Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603725N *I Facilities Improvement*							
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
Total Program Element	35.455	5.598	10.149	9.067	-	9.067	10.116	10.103	10.748	11.107	Continuing	Continuing
0995: *Naval Facilities System*	21.392	1.979	2.192	2.532	-	2.532	2.456	2.424	2.474	2.527	Continuing	Continuing
3018: *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*	4.487	2.790	6.462	5.055	-	5.055	6.354	6.381	6.950	7.228	Continuing	Continuing
3155: *Force Protection Ashore*	9.576	0.829	1.495	1.480	-	1.480	1.306	1.298	1.324	1.352	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.

Naval Facilities System Project 0995 addresses Facilities Sustainment, Restoration and Modernization for reducing the total ownership cost (TOC) of future and existing Facilities and addressing natural and catastrophic risk of critical Naval Waterfront Facilities.

Project 3018: Facilities Related Controls Systems (FRCS) Cybersecurity RDTE. The Cyber Vulnerability Assessments and Evaluations program funds cyber vulnerability assessments of critical shore infrastructure. Funding will be used for prioritized critical shore infrastructure. Funded vulnerability assessments will build upon existing mission assurance, blue team, and red team capabilities and will utilize DoE and DoD national laboratory partnerships. Assessments will end with the submission of a final report to Congress detailing strategies and procedures for mitigating the risk of cyber vulnerabilities should be identified during the course of evaluation vulnerability.

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 2025 Navy	Date: March 2024
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603725N *I Facilities Improvement*

B. Program Change Summary ($ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	5.664	10.149	7.817	-	7.817
Current President's Budget	5.598	10.149	9.067	-	9.067
Total Adjustments	-0.066	0.000	1.250	-	1.250
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.066	0.000			
• Program Adjustments	0.000	0.000	1.888	-	1.888
• Rate/Misc Adjustments	0.000	0.000	-0.638	-	-0.638

Change Summary Explanation

FY 2025 programmatic increase of $1.888M implements Cyber Security Operations for FRCS at 4 locations; Miscellaneous rate change of $0.638M.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603725N / *Facilities Improvement*				Project (Number/Name) 0995 / *Naval Facilities System*			
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
0995: *Naval Facilities System*	21.392	1.979	2.192	2.532	-	2.532	2.456	2.424	2.474	2.527	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

In accordance with the National Defense Strategy (NDS) of 2018, A Design for Maintaining Maritime Superiority 2.0 and the NAVFAC Strategic Design 2.0 Guidance, 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 and increasing resiliency. The program focuses available RDT&E resources on satisfying facility requirements where the Navy is a major stakeholder or where there are no tested 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 that includes the National Science Foundation (NSF) and the National Institute of Standards and Technology (NIST). This program introduces the idea of resilient facilities and infrastructure thru hardening, rapid assessment, and recovery. The validated technologies will be implemented in the Navy's Military Construction (MILCON) and Facilities Sustainment Restoration and Modernization Programs (FSRM).

Project 0995 addresses two Navy facilities requirements: 1) waterfront facilities repair, upgrade and service life extension; and, 2) validation testing/performance monitoring of critical facilities (such as dry docks, piers, runways, magazines, etc.), testing and evaluation of the performance of alternative materials, and surfacing concepts, and, methods and corrosion technologies to reduce the cost of Sustainment, Restoration and Modernization (SRM).

Waterfront facilities, repair, upgrade and service life extension:
Improved resilience of our installations (employing key technology focus areas defined in the NDS) will enable readiness and fleet lethality. An urgent requirement exists for early identification of strategies and solution recommendations for sea level rise at Naval Facilities, and especially nuclear capable waterfront facilities. Recent weather patterns have heightened anxiety levels on perceived huge risks to Navy waterfront facilities. The sub-project will provide analysis and solution recommendations for facilities affected by sea level rise. Approximately 75% of the Navy's waterfront facilities are over 45 years old, but they were designed for a service life of 25 years. The over aged reinforced concrete requires costly and repetitive repairs. Besides providing 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 not designed for concentrated loads. Piers were previously designed to service one, or possibly two, specific ship classes. Berthing flexibility is now limited by mooring and utility arrangements. This sub-project addresses new material design and retrofit methods, which extends the service life of existing waterfront facilities by an additional 15 years, or longer. 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 Product Support for Acquisition Category (ACAT) Programs.

