:
Design Agent/Engineering Services - FY10-FY16

E. Performance Metrics

- Complete the Build and test of the Signal Data Processor with the Sierra II Crypto Chip.
- Successful completion will result in an Interim Authority to Transmit and NSA full Certification for operation.
- Complete the adaptive layer development for the E-2D aircraft. Provide technical support for installation and integration in the Northrop Grumman Systems Integration Laboratory, on board the test aircraft and support the Developmental testing.
- Finalize the IFC Kernel development changes and integration with AHE adaptive layer for release 3.
- Continue AEGIS Advance Capability Build-12 (ACB-12) CEC integration and demonstration efforts.

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- Continue Naval Integrated Fire Control - Counter Air (NIFC-CA) CEC integration and demonstration efforts.
- Continue E-2D Advanced Hawkeye aircraft CEC integration efforts.
- Continue Crypto Modernization Tech Refresh efforts.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy		DATE: February 2011
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AN/USG-2/3 Development	C/CPFF	Raytheon:St. Petersburg, FL	49.157	15.127	Dec 2010	16.441	Dec 2011	-		16.441	Continuing	Continuing	Continuing
AN/USG-2/3 Development/ TDA	C/CPFF	JHU/APL:Laurel, MD	32.446	8.000	Oct 2010	8.102	Oct 2011	-		8.102	Continuing	Continuing	Continuing
SI/DA	C/CPAF	General Dynamics:Fairfax, VA	23.979	-		-		-		-	0.000	23.979	
SI/DA	C/CPAF	Award Fees:Not Specified	2.903	-		-		-		-	0.000	2.903	
P3I	C/CPAF	Raytheon:St. Petersburg, FL	11.475	-		-		-		-	0.000	11.475	
DDG 1000	C/CPAF	Raytheon:Massachusetts	10.983	-		-		-		-	0.000	10.983	
DDG 1000	C/CPAF	Award Fees:Not Specified	0.447	-		-		-		-	0.000	0.447	
NIFC-CA Integration	TBD	Various:Not Specified	31.559	2.080	Dec 2010	3.390	Dec 2011	-		3.390	Continuing	Continuing	Continuing
In-Service Engineering Activity	WR	NSWC:Port Hueneme, CA	0.607	0.250	Nov 2010	0.250	Nov 2011	-		0.250	Continuing	Continuing	Continuing
Software Support Activity/ SEIA	WR	NSWC:Dahlgren, VA	9.676	1.662	Nov 2010	1.712	Nov 2011	-		1.712	Continuing	Continuing	Continuing
Production Engineering Activity	WR	NSWC:Crane, IN	4.094	1.000	Nov 2010	1.000	Nov 2011	-		1.000	Continuing	Continuing	Continuing
JTRS	TBD	Various:Not Specified	8.500	-		-		-		-	0.000	8.500	
Various	TBD	Miscellaneous:Not Specified	12.119	3.713	Jan 2011	0.449	Jan 2012	-		0.449	Continuing	Continuing	Continuing
NAVSSI	WR	SPAWAR:San Diego, CA	0.368	-		-		-		-	0.000	0.368	
Certification	MIPR	NSA:Fort Meade, MD	0.600	0.250	Nov 2010	0.250	Nov 2011	-		0.250	Continuing	Continuing	Continuing
Certification	WR	SPAWAR:Charleston, SC	0.930	-		-		-		-	Continuing	Continuing	Continuing
Joint Exercises	WR	Various:Not Specified	3.744	-		1.000	Nov 2011	-		1.000	Continuing	Continuing	Continuing
LBTS Testing	WR	CDSA Damneck:Virginia Beach, VA	3.770	1.300	Nov 2010	1.400	Nov 2011	-		1.400	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy		DATE: February 2011
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LBTS Testing	Reqn	SCSC:Wallops Island, VA	3.230	0.700	Nov 2010	0.700	Nov 2011	-		0.700	Continuing	Continuing	Continuing
E-2D Integration	TBD	Various:Not Specified	34.548	2.400	Jan 2011	0.500	Nov 2011	-		0.500	Continuing	Continuing	Continuing
MSI/NCCT	MIPR	Wright Patterson AFB:Dayton, OH	1.228	-		-		-		-	0.000	1.228	
Common Array Block Development	C/CPFF	TBD:Not Specified	-	-		10.800	Dec 2011	-		10.800	0.000	10.800	
		Subtotal	246.363	36.482		45.994		-		45.994			

