Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy	Date: April 2022
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 0603239N *I (U)NAVAL CONSTRUCTION FORCES*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	0.000	2.251	5.290	1.706	-	1.706	2.465	2.625	2.511	2.558	Continuing	Continuing
3444: *Airfield/Port Damage Repair*	0.000	2.251	5.290	1.706	-	1.706	2.465	2.625	2.511	2.558	Continuing	Continuing

A. Mission Description and Budget Item Justification

Project 3444 directly supports resilient and agile logistics 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, Commandant's Planning Guidance (CPG), USMC Force Design, and Naval Integration efforts. This program will deliver new capabilities to overcome expeditionary performance limitations in the areas of airfield damage repair (ADR), port damage repair (PDR), expeditionary advance base operations (EABO), and expeditionary engineering and materials to maximize resiliency and agility.

Investment in ADR technologies enhance Navy force response plans, and Joint Force Commander's flexibility to deploy and employ from expeditionary airfields, as well as deliver and sustain warfighting capabilities at the point of effect. This includes "right size, just-in-time" technologies that can facilitate both conventional and autonomous rapid assessment, repair, and re-constitution of expeditionary airfields.

Innovative PDR capabilities enable the reviving, re-armament, repair, re-fueling, re-calibration and re-constitution of fleet platforms at Navy Port Facilities of opportunity. This effort will develop technologies that facilitate just-in-time assessment and rapid repair of piers, quay-walls, fleet moorings, critical expeditionary waterfront facilities and infrastructure, and port facilities above, at, and below the waterline.

Investment in EABO technologies enables Naval Construction Force (NCF) capability modernization and adaption for Naval Integration. These technologies will enable capabilities such as Expeditionary Ordinance Re-load (ExORD), Expeditionary Fuel Distribution (ExFUEL), and Expeditionary Force Sustainment in a littoral environment. New warfighting concepts and Marine Corps organizational changes will necessitate future changes to NCF capabilities, organization, and table of allowance material outside of the existing ADR and PDR mission areas. Further, mobile infrastructure capabilities are envisioned to supplement these vulnerable fixed airfield and port infrastructure assets.

Development of alternative expeditionary engineering solutions in areas of saltwater concrete and indigenous materials will maximize agility and resilience while minimizing supply chain risk for airfields, and ports. These technologies will enable in-the-field production of parts (including original and spare parts for expeditionary equipment) and in-situ fabrication of expeditionary structures that can be utilized in an operational environment. This includes production equipment (such as additive manufacturing systems), raw materials (such as locally sourced construction materials), inspection and quality certification equipment, as well as support methods and criteria to employ these systems in the expeditionary environment. New concepts for expeditionary engineering equipment technologies enhance expeditionary engineering operations, to include site identification, selection, and planning; site clearing and preparation; construction activities; site operations support (including local material handling, damage repair, etc.); and site deconstruction and retrograde activities. Technologies demonstrated will provide required engineer support capability while maximizing deploy ability (by minimizing size and weight) and enhancing operator safety (by providing direct operator protection or allowing for remote or autonomous operation).

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Navy	Date: April 2022
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 0603239N *I (U)NAVAL CONSTRUCTION FORCES*

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	2.341	5.290	0.000	-	0.000
Current President's Budget	2.251	5.290	1.706	-	1.706
Total Adjustments	-0.090	0.000	1.706	-	1.706
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.090	0.000			
• Program Adjustments	0.000	0.000	0.000	-	0.000
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000
• Adjustments to Budget Year	-	-	1.706	-	1.706

Change Summary Explanation

The FY 2023 funding request was reduced by $0.405 million to account for the availability of prior year execution balances.

FY 2023 funding increase reflects the fact that the FY 2022 President’s Budget request did not include out-year funding.

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy			Date: April 2022
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	Project (Number/Name) 3444 / *Airfield/Port Damage Repair*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
3444: *Airfield/Port Damage Repair*	0.000	2.251	5.290	1.706	-	1.706	2.465	2.625	2.511	2.558	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project 3444 directly supports resilient and agile logistics 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 will deliver new capabilities to overcome expeditionary performance limitations in the areas of airfield damage repair (ADR), port damage repair (PDR), and expeditionary engineering and materials to maximize resiliency and agility.

Investment in ADR technologies enhance Navy force response plans, and Joint Force Commander's flexibility to deploy and employ from expeditionary airfields, as well as deliver and sustain warfighting capabilities at the point of effect. This includes "right size, just-in-time" technologies that can facilitate both conventional and autonomous rapid assessment, repair, and re-constitution of expeditionary airfields.

Innovative PDR capabilities enable the reviving, re-armament, repair, re-fueling, re-calibration and re-constitution of fleet platforms at Navy Port Facilities of opportunity. This effort will develop technologies that facilitate just-in-time assessment and rapid repair of piers, quay-walