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 0603725N: *Facilities Improvement*	

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	3.727	3.754	3.401	-	3.401	3.435	3.467	3.517	4.029	Continuing	Continuing
0995: *Naval Facilities System*	1.775	1.772	1.409	-	1.409	1.412	1.418	1.437	1.907	Continuing	Continuing
3155: *Force Protection Ashore*	1.952	1.982	1.992	-	1.992	2.023	2.049	2.080	2.122	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program provides for capabilities to: a) overcome performance limitations and reduce the life cycle cost of shore facilities and, b) provide protection against terrorist attacks for shore installations and their operations. The program focuses on technical and operational issues of specific Navy interest, where there are no unbiased test validated Commercial Off the Shelf (COTS) solutions available, and where timely capabilities may not materialize without specific demonstration or validation by the Navy. Additionally, the program completes the development of technologies originating from Navy, DOD and other sources of Science and Technology programs, including the National Science Foundation (NSF), the National Institute of Standards and Technology (NIST) and Department of Energy (DOE). Validated technologies are implemented in the Navy's Military Construction (MILCON) and Facilities, Sustainment Restoration and Modernization (FSRM) program, and Antiterrorism and Force Protection (ATFP) Other Procurement, Navy (OP,N) program.

Project 0995 addresses the following Navy facilities requirements during FY 2011 through FY 2017: Advance Technology for Waterfront Facilities Repair and Enhancements, Facilities Technologies to Reduce the Cost of Facilities Sustainment, Restoration and Modernization for reducing the total ownership cost (TOC) of future and existing Facilities and addressing seismic risk of Naval Waterfront Facilities. This project is consistent with recommendations of two National Academy of Sciences Reports: "The Role of Federal Agencies in Fostering New Technology and Innovation in Building" and "Federal Policies to Foster Innovation and Improvement in Constructed Facilities."

Started in FY2006 the Force Protection Ashore Project 3155 addresses selective topics in modeling, and material technologies to reduce the vulnerability of installations; and reduce the acquisition and operating costs of protective technologies. The demonstrations and validations provide the independent, technical and operational test data for the development of competitive performance specifications to acquire the required capabilities. The ATFP project is coordinated with other DOD programs.

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 0603725N: *Facilities Improvement*			
B. Program Change Summary ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**
Previous President's Budget	3.746	3.754	3.792	-	3.792
Current President's Budget	3.727	3.754	3.401	-	3.401
Total Adjustments	-0.019	-	-0.391	-	-0.391
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	-0.379	-	-0.379
• Rate/Misc Adjustments	-	-	-0.012	-	-0.012
• Congressional General Reductions Adjustments	-0.019	-	-	-	-

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*	

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
0995: *Naval Facilities System*	1.775	1.772	1.409	-	1.409	1.412	1.418	1.437	1.907	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program provides the Navy with new engineering capabilities that are required to overcome specific performance limitations of Naval shore facilities while reducing the cost of sustaining the Naval shore infrastructure. The program focuses available RDT&E resources on satisfying facility requirements where the Navy is a major stakeholder or where there are no test validated Commercial Off the Shelf (COTS) solutions available, and a timely solution will not emerge without a Navy sponsored demonstration and validation. The program completes the development and validation of facility technologies originating in Navy science and technology programs, plus a variety of other sources which includes the National Science Foundation (NSF) and the National Institute of Standards and Technology (NIST). Validated technologies are implemented in the Navy's Military Construction (MILCON) and Facilities Sustainment Restoration and Modernization Programs (FSRP). The Duncan Hunter National Defense Authorization Act of 2009 laid down very specific guidelines for the correction of corrosion deficiencies in DoD shore facilities which is estimated to be $1.9B (DOD Annual Cost of Corrosion for the Department of Defense Facilities and Infrastructure July 2010).