Technologies to reduce the cost of Sustainment, Restoration and Modernization (SRM):

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 0995 / *Naval Facilities System*

Technologies to reduce the cost of SRM issues of high operational significance are addressed on a priority basis. The Navy's portion of corrosion deficiencies at DoD shore facilities is estimated to be $433M (DOD Annual Cost of Corrosion for the Department of Defense Facilities and Infrastructure July 2010). This effort will demonstrate and validate the cost and reliability of advanced corrosion technologies in order to ensure their acceptance and implementation.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Sustainment, Restoration & Modernization	0.792	0.877	1.015	0.000	1.015
Articles:	-	-	-	-	-
FY 2024 Plans: -Continue funding technologies that enhance facility designs to accommodate Climate Change and decrease building cost.					
FY 2025 Base Plans: -Continue funding technologies that enhance facility designs to accommodate Climate Change and decrease building cost -Support additional projects and technologies to enhance facility designs especially exploring opportunities to utilize unmanned systems and artificial intelligence to improve facility efficiency, inspection, and resilience					
FY 2025 OCO Plans: N/A					
FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase ($0.138M) will support Climate Change Adaptation initiatives and technologies that will aid in reducing building costs.					
Title: Waterfront Facilities, Repair, Upgrade and Service Life Extension	1.187	1.315	1.517	0.000	1.517
Articles:	-	-	-	-	-
FY 2024 Plans: -Continue to fund and develop technologies/capabilities that increase adaptation in response to Climate Change. -Continue funding developing technologies/capabilities that increase facilities resiliency and longevity.					
FY 2025 Base Plans: -Continue to fund and develop technologies/capabilities that increase adaptation in response to Climate Change. -Continue funding developing technologies/capabilities that increase facilities resiliency and longevity. -Support additional projects and technologies to enhance facility designs especially exploring opportunities to utilize unmanned systems and artificial intelligence to improve facility efficiency, inspection, and resilience.					
FY 2025 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 0995 / *Naval Facilities System*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** FY25 increase ($0.202M) will support Climate Change Adaptation initiatives as well as facilities resiliency.					
Accomplishments/Planned Programs Subtotals	1.979	2.192	2.532	0.000	2.532

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Projects identified in this budget have been carefully selected to respond to: Facilities support for the National Defense Strategy of 2018, Acquisition Category Programs, to address TOC and resiliency considerations of an evolving and aging infrastructure, and to facilitate rational risk based decisions and solutions to protect and decrease risk levels for Department of the Navy-critical infrastructure and 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 influence shore facilities.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 0995 / *Naval Facilities System*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Waterfront Facilities, Repair, Upgrade and Services Life Extension	Various	NAVFAC EXWC : Pt Hueneme, CA	9.884	1.187	Jan 2023	1.315	Jan 2024	1.517	Jan 2025	-		1.517	Continuing	Continuing	Continuing
Sustainment, Restoration and Modernization	Various	NAVFAC EXWC : Pt Hueneme, CA	11.508	0.792	Jan 2023	0.877	Jan 2024	1.015	Jan 2025	-		1.015	Continuing	Continuing	Continuing
		Subtotal	21.392	1.979		2.192		2.532		-		2.532	Continuing	Continuing	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	21.392	1.979		2.192		2.532		-		2.532	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 0995 / *Naval Facilities System*

