Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy										DATE: February 2012	
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 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	57.198	54.783	56.512	-	56.512	71.776	64.469	86.867	77.385	Continuing	Continuing
2039: *COOP Engagement*	57.198	54.783	56.512	-	56.512	71.776	64.469	86.867	77.385	Continuing	Continuing

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 interface with Combat Systems and sensors. 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, and comms independence. The 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.

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 satisfy 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-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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*

A family of antennas approach will be used to satisfy CEC requirements with lower life cycle costs (procurement, installation, and maintenance) and reduced weight (on mast and below deck). These antennas enable future capability as well as providing a solution extensible to additional platforms. This effort for Common Array Block (CAB) antennas will be competed and awarded to a single Design Agent in FY12 and a competitive award for production is planned for FY14.

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 an 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 support the increasing number of fielded CEC assets.

In support of Interoperability, CEC will continue to work collaboratively with other Combat Systems programs (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 provide collaboration for development of CEC and other system changes. Develop the long term solutions, including the engineering process to 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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	52.282	54.783	44.360	-	44.360
Current President's Budget	57.198	54.783	56.512	-	56.512
Total Adjustments	4.916	-	12.152	-	12.152
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	6.410	-			
• SBIR/STTR Transfer	-1.228	-			
• Program Adjustments	-	-	12.348	-	12.348
• Rate/Misc Adjustments	-	-	-0.196	-	-0.196
• Congressional General Reductions Adjustments	-0.266	-	-	-	-

Change Summary Explanation

Technical: Not Applicable.
Schedule: Not Applicable.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
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*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2039: *COOP Engagement*	57.198	54.783	56.512	-	56.512	71.776	64.469	86.867	77.385	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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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, and comms independence. The 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.

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 satisfy 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 2013 Navy		DATE: February 2012
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*

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In support of Interoperability, CEC will continue to work collaboratively with other Combat Systems programs (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 provide collaboration for development of CEC and other system changes. Develop the long term solutions, including the engineering process to 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 2011	FY 2012	FY 2013
Title: E-2D	3.900	2.240	1.000
Articles:	0	0	0
FY 2011 Accomplishments: Completed E-2D and AN/USG-3B laboratory and aircraft engineering ground and flight testing. Analyzed related data, and developed and implemented trouble report corrective actions. Prepared for entry into E-2D AN/USG-3B initial operational testing. Supported installation and check out of AN/USG-3B system components into test aircraft supporting NIFC-CA, and prepared for NIFC-CA demonstration events. Continued 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 integration and demonstration preparation events. Provide analysis, debug and fixes.			