Project 0995 addresses two Navy facilities requirements: 1) waterfront facilities repair, upgrade and service life extension; and, 2) validation testing/performance monitoring of vertical take-off and landing (VTOL) pads for JSF (F-35B), testing and evaluation of the performance of alternative materials, and surfacing concepts, and, methods and corrosion technologies to reduce the cost of Facilities, Sustainment, Restoration and Modernization (FSRM).

Waterfront facilities, repair, upgrade and service life extension:
An urgent requirement exists for early identification of strategies and solution recommendations for Seismic Risk at Naval Facilities, and especially nuclear capable waterfront facilities. Recent Pacific Rim earthquakes have heightened anxiety levels on perceived huge risks to Navy waterfront facilities in the region. The sub-project will provide analysis and solution recommendations for facilities impacted by seismic risk. Waterfront facilities repair and upgrade: About 75% of the Navy's waterfront facilities are over 45 years old. They were designed for a service life of 25 years and to satisfy the mission requirements existing at that time. The over aged reinforced concrete requires costly and repetitive repairs. In addition, to accomplish more pier side ship maintenance and thus reduce dry dock costs, these piers must be strengthened to support concentrated crane loads up to 140 tons when piers were originally designed for no concentrated loads. At the time piers were designed to service one, possibly two particular ship classes, berthing flexibility is now limited by mooring and utility arrangements. This sub-project addresses new materials design methods, and retrofit methods to extend the service life of existing waterfront facilities by an additional 15 or more years. The project also addresses updating the mission based service, environmental, and protection loading requirements imposed by changes in platforms, operations and threats. Other initiatives include: leveraging Building Information Modeling (BIM) technology to provide for enhanced facilities management processes and waterfront utilities service enhancements using models to achieve flexible berthing arrangements consistent with current and future platform mooring configurations and hotel service requirements including Facilities and Infrastructure Integrated Logistics Support for ACAT Programs.

Technologies to reduce the cost of Facilities Sustainment Restoration and Modernization (FSRP):

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*

Technologies to reduce the cost of FSRM: SRM issues of high operational significance are addressed on a priority basis. The Navy portion of corrosion deficiencies in DoD shore facilities is estimated to be $433M (DOD Annual Cost of Corrosion for the Department of Defense Facilities and Infrastructure July 2010). Current Navy FSRM funding levels are insufficient to prevent the continued growth of the backlog of mission and safety critical maintenance and repairs. This effort will demonstrate and validate the cost and reliability of advanced corrosion technologies in order to assure their acceptance and implementation in traditionally conservative public works and construction industries. The effort will accelerate the validation, commercialization, and wide-spread implementation of the facility corrosion technologies urgently required to reduce the cost of correcting the deficiencies in the Navy FSRM backlog. Estimated returns on these investments are better than 60 to 1. The sub-project includes the continuing effort to validate, test and conduct performance monitoring of vertical take-off and landing (VTOL) pads for JSF (F-35B).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Naval Facilities System	1.775	1.772	1.409
Articles:	0	0	0

FY 2011 Accomplishments:

Waterfront Facilities Repair & Upgrade: Support and manage the advanced nuclear capable dry-dock seismic analysis standard procedure as a pilot definition for the analysis of 26 additional Navy dry-docks, including nuclear capable facilities, requiring analysis to meet NAVSEA MILSTD 1625 MILITARY STANDARD: SAFETY CERTIFICATION PROGRAM (SCP) FOR DRYDOCKING FACILITIES AND SHIPBUILDING WAYS FOR US NAVY SHIPS. Providing new analysis methods for, developing and populating the unclassified 3D ship model repository to improve fleet support for the standardization, utilization and sustainment of facilities data sets from planning (integrated logistics support (ILS)) to facility design to facility demolition consistent with Building Information Management (BIM) and Modeling processes. This will establish data interoperability with business processes in the Capital Improvements Business Line (CIBL) to ensure that efficiencies are realized. The immediate result of this effort has had a direct positive impact on support to NAVSEA05 and current ACAT programs.