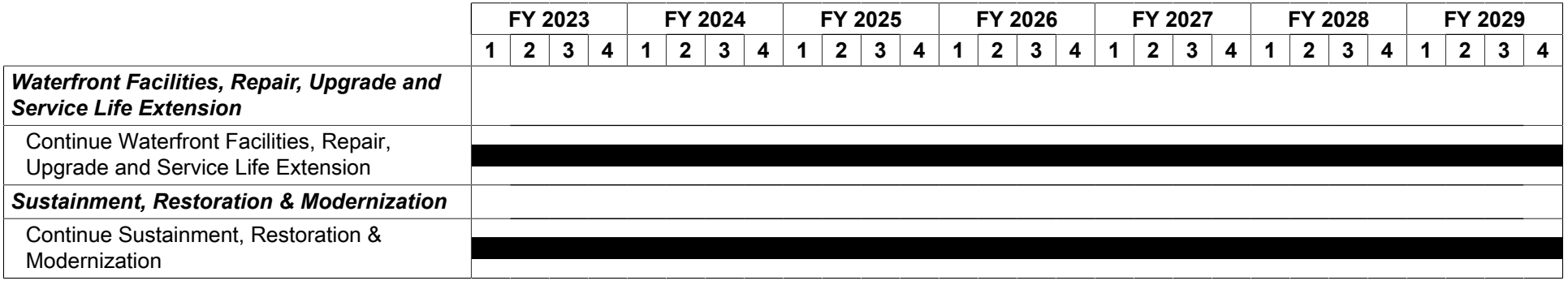

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 0995 / *Naval Facilities System*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Waterfront Facilities, Repair, Upgrade and Service Life Extension				
Continue Waterfront Facilities, Repair, Upgrade and Service Life Extension	1	2023	4	2029
Sustainment, Restoration & Modernization				
Continue Sustainment, Restoration & Modernization	1	2023	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603725N / *Facilities Improvement*				Project (Number/Name) 3018 / *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*			
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
3018: *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*	4.487	2.790	6.462	5.055	-	5.055	6.354	6.381	6.950	7.228	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Cyber Vulnerability Assessments and Evaluations program funds cyber vulnerability assessments of critical shore infrastructure. Funding will be used for assessments of prioritized critical shore infrastructure and will build upon existing mission assurance, blue team, and red team capabilities. As instructed by the Congressional language, the assessments will utilize DoE and DoD national laboratory partnerships. Assessments will end with the submission of a final report to Congress. Strategies and procedures for mitigating the risk of cyber vulnerabilities should be identified during the course of evaluation vulnerability.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**
Title: Cyber Protection and Response Capability (CPRC)	1.186	2.633	1.000	0.000	1.000
Articles:	-	-	-	-	-
FY 2024 Plans: -Develop and test additional FRCS models in RDTE environment -Deploy Red and Blue Team capability to RDTE environment -Test latest cyber vulnerabilities in RDTE environment					
FY 2025 Base Plans: -Continue development and experimentation of next generation FRCS Cyber risk management tools to elevate into production environments supporting task critical assets -Enhance Red/Blue team technical capabilities by test and evaluation of emerging technologies					
FY 2025 OCO Plans: N/A					
FY 2024 to FY 2025 Increase/Decrease Statement: FY25 decrease ($1.633M) due to initial requirements test and experimentation completion.					
Title: More Situational Awareness (MOSAICS)	1.324	2.689	3.220	0.000	3.220
Articles:	-	-	-	-	-
FY 2024 Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3018 / *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
-Continue adding MOSAIC sites to overall transition plan. -Incorporate Fleet test results into MOSAIC's transition plan ***FY 2025 Base Plans:*** -Develop additional models in RDTE environment to test Cyber vulnerabilities -Integrate emerging production requirements models into RDTE environment for test and evaluation -Test article procurement ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** FY25 increase ($0.531M) supports additional testing and experimentation requirements.					
Title: Digital Twin Development	0.280	1.140	0.835	0.000	0.835
Articles:	-	-	-	-	-
FY 2024 Plans: -Continue development and management of Digital Twin capabilities. ***FY 2025 Base Plans:*** -Incorporate new controls systems into test bed for test and evaluation. -Integrate emerging control systems models into production models for test and evaluation. -Support test article procurements. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** FY25 decrease ($0.305M) supports updated testing requirements from emerging controls systems deployments.					
Accomplishments/Planned Programs Subtotals	2.790	6.462	5.055	0.000	5.055

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3018 / *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3018 / *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Cyber Protection and Response Capability	WR	EXWC : Pt. Hueneme, CA	1.625	1.186	Dec 2022	2.633	Oct 2023	1.000	Oct 2024	-		1.000	Continuing	Continuing	Continuing
More Situational Awareness (MOSAICS)	C/CPFF	SANDIA National Labs : SANDIA National Labs	1.562	1.324	Dec 2022	1.689	Oct 2023	2.000	Jan 2025	-		2.000	Continuing	Continuing	Continuing
Digital Twin Development	C/CPFF	GSA : GSA	1.300	0.280	Dec 2022	1.140	Dec 2023	0.835	Oct 2024	-		0.835	Continuing	Continuing	Continuing
More Situational Awareness (MOSAICS)	WR	EXWC : NBVC	0.000	0.000		1.000	Oct 2023	1.220	Oct 2024	-		1.220	0.000	2.220	-
		Subtotal	4.487	2.790		6.462		5.055		-		5.055	Continuing	Continuing	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.487	2.790		6.462		5.055		-		5.055	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3018 / *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*