FY 2013 Plans: Support NIFC-CA execution events with analysis, debug and fixes.			
Title: B/L 2.1 INTEGRATION AND FOT&E TESTING	13.300	6.800	6.700
Articles:	0	0	0
FY 2011 Accomplishments:			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continued development, integration and testing of computer program Baseline 2.1 for AEGIS and SSDS platforms in support of ACB-12. Performed Engineering and Developmental Testing (DT) of AN/USG-3B on E-2D. Performed Engineering Testing of AN/USG-2B for DDG-51 and CG-47 class. Supported developmental testing of near-term interoperability engineering upgrade. ***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. Perform Operational Testing (OT) of AN/USG-2A on DDG-51 class. Support developmental testing of Mid-term interoperability enterprise upgrade. ***FY 2013 Plans:*** Support demonstration and OT testing of NIFC-CA. Perform Operational Testing (OT) of AN/USG-2B with AEGIS ACB12. Support operational testing of Mid-term interoperability enterprise upgrade.			
Title: NIFC-CA	2.080	3.390	2.730
Articles:	0	0	0
FY 2011 Accomplishments: Supported NIFC-CA From-The-Sea (FTS) System-of-Systems (SoS) Systems Engineering (SE) leading to tests beginning in FY11. ***FY 2012 Plans:*** Support NIFC-CA FTS SoS SE. Provide CEC test support, model updates, post test analysis, debug and fix. Establish CEC capability at White Sands Missile Range Desert Ship in support of NIFC-CA. ***FY 2013 Plans:*** Support NIFC-CA FTS SoS SE leading to FY13 live fire testing at WSMR and At Sea. Provide CEC test support, model updates, post test analysis, debug and fix leading to deployable CEC baseline with NIFC-CA capability.			
Title: SYSTEM IMPROVEMENTS	23.108	19.143	17.638
Articles:	0	0	0
FY 2011 Accomplishments: Continue CEC system improvements including enhanced communications, expansion of networking capability, development of system protection. Cryptologic Modernization, design agent and engineering services. Initiated Reduced Total Ownership Cost (RTOC) effort to design new USN antennas. ***FY 2012 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continue CEC system improvements including enhanced communications, expansion of networking capability, development of system protection. Cryptologic Modernization, design agent and engineering services. ***FY 2013 Plans:*** Continue CEC system improvements with large network development and integration with Advanced Missile Defense Radar (AMDR).			
Title: NETWORK ENABLED ELECTRONIC DEFENSE SYSTEM (NEEDS) ***Articles:*** ***FY 2013 Plans:*** Continue research and development for NEEDS capability to respond to emergent needs of operational forces and will provide improved surveillance, tracking, ID, and engagement capabilities.	- 	- 	6.160 0
Title: FIELD ACTIVITIES ***Articles:*** ***FY 2011 Accomplishments:*** Continue field activity support of CEC development efforts (i.e. SE/IA, Technical Direction Agent, In-Service Engineering, Integrated Logistics Support Planning) and program management support. ***FY 2012 Plans:*** Continue field activity support of CEC development and fielding efforts (i.e. SE/IA, Technical Direction Agent, In-Service Engineering, Integrated Logistics Support Planning) and program management support. ***FY 2013 Plans:*** Continue field activity support of CEC development and fielding efforts (i.e. SE/IA, Technical Direction Agent, In-Service Engineering, Integrated Logistics Support Planning) and program management support.	8.400 0	8.200 0	8.294 0
Title: LINK 16/INTEROPERABILITY ***Articles:*** ***FY 2011 Accomplishments:*** Developed Accelerated Mid-Term Interoperability Improvement Program (AMIIP) design changes for CEC and Common Data Link Management System (CDLMS)/Link 16. Reviewed CEC and CDLMS design changes with Aegis, SSDS, SGS/AC, and E-2C programs.	6.410 0	2.210 0	3.390 0