Facilities, Sustainment, Restoration, & Modernization: Continue validation testing/performance monitoring of vertical take-off and landing (VTOL) pads for JSF (F-35B). Test and evaluate performance of alternative materials, and surfacing concepts and methods. Conduct field (validation) testing of high temperature resistant pavement joint sealants. Evaluate possible solutions and develop associated design and construction criteria to support the transition of new technologies associated with weapons system introduction into the shore facilities infrastructure. Focus in this area is to address lowest Total Ownership Cost (TOC), sustainable operations and capturing best practice technologies to facilitate successful operations of the weapons platforms and existing infrastructures. Continue corrosion prevention and control projects and sustainability engineering and maintenance research: accelerated weathering of organic materials, enhanced guidelines for marine concrete repairs, electrochemical chloride extraction of reinforced concrete during repair of waterfront structures materials, crack resistant durable repair material, pipeline repair technology for fuel pipelines and criticacl utilities on the underside of Navy piers, and thermally insulating coatings. Investigating solutions for enhanced and more timely response to contingency operations and post-disaster situations for Naval Installations with improved assessment, data collection, diagnostics and communications to assure more efficient/effective response. Projects

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
for lowest total ownership costs for hangar unmanned electronics system, sustainable engineering design and mobile condition assessment projects are proceeding. Complete work begun on Modular Hybrid Pier (MHP) cost estimate, 35% design and final report funded in FY2010. MHP project costs estimate and final report developed in FY2011. ***FY 2012 Plans:*** Waterfront Facilities Repair & Upgrade: Aggressively pursuing dry-dock and waterfront seismic analysis and standard seismic risk mitigation procedures pilot definition for the analysis of 26 Navy dry-docks (including nuclear capable facilities, requiring analysis to meet NAVSEA MILSTD 1625 MILITARY STANDARD: SAFETY CERTIFICATION PROGRAM (SCP) FOR DRYDOCKING FACILITIES AND SHIPBUILDING WAYS FOR US NAVY SHIPS requirements and broader risk issues caused by recent Pacific Rim seismic events. Provide evaluation and proposed solutions for CVN Dredge Depth (re-evaluation of under keel clearance requirements), and Tsunami evaluation of Japanese ports that accommodate CVNs and submarines. Provide for the standardization, utilization and sustainment of facilities data sets from planning (ILS) to facility design to facility demolition consistent with Building Information Management and Modeling processes and establish data interoperability with business processes to ensure that efficiencies are realized between NAVFAC Business Lines in support of the Fleet, CNIC and other NAVFAC Supported Commanders. Continue to leverage BIM best practices for reduction of TOC on shore infrastructure in support of ACAT and ILS/ILA (Independent Logistic Assessments) programs. Facilities, Sustainment, Restoration & Modernization: Continue validation testing/performance monitoring of vertical take-off and landing (VTOL) pads for JSF (F-35B). Test and evaluate performance of alternative materials, and surfacing concepts and methods. Conduct field (validation) testing of high temperature resistant pavement joint sealants. Continue Corrosion Prevention & Control projects and complete Sustainability Engineering and Maintenance Research. Continue evaluation of solutions to develop associated design and construction criteria to support the transition of new technologies associated with weapons system introduction into the shore facilities infrastructure. Complete FY2011 funded projects for lowest total ownership costs for hangar unmanned electronics system and mobile condition assessment projects are proceeding. ***FY 2013 Plans:*** Waterfront Facilities Repair & Upgrade: Continuing the analysis and solution set development for dry-dock and waterfront seismic analysis and standard seismic risk mitigation procedures pilot for the analysis of 26 Navy dry-docks, including nuclear capable facilities, requiring analysis to meet NAVSEA MILSTD 1625 MILITARY STANDARD: SAFETY CERTIFICATION PROGRAM (SCP) FOR DRYDOCKING FACILITIES AND SHIPBUILDING WAYS FOR US NAVY SHIPS requirements and broader risk issues caused by recent Pacific Rim seismic events. Continue to evaluate proposed solutions for CVN Dredge Depth (re-evaluation of under keel clearance requirement), and Tsunami evaluation of Japanese ports that accommodate CVNs and			