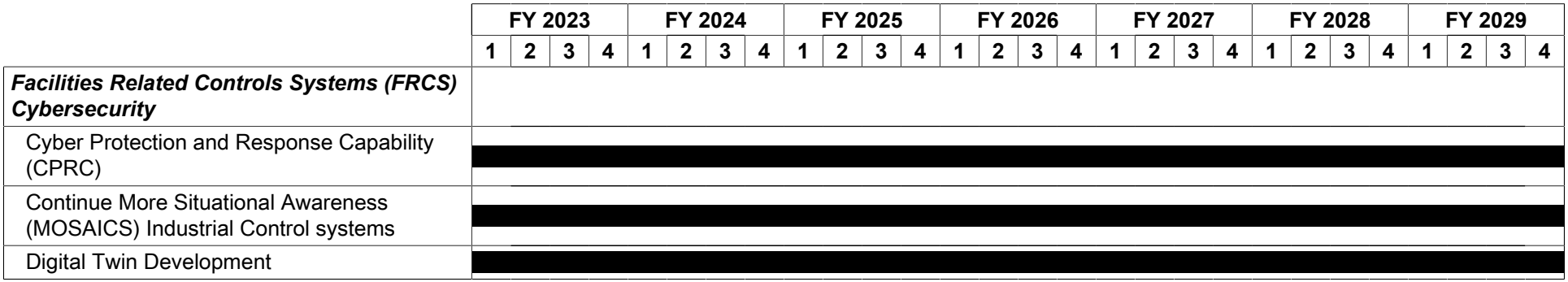

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3018 / *Facilities Related Controls Systems (FRCS) Cybersecurity RDTE*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Facilities Related Controls Systems (FRCS) Cybersecurity				
Cyber Protection and Response Capability (CPRC)	1	2023	4	2029
Continue More Situational Awareness (MOSAICS) Industrial Control systems	1	2023	4	2029
Digital Twin Development	1	2023	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603725N / *Facilities Improvement*				Project (Number/Name) 3155 / *Force Protection Ashore*			
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
3155: *Force Protection Ashore*	9.576	0.829	1.495	1.480	-	1.480	1.306	1.298	1.324	1.352	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Protection of Navy installations against terrorist activities requires deployment of advanced technology for force protection capabilities. This antiterrorism and force protection (AT/FP) ashore project will develop, demonstrate and validate technologies for the following: access control and integrated perimeter security surveillance sensors and intelligent electronic security systems for automated intruder detection (Installation Protection); perimeter security; waterside protection against craft and swimmer intrusion; secure and efficient operations centers and emergency management centers including human and information support systems (Command and Control). Programs currently being evaluated are, standard-based enterprise physical security system integration and automation; Command, Control, and Communications (C3) capabilities for emergency operations; integrated and networked mass notification systems (MNS); Waterside intelligent video security systems; integrated over-the-water sensors and analytics for automated course of action planning; identifying and interdicting malevolent threats - watercraft, swimmers, divers, and unmanned underwater vessels (UUVs) to reduce injury and death to the warfighter and damage to high value units (HVUs)(Waterside Protection). 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. Multiple systems with sensors and cameras are being deployed on Navy installations to be used for threat assessment. These systems are not integrated and there is not a centralized location or system that all the data can be analyzed. The Sensor Assessment Cell (SAC) brings all these sensor feeds into one location and the Physical Security Information Management (PSIM) software provides an integrated picture so that an intelligent assessment can be made. Current AT/FP systems to be integrated include Automated Vehicle Gates (AVG), Regional Alarms/Local Alarms (AMAS), Navy Munition Command enclave (NMC), and Electronic Harbor Security System. These demonstrations and validations derive advanced technology from science and technology programs of government academia and industry. The technology evaluation and validation produces data for performance specifications used for competitive procurement. All work will be coordinated with other programs and through industry forums as appropriate.