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Reviewed CEC and CDLMS documented system trouble reports to identify and prioritize critical interoperability trouble reports for correction. Commenced a coordinated review between all 6 programs and Fleet representatives to review the entire Trouble Report package for completeness. Commenced Software code development. Executed Engineering Assessment #1 (EA#1) with Aegis, CEC, and CDLMS/Link 16 with initial versions of modified software at the Combat Systems Engineering Development Site (CSEDS) in Moorestown, NJ. ***FY 2012 Plans:*** Collaborate Link 16/interoperability efforts with other Combat Systems programs (AWS, E-2C, E-2D, SSDS, CDLMS, C2P, and SGS/AC). Develop and analyze impacts of software and implement foundational changes, design corrections, and other system changes. Participate in testing of the resulting Mid-term interoperability changes aboard USN fleet during Trident Warrior 12. ***FY 2013 Plans:*** Test, debug, certify and field the Mid-term interoperability upgrade.			
Title: COMMON ARRAY BLOCK (CAB) ANTENNA	-	12.800	10.600
Articles:		0	0
FY 2012 Plans: Continue development of the CAB-S antenna. ***FY 2013 Plans:*** Continue development of the CAB-S antenna.			
Accomplishments/Planned Programs Subtotals	57.198	54.783	56.512

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• SCN: *Navy, SCN*	17.006	16.367	28.994	0.000	28.994	10.058	18.774	12.500	16.900	Continuing	Continuing
• APN/0204152N: *Navy, APN*	16.277	20.657	21.010	0.000	21.010	21.382	30.474	26.591	31.581	Continuing	Continuing
• OPN/2606: *CEC*	25.551	19.332	27.881	0.000	27.881	34.932	38.133	29.421	34.710	Continuing	Continuing
• OPN/0960: *CG Mod*	16.455	15.284	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• OPN/0900: *DDG Mod*	16.388	0.000	11.191	0.000	11.191	5.587	15.757	11.154	11.777	Continuing	Continuing
• OPN/0206313M: *USMC*	11.305	2.200	0.000	0.000	0.000	6.579	0.000	0.000	0.000	Continuing	Continuing
• RDT&E/0206313M: *USMC*	1.249	2.513	0.486	0.000	0.486	0.100	0.000	0.000	0.000	Continuing	Continuing
• RDT&E,N/: *NAVAIR*	1.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• RDT&E,A/0102419A: *JLENS*	5.037	2.725	0.000	0.000	0.000	0.000	0.000	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. The CEC Acquisition Plan (AP) was revised June 2011 to incorporate the Common Array Block (CAB) antenna effort.

Contracts:
SDP-S Contract Awarded - Q1 FY12.
Design Agent/Engineering Services - FY11-FY12. New Contract will be competitively awarded in FY13.
Common Array Block (CAB) antenna - New Contract will be competitively awarded in FY12.
CEC Systems (less SDP) production - New Contract will be competitively awarded in FY13.

E. Performance Metrics

- Achieved NSA Type 1 Certification.
- 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.
- Continue AEGIS Advance Capability Builds CEC integration and demonstration efforts.
- 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.
- Award contract to develop Common Array Block (CAB).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy		DATE: February 2012
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
AN/USG-2/3 Development/P3I	C/CPFF	Raytheon:St. Petersburg, FL	75.759	7.970	Feb 2012	8.000	Dec 2012	-		8.000	Continuing	Continuing	Continuing
AN/USG-2/3 Development/ TDA	C/CPFF	JHU/APL:Laurel, MD	40.446	8.102	Feb 2012	8.551	Nov 2012	-		8.551	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	
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	33.639	2.390	Dec 2011	2.730	Dec 2012	-		2.730	Continuing	Continuing	Continuing
In-Service Engineering Activity	WR	NSWC:Port Hueneme, CA	0.857	0.250	Nov 2011	0.250	Nov 2012	-		0.250	Continuing	Continuing	Continuing
Software Support Activity/ SEIA	WR	NSWC:Dahlgren, VA	11.338	0.449	Nov 2011	0.449	Nov 2012	-		0.449	Continuing	Continuing	Continuing
Production Engineering Activity	WR	NSWC:Crane, IN	5.094	0.600	Nov 2011	0.600	Nov 2012	-		0.600	Continuing	Continuing	Continuing
JTRS	TBD	Various:Not Specified	8.500	-		-		-		-	0.000	8.500	
Various	TBD	Miscellaneous:Not Specified	15.832	12.322	Feb 2012	-		-		-	Continuing	Continuing	Continuing
NAVSSI	WR	SPAWAR:San Diego, CA	0.368	-		-		-		-	0.000	0.368	
Certification	MIPR	NSA:Fort Meade, MD	0.850	0.250	Feb 2012	0.250	Nov 2012	-		0.250	Continuing	Continuing	Continuing
Certification	WR	SPAWAR:Charleston, SC	0.930	-		-		-		-	Continuing	Continuing	Continuing
Joint Exercises	WR	Various:Not Specified	3.744	-		-		-		-	Continuing	Continuing	Continuing
LBTS Testing	WR	CDSA Damneck:Virginia Beach, VA	5.070	0.500	Nov 2011	0.500	Nov 2012	-		0.500	Continuing	Continuing	Continuing
LBTS Testing	Reqn	SCSC:Wallops Island, VA	3.930	0.700	Nov 2011	0.700	Nov 2012	-		0.700	Continuing	Continuing	Continuing

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
E-2D Integration	TBD	Various:Not Specified	36.948	2.250	Nov 2011	1.000	Nov 2012	-		1.000	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	-	11.200	Dec 2011	10.600	Dec 2012	-		10.600	0.000	21.800	
AN/USG-2B/3B Development	C/CPFF	TBD:Not Specified	-	-	Dec 2011	9.018	Dec 2012	-		9.018	0.000	9.018	
NEEDS	C/CPFF	TBD:Not Specified	-	-		6.160	Dec 2012	-		6.160	0.000	6.160	
		Subtotal	282.845	46.983		48.808		-		48.808			