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
submarines. Continue to leverage BIM best practices for reduction of TOC on shore infrastructure in support of ACAT and ILS/ILA programs. Facilities, Sustainment, Restoration & Modernization: Continue validation testing/performance monitoring of vertical take-off and landing (VTOL) pads for JSF (F-35B). Test and evaluate performance of alternative materials, and surfacing concepts and methods. Conduct field (validation) testing of high temperature resistant pavement joint sealants. Continue Corrosion Prevention & Control projects and Sustainability Engineering and Maintenance Research. Continue evaluation of solutions to develop associated design and construction criteria to support the transition of new technologies associated with weapons system introduction into the shore facilities infrastructure.			
Accomplishments/Planned Programs Subtotals	1.775	1.772	1.409

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

The Projects identified in this budget have been carefully selected to respond to both the facilities support for new Weapons Systems Acquisition Category Programs, to address TOC considerations of an evolving and aging infrastructure, and to facilitate rational risk based decisions and solutions to protect and decrease risk levels for seismically impacted facilities. Each project has been assessed to ensure that it is addressing legitimate risks and requirements of the shore establishment. The results of these projects will be the development of design and construction criteria and or components that directly impact the shore facilities and the weapons systems supported.

E. Performance Metrics

Quarterly Program Reviews are conducted with Performers are conducted to include funds status discussion, schedule review, assessment of plan to actual, and review of accomplishments and issues to date.

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*

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
Waterfront Facilities Repair & Upgrade	WR	NFESC:Pt Hueneme, CA	2.525	0.972	Oct 2011	0.714	Oct 2012	-		0.714	Continuing	Continuing	Continuing
Facilities, Sustainment, Restoration and Modernization	WR	NFESC:Pt Hueneme, CA	6.073	0.800	Oct 2011	0.695	Oct 2012	-		0.695	Continuing	Continuing	Continuing
Modular Hybrid Pier	WR	NFESC:Pt Hueneme, CA	5.478	-		-		-		-	0.000	5.478	
		Subtotal	14.076	1.772		1.409		-		1.409			

Remarks

Remarks:

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	14.076	1.772		1.409		-		1.409			

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*

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 0603725N: *Facilities Improvement*	**PROJECT** 0995: *Naval Facilities System*

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 0603725N: *Facilities Improvement*	PROJECT 0995: *Naval Facilities System*

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 0603725N: *Facilities Improvement*	**PROJECT** 0995: *Naval Facilities System*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Modular Hybrid Pier				
Modular Hybrid Pier	1	2011	4	2011
Facilities, Sustainment, Restoration & Moderization Tech				
Facilities, Sustainment, Restoration & Moderization Tech	1	2011	4	2017
Joint Strike Fighter Pavement Development	1	2011	4	2013
Corrosion Prevention Control	1	2011	4	2017
Investigate Best Practice Solutions for Post Diaster Analysis and Recovery	2	2011	4	2012
Determine Lowest TOC for Hanger Electronics System	2	2011	4	2012
Waterfront Facilities Repair & Upgrade				
Waterfront Facilities Repair & Upgrade	1	2011	4	2017
Waterfront IPT - Seismic Design Criteria	1	2011	4	2017
Drydock Seismic Analysis Procedures	2	2011	4	2017
Determine Reduction in TOC for Waterfront Facilities via Information Management Policies and Processes	2	2011	4	2013