Facilities Related Controls Systems (FRCS) Cybersecurity RDTEN
The Cyber Vulnerability Assessments and Evaluations program funds cyber vulnerability assessments of critical shore infrastructure as directed by Section 1650 of the FY17 National Defense Authorization Act (NDAA). Funding will be used for assessments of prioritized critical shore infrastructure and to assess the cyber vulnerability of critical defense infrastructure. Funded vulnerability assessments will build upon existing mission assurance, blue team, and red team capabilities. As instructed by the Congressional language, the assessments will utilize DoE and DoD national laboratory partnerships.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**
Title: Force Protection Ashore	0.829	1.495	1.480	0.000	1.480
Articles:	-	-	-	-	-
FY 2024 Plans:					
- Complete Facial Recognition Access Control Technology Extension (FRACT-X) development for transition.					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3155 / *Force Protection Ashore*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
- Initiate utilization of Firefighting Robots: Recent shipboard fires have demonstrated that a human firefighter is a weak link in firefighting activities because of extreme heat, flashover/collapse potential or radiation exposure. This RDT&E project will initiate and understand the utilization of firefighting robots for shipboard and airfield fire response, a comprehensive review will demonstrate the capabilities that a robot may have in various test bed environments as well as shipboard and airfield locations. -Initiate utilization of Blue Force Fire Drones: The USS Bonhomme Richard incident has demonstrated that on scene incident commanders must be able to visualize the incident from all vantage points to deploy firefighters effectively. This RDT&E project will work with previous research efforts to identify a Commercial Off -The Shelf (COTS)/Government Off -The Shelf (GOTS) solution to examine a small drone's ability to provide innovative aerial situational awareness of fire and emergency services. ***FY 2025 Base Plans:*** - Continue utilization of Firefighting Robots: Recent shipboard fires have demonstrated that a human firefighter is a weak link in firefighting activities because of extreme heat, flashover/collapse potential or radiation exposure. This RDT&E project will initiate and understand the utilization of firefighting robots for shipboard and airfield fire response, a comprehensive review will demonstrate the capabilities that a robot may have in various test bed environments as well as shipboard and airfield locations. - Continue utilization of Blue Force Fire Drones: The USS Bonhomme Richard incident has demonstrated that on scene incident commanders must be able to visualize the incident from all vantage points to deploy firefighters effectively. This RDT&E project will work with previous research efforts to identify a COTS/GOTS solution to examine a small drone's ability to provide innovative aerial situational awareness of fire and emergency services. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** No significant change from FY24.					
Accomplishments/Planned Programs Subtotals	0.829	1.495	1.480	0.000	1.480

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3155 / *Force Protection Ashore*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603725N / *Facilities Improvement*	Project (Number/Name) 3155 / *Force Protection Ashore*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Need Item Text	C/BA	Not Specified : Not Specified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
		Subtotal	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Command and Control Capability Development: Government Engineering Support	Various	SPAWAR : San Diego, CA	0.499	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Installation Protection: Airborne Threat	WR	NAWCAD/ONR : Pax River, MD	1.687	0.000		0.000		0.000		-		0.000	0.000	1.687	-
Access Control Point (ACP)	Various	SPAWAR : San Diego, CA	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	-
Waterside Intelligent Video Security System (WSIVDS)	Various	SPAWAR : San Diego, CA	0.754	0.000		0.000		0.000		-		0.000	0.000	0.754	-
Command and Control Capability Development: Virtual Field Support	WR	SPAWAR : San Diego, CA	0.897	0.000		0.000		0.000		-		0.000	0.000	0.897	-
Integrated Multi-sensor Perimeter Awareness with Intelligent LiDAR (IMPAIL) System	Various	NIWC-PAC : San Diego, CA	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	-
Waterside Protection: Boat Barriers	C/CPFF	CTTSO : CTTSO	0.999	0.000		0.000		0.000		-		0.000	0.000	0.999	-
Multimodal Automated Vehicle Barrier (MAVB	Various	NIWC-PAC : San Diego, CA	0.405	0.000		0.000		0.000		-		0.000	0.000	0.405	-
Sensor Assessment Cell (SAC) Capability Development	Various	SPAWAR : San Diego, CA	0.304	0.000		0.000		0.000		-		0.000	0.000	0.304	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603725N / *Facilities Improvement*	Project (Number/Name) 3155 / *Force Protection Ashore*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Modeling and Simulation of Requirements (M/S REQ)	Various	NIWC-LANT : Charleston,SC	0.149	0.000		0.000		0.000		-		0.000	0.000	0.149	-
Installation Protection Capability Development - Integrated Physical Security and Access Control Automation: Spiral Development	Various	NSWC : Dahlgren, VA	0.597	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Installation Protection Capability Development -Integrated Physical Security and Access Control Automation:Test & Evaluation (DT)	Various	NSWC : Dahlgren, VA	0.449	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Installation Protection Capability Development - Integrated Physical Security and Access Control Automation:Test & Evaluation (OT)	Various	SPAWAR : San Diego, CA	0.332	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Water Protection - Common Information Exchange Spiral Development	WR	SSC-PAC : SSC-PAC	0.244	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Installation Protection - Versatile Access Control Spiral Development	WR	NSWC : Dahlgren, VA	0.339	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Waterside Protection - Boat Barrier Electronic Infrastructure - Spiral Development	WR	SSC-PAC : SSC-PAC	0.484	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Waterside Intelligent Video Security System (WDSS)	Various	SPAWAR : SAN DIEGO, CA	0.532	0.000		0.000		0.000		-		0.000	0.000	0.532	-
Perimeter Defense Sensor Systems (PDSS)	Various	EXWC : Pt. Hueneme, CA	0.405	0.000		0.000		0.000		-		0.000	0.000	0.405	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3155 / *Force Protection Ashore*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Rapid Intelligent Video Analytics Layer (RIVAL)	Various	SSC-PAC : SSC-PAC	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Facial Recognition Access Control Technology Extension (FRACT-X)	Various	SSC-PAC : SSC-PAC	0.000	0.788	Dec 2022	0.495	Dec 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Underwater Unmanned Vehicle Detection, Tracking and Classification (UUV-DTC)	Various	SSC-PAC : SSC-PAC	0.000	0.041	Feb 2023	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Installation Protection - Geofencing	Various	NSWC : Crance, IN	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Installation Protection - Mobile Network Support	Various	NSWC : Panama City, FL	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Fire and Emergency Services - Firefighting Robots	Various	SSC-PAC : SSC-PAC	0.000	0.000		0.500	Dec 2023	0.740	Dec 2024	-		0.740	0.000	1.240	-
Fire and Emergency Services - Blue Force Fire Drones	Various	SSC-PAC : SSC-PAC	0.000	0.000		0.500	Dec 2023	0.740	Dec 2024	-		0.740	0.000	1.240	-
		Subtotal	9.576	0.829		1.495		1.480		-		1.480	Continuing	Continuing	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	9.576	0.829		1.495		1.480		-		1.480	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3155 / *Force Protection Ashore*