Remarks

Explanations for the use of "WR, MP, and Reqn" in the "Contract method & type" column are as follows:
-When using "MIPR", these documents are issued to DOD activities that are outside of the Department of the Navy.
-When using "Reqn" for Wallops Island, this document is used because this is the only document we can provide to the activity to accomplish taskings for the CEC program.
-When using "WR", these documents are sent to Navy activities who obligate funding on their vehicles to accomplish tasking for CEC. These activities are the only ones who can accomplish these tasks for the program.
-E-2D Integration/NIFC-CA "Various/TBDs" are for classified programs and several document types.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Need Item Text	C/BA	Not Specified:Not Specified	-	-		-		-		-	0.000	0.000	
		Subtotal	-	-		-		-		-	0.000	0.000	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test/ACB-12 Support	C/CPFF	Raytheon:St. Petersburg, FL	0.540	0.794	Dec 2010	-		-		-	Continuing	Continuing	Continuing
Test/ACB-12 Support	C/CPFF	JHU/APL:Laurel, MD	0.080	0.118	Oct 2010	-		-		-	Continuing	Continuing	Continuing

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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support	WR	NRL:Washington, DC	0.313	-		-		-		-	0.000	0.313	
Test/ACB-12 Support	WR	NSWC:Port Hueneme, CA	11.708	3.900	Oct 2010	1.016	Oct 2011	-		1.016	Continuing	Continuing	Continuing
Air Operations Test Support	WR	NAVAIR (PMA207):Patuxent River, MD	3.664	2.797	Oct 2010	2.400	Oct 2011	-		2.400	Continuing	Continuing	Continuing
Test Data Reduction Analysis	WR	NWAS:Corona, CA	7.218	3.603	Oct 2010	3.368	Oct 2011	-		3.368	Continuing	Continuing	Continuing
Test Support	WR	COMOPTEVFOR:Norfolk, VA	3.689	2.588	Oct 2010	0.005	Oct 2011	-		0.005	Continuing	Continuing	Continuing
Test/ACB-12 Support	WR	NSWC:Dahlgren, VA	-	1.000	Oct 2010	1.000	Oct 2011	-		1.000	0.000	2.000	
		Subtotal	27.212	14.800		7.789		-		7.789			

Remarks

Explanation for the use of "WR" in the "Contract method & type" column are as follows:

When using "WR", these documents are sent to Navy activities who obligate funding on their vehicles to accomplish tasking for CEC. These activities are the only ones who can accomplish these tasks for the program.

Test support includes funding in support of ACB-12:
FY11 - $4M
FY12 - $3.9M

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/FFP	Booz Allen & Hamilton:Washington, DC	3.310	0.880	Dec 2010	0.880	Dec 2011	-		0.880	Continuing	Continuing	Continuing
Program Management Support	C/FFP	Tech Marine Business:Washington, DC	0.120	0.120	Dec 2010	0.120	Dec 2011	-		0.120	Continuing	Continuing	Continuing
		Subtotal	3.430	1.000		1.000		-		1.000			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603658N: *Cooperative Engagement*	PROJECT 2039: *COOP Engagement*

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	277.005	52.282		54.783		-		54.783			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603658N: *Cooperative Engagement*	**PROJECT** 2039: *COOP Engagement*

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603658N: *Cooperative Engagement*	**PROJECT** 2039: *COOP Engagement*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2039				
AN/USG-3B CEC LRIP DAB	1	2010	1	2012
AT CDR	4	2011	4	2011
CRYPTO MOD CERT	2	2011	2	2011
AN/USG-3 PRR	4	2012	4	2012
ILA Event 1	2	2011	2	2011
AN/USG-3B CEC FRP DR	2	2013	2	2013
AN/USG-2 OT-IIIE	1	2012	3	2012
TEMP (5)	2	2011	2	2011
AN/USG-3 DT-IIID	2	2011	4	2011
JTMC DEMO	1	2012	1	2012
AN/USG-3 DT-IIIE	4	2012	3	2013
AN/USG-2 OT-IIIG	1	2014	3	2014
AN/USG-2 OT-IIIF	3	2012	4	2012
CEC Competitive Production	4	2011	4	2015
CEC SDP Comp Production	2	2011	4	2015
GFE Repair Competitive	2	2012	4	2015
CEC DA/ES Competitive	3	2012	4	2015
AN/USG-3B Platform Integration CDR	2	2010	2	2010
AN/USG-3B DT-IIIF	3	2015	2	2016
AN/USG-2 OT-IIIH	3	2016	4	2016
ILA Event 2	2	2016	2	2016

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603658N: *Cooperative Engagement*	PROJECT 9999: *Congressional Adds*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: *Congressional Adds*	3.983	-	-	-	-	-	-	-	-	0.000	3.983
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Congressional Add funding will be used for CEC improvements for Crypto Modernization at Raytheon.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011
Congressional Add: Cooperative Engagement Capability Tech Refresh, I	3.983	-
FY 2010 Accomplishments: Continued CEC system improvements including enhanced communications, expansion of capability, and development of system protection/multi-level secure operational-level operations.		
Congressional Adds Subtotals	3.983	-

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Congressional Add.