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.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test/ACB Support	C/CPFF	Raytheon:St. Petersburg, FL	1.334	0.463	Nov 2011	-		-		-	Continuing	Continuing	Continuing
Test/ACB Support	C/CPFF	JHU/APL:Laurel, MD	0.198	0.261	Nov 2011	-		-		-	Continuing	Continuing	Continuing
Test Support	WR	NRL:Washington, DC	0.313	-		-		-		-	0.000	0.313	
Test/ACB Support	WR	NSWC:Port Hueneme, CA	15.608	1.436	Nov 2011	1.836	Nov 2012	-		1.836	Continuing	Continuing	Continuing
Air Operations Test Support	WR	NAVAIR (PMA207):Patuxent River, MD	6.461	1.700	Nov 2011	0.800	Nov 2012	-		0.800	Continuing	Continuing	Continuing
Test Data Reduction Analysis	WR	NWAS:Corona, CA	10.821	0.300	Nov 2011	0.900	Nov 2012	-		0.900	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy		DATE: February 2012
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*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support	WR	COMOPTEVFOR:Norfolk, VA	6.277	2.500	Nov 2011	0.300	Nov 2012	-		0.300	Continuing	Continuing	Continuing
Test/ACB Support	WR	NSWC:Dahlgren, VA	1.000	0.140	Nov 2011	0.144	Nov 2012	-		0.144	0.000	1.284	
Test/ACB Support	C/CPFF	TBD:Not Specified	-	-		2.724	Dec 2012	-		2.724	0.000	2.724	
		Subtotal	42.012	6.800		6.704		-		6.704			

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 also includes ACB the following funding:
FY12 - $1.0M
FY13 - $3.0M

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/FFP	Booz Allen & Hamilton:Washington, DC	4.190	0.880	Dec 2011	0.880	Dec 2012	-		0.880	Continuing	Continuing	Continuing
Program Management Support	C/FFP	Tech Marine Business:Washington, DC	0.240	0.120	Dec 2011	0.120	Dec 2012	-		0.120	Continuing	Continuing	Continuing
		Subtotal	4.430	1.000		1.000		-		1.000			

	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	329.287	54.783		56.512		-		56.512			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
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 2013 Navy		DATE: February 2012
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	3	2012	3	2012
CRYPTO MOD CERT	2	2011	2	2011
1ST SDP-S PRODUCTION	2	2011	2	2011
ILA 1	4	2011	4	2011
AN/USG-3B CEC FRP DR	1	2014	1	2014
AN/USG-2 OT-IIIE	1	2012	1	2012
TEMP REV 5	2	2012	2	2012
AN/USG-3 DT-IIID	2	2011	4	2011
JTMC DEMO	1	2012	1	2012
AN/USG-3B DT-IIIF	3	2015	4	2015
AN/USG-2B OT-IIIG	2	2014	3	2014
AN/USG-3B OT-IIIF	2	2012	3	2012
CEC COMPETITIVE PRODUCTION	2	2013	4	2017
CEC SDP COMP PRODUCTION	1	2012	1	2017
CEC GFE REPAIR COMPETITIVE	2	2013	4	2017
CEC DA/ES COMPETITIVE	1	2013	4	2017
AN/USG-2B DT-IIIE	3	2012	4	2013
AN/USG-3B OT-IIIH	2	2016	4	2016
ILA 2	2	2013	2	2013
GATE 6 CSB 1	1	2011	1	2011
GATE 6 CSB 2	1	2012	1	2012

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
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*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
GATE 6 CSB 3	1	2013	1	2013
GATE 6 CSB 4	1	2014	1	2014
GATE 6 CSB 5	1	2015	1	2015
GATE 6 CSB 6	1	2016	1	2016
GATE 6 CSB 7	1	2017	1	2017
AN/USG-2B FQT	1	2012	1	2012
CEC PRODUCTION LAST OPTION AWARDED	1	2011	1	2011
CEC CAB	4	2012	4	2015
PEO IWS SUFFICIENCY REVIEW	3	2011	3	2011
TRIDENT WARRIOR	4	2012	4	2012
CAB FIRST PRODUCTION UNIT TESTING	1	2015	1	2015