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*	

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
3155: *Force Protection Ashore*	1.952	1.982	1.992	-	1.992	2.023	2.049	2.080	2.122	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Protection of the Navy Installations against terrorist activities requires deployment of advanced technology for force protection capabilities. This antiterrorism and force protection ashore project will develop, demonstrate and validate technologies for the following: access control and perimeter denial; waterside protection against craft and swimmer intrusion; secure and efficient operations centers and emergency centers (including human and information support systems); construction integrated surveillance sensors and robotic systems for intruder detection; material systems to improve utilities security and recovery; and material concepts. Program currently being evaluated are the inclement weather sensors for detecting intruders, intelligent video (VEW Maritime) in waterside security systems and over-the-water analytics, Command, Control, and Communications (C3) capabilities for emergency operations, and identifying and interdicting malevolent threats - watercraft, swimmers, divers, unmanned underwater vessels (UUVs) to reduce injury and death to the war fighter.

Through demonstration and validation of risk modeling and simulation models, the potential of emerging technologies will be evaluated and installation security strategies that reduce manpower and other costs will be formulated.

Installation protection concepts against attacks from the air will be identified and jointly demonstrated. These demonstrations and validations derive from advanced technology from science and technology programs of government academia and industry. The technology produces data for performance specifications for competitive procurement.

All work will be coordinated with other programs and through industry forums as appropriate.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Force Protection Ashore	1.952	1.982	1.992
Articles:	0	0	0
FY 2011 Accomplishments:			
Continue, complete, and initiate advanced prototype development and demonstrations as follows: - Complete demonstration and validation of counter surveillance and malevolent intent detection in existing ATFP surveillance systems, including WiFi integration. - Complete advanced C3 development and demonstration for mobile operations and system interoperability at ATFP Installations. - Complete integration and initial demonstration of counter surveillance and malevolent intent detection capabilities in existing surveillance systems at Naval Installations.			

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
- Initiate IP-enabled WAAN development, integration, and demonstration for Navy and Joint Bases for early warning from remote Command & Control Centers. ***FY 2012 Plans:*** - Continue demonstration and validation of waterside identification and interdiction capabilities for swimmers, divers, and watercraft. - Begin integration and demonstration of Automated Sensor Assessment and Course of Action Planning (COAP) Test & Evaluation (DT/OT) for EHSS. - Complete enhancements and DT/OT of advanced C3 prototypes during AT and Hurricane Exercise (HUREX) operational exercises for Joint Interoperability and Advanced Emergency Mobile Communications. - Complete IP-enabled WAAN DT/OT at operational Navy Installation with various COTS Vendors for Joint Interoperability and Advanced Emergency Mobile Communications. . ***FY 2013 Plans:*** - Continue integration and demonstration of Automated Sensor Assessment and Course of Action Planning (COAP) (OT) and centralized Sensor Monitoring Center. - Continue integration and validation of advanced beyond swimmers/diver detection, tracking, and interdiction capabilities into EHSS. - Initiate advanced integrated waterside threat protection surface/subsurface defense capability development, integration and evaluation.			
Accomplishments/Planned Programs Subtotals	1.952	1.982	1.992

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

Demonstration and validation is conducted for maximum transfer and interaction with industry such as to influence the industry COTS with the results of this demonstration and prototype validation. Acquisition is based on performance specifications enabled by this project.

E. Performance Metrics

Quarterly Program Reviews to include funds status, schedule review and assessment of plan to actual.