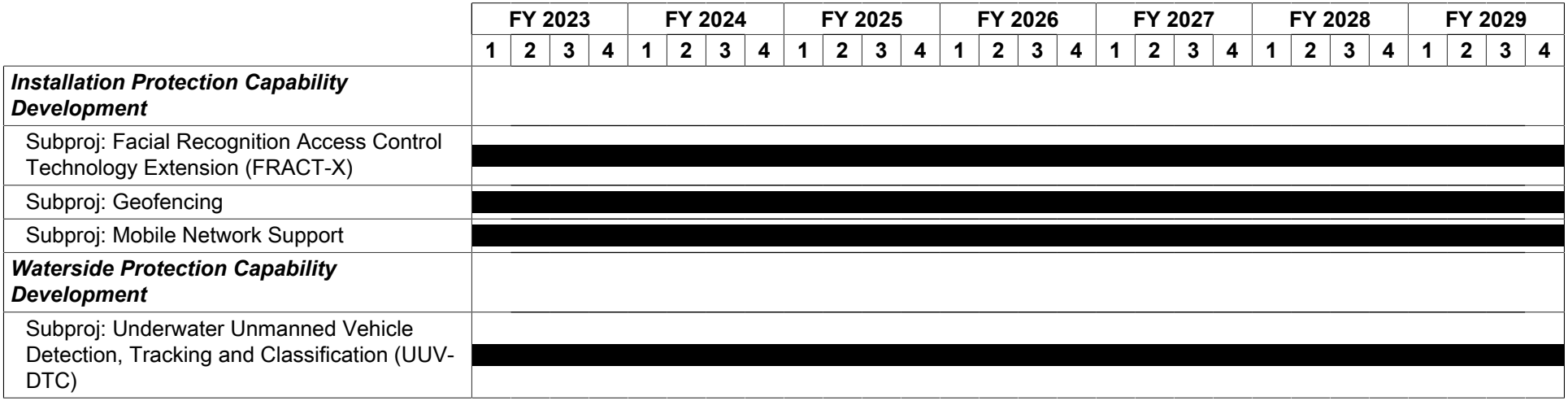

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603725N / *Facilities Improvement*	**Project (Number/Name)** 3155 / *Force Protection Ashore*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Installation Protection Capability Development				
Subproj: Facial Recognition Access Control Technology Extension (FRACT-X)	1	2023	4	2029
Subproj: Geofencing	1	2023	4	2029
Subproj: Mobile Network Support	1	2023	4	2029
Waterside Protection Capability Development				
Subproj: Underwater Unmanned Vehicle Detection, Tracking and Classification (UUV-DTC)	1	2023	4	2029