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*	

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
Force Protection Ashore (CA)	WR	NFESC:Pt Hueneme, CA	1.610	-		-		-		-	0.000	1.610	
Force Protection Ashore (Crane)	WR	NSWC Dahlgren:Panama City, Crane	2.581	-		-		-		-	0.000	2.581	
Force Protection Ashore (VA)	WR	ONR:Arlington, VA	0.300	-		-		-		-	0.000	0.300	
Waterside Intelligent: Operational Test & Evaluation	WR	SPAWAR:San Diego, CA	0.205	-		-		-		-	Continuing	Continuing	Continuing
Waterside Intelligent Video: Percurement Specifiction	WR	SPAWAR:San Diego, CA	0.060	-		-		-		-	Continuing	Continuing	Continuing
Waterbourne Vessel Microwave Interdiction: Technology Assessment	WR	SPAWAR:San Diego, CA	0.105	-		-		-		-	Continuing	Continuing	Continuing
Waterbourne Vessel Michrowave Interdidtion: Concept of Employment	WR	SPAWAR:San Diego, CA	0.105	-		-		-		-	Continuing	Continuing	Continuing
Joint Interoperability and Advanced Emergency Mobile Comm: Spiral Development (TF&I9)	WR	SPAWAR:San Diego, CA	0.205	-		-		-		-	Continuing	Continuing	Continuing
Joint Interoperability and Advanced Emergency Mobile Comm: Deevelopmental Test & Evaluation	WR	SPAWAR:San Diego, CA	0.205	-		-		-		-	Continuing	Continuing	Continuing
Joint Interoperability and Advanced Emergency Mobile Comm: Oerational Test & Evaluation	WR	SPAWAR:San Diego, CA	-	0.216	Oct 2011	-		-		-	Continuing	Continuing	Continuing
Swimmer/Divr Interdiction: Technology Assessment	WR	SPAWAR:San Diego, CA	0.195	-		-		-		-	Continuing	Continuing	Continuing
Swimmer/Divr Interdiction: Concept of Employment	WR	SPAWAR:San Diego, CA	0.205	-		-		-		-	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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*	

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
Swimmer/Divr Interdiction: Spiral Development (LPN)	WR	SPAWAR:San Diego, CA	0.205	-		-		-		-	Continuing	Continuing	Continuing
Swimmer/Divr Interdiction: Spiral Development (TF&I9)	WR	SPAWAR:San Diego, CA	-	0.299	Oct 2011	0.264	Oct 2012	-		0.264	Continuing	Continuing	Continuing
Swimmer/Divr Interdiction: Developmental Test & Evaluation	WR	SPAWAR:San Diego, CA	-	0.316	Oct 2011	0.331	Oct 2012	-		0.331	Continuing	Continuing	Continuing
Swimmer/Divr Interdiction: Operational Test & Evaluation	WR	SPAWAR:San Diego, CA	-	0.315	Oct 2011	0.311	Oct 2012	-		0.311	Continuing	Continuing	Continuing
Swimmer/Divr Interdiction: Procurement Specification	WR	SPAWAR:San Diego, CA	-	0.085	Oct 2011	0.086	Oct 2012	-		0.086	Continuing	Continuing	Continuing
Surveilance/Counter-Surveilance: Procurement Specification	WR	NSWC:Panama City, FL	-	0.050	Oct 2011	-		-		-	Continuing	Continuing	Continuing
Automated Sensor Assessment and Course of Action: Technology Assessment	WR	SPAWAR:San Diego, CA	0.105	-		-		-		-	Continuing	Continuing	Continuing
Automated Sensor Assessment and Course of Action: Concept of Employment	WR	SPAWAR:San Diego, CA	0.105	-		-		-		-	Continuing	Continuing	Continuing
Automated Sensor Assessment and Course of Action:Spiral Development (LPN)	WR	SPAWAR:San Diego, CA	-	0.315	Oct 2011	0.258	Oct 2012	-		0.258	Continuing	Continuing	Continuing
Automated Sensor Assessment and Course of Action: Spiral Develpment (TF&I9)	WR	SPAWAR:San Diego, CA	-	0.306	Oct 2011	0.296	Oct 2012	-		0.296	Continuing	Continuing	Continuing
Inclement Weather Sensor System (mid range IR):Procurement Specification	WR	NSWC:Panama City, FL	0.052	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	6.243	1.902		1.546		-		1.546			

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

Support ($ 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
Joint Interoperability and Advanced Emergency Mobile Comm: Government Engineering Support	WR	SPAWAR:San Diego, CA	-	0.080	Oct 2011	-		-		-	0.000	0.080	
Advance Integrated Waterside Threat Protection	WR	SPAWAR:San Diego, CA	-	-		0.446	Oct 2012	-		0.446	0.000	0.446	
		Subtotal	-	0.080		0.446		-		0.446	0.000	0.526	

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	6.243	1.982		1.992		-		1.992			

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

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 0603725N: *Facilities Improvement*	**PROJECT** 3155: *Force Protection Ashore*

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 0603725N: *Facilities Improvement*	**PROJECT** 3155: *Force Protection Ashore*

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

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 0603725N: *Facilities Improvement*	**PROJECT** 3155: *Force Protection Ashore*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Waterside Intelligent Video				
Subproj: Waterside Intelligent Video: Test & Evaluation (DT)	1	2012	1	2012
Subproj: Waterside Intelligent video: Test & Evaluation (OT)	2	2012	3	2012
Subproj: Waterside Intelligent video: Procurement Specification	3	2012	4	2012
Joint Interoperability and Advanced Emergency Mobile Communications				
Subproj: Joint Interoperability and Advanced Emergency Mobile Communications: Spiral Develoment (LPR)	1	2011	1	2011
Subproj: Joint Interoperability and Advanced Emergency Mobile Communications:Spiral Development (TF&I9)	2	2011	3	2011
Subproj: Joint Interoperability and Advanced Emergency Mobile Communications:Test & Evaluation (DT)	3	2011	4	2011
Subproj: Joint Interoperability and Advanced Emergency Mobile Communications:Test & Evaluation (OT)	1	2012	2	2012
Subproj: Joint Interoperability and Advanced Emergency Mobile Communications:Procurement Specification	2	2012	3	2012
Swimmer/Diver Interdiction				
Subproj: :Swimmer/Diver Interdiction Technology Assessment	1	2012	2	2012
Subproj: Swimmer/Diver Interdiction: Concept of Employment	2	2012	3	2012
Subproj: Swimmer/Diver Interdiction: Spiral Development (LPR)	3	2012	3	2012
Subproj: Swimmer/Diver Interdiction: Spiral Development (TF&I9)	4	2012	3	2014
Subproj: Swimmer/Diver Interdiction: Test & Evaluation (DT)	1	2013	2	2014
Subproj: Swimmer/Diver Interdiction: Test & Evaluation (OT)	3	2012	4	2012
Subproj: Swimmer/Diver Interdiction: Procurement Specification	1	2012	2	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 0603725N: *Facilities Improvement*	PROJECT 3155: *Force Protection Ashore*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Surveillance/Counter-Surveillance				
Subproj: Surveillance/Counter-Surveillance: Spiral Development (TF&I9)	1	2011	1	2011
Subproj: Surveillance/Counter-Surveillance: Spiral Development (DT)	2	2011	4	2011
Subproj: Surveillance/Counter-Surveillance: Spiral Development (OT)	4	2011	1	2012
Subproj: Surveillance/Counter-Surveillance: Procurement Specification	1	2012	2	2012
Automated Sensor Assessment and Course of Action Planning				
Subproj: Automated Sensor Assessment and Course of Action Planning: Technology Assessment	2	2012	3	2012
Subproj: Automated Sensor Assessment and Course of Action Planning: Concept of Employment	3	2012	4	2012
Subproj: Automated Sensor Assessment and Course of Action Planning: Spiral Development (LPR)	1	2013	3	2013
Subproj: Automated Sensor Assessment and Course of Action Planning: Spiral Development (TF&I9)	3	2013	4	2013
Subproj: Automated Sensor Assessment and Course of Action Planning: Test & Evaluation (DT)	1	2014	3	2014
Subproj: Automated Sensor Assessment and Course of Action Planning: Test & Evaluation (OT)	3	2014	4	2014
Subproj: Automated Sensor Assessment and Course of Action Planning: Procurement Specification	4	2013	4	2013
Inclement Weather Sensor System (mid range IR)				
Subproj: Inclement Weather Sensor System (mid range IR): Procurement Specification	1	2011	1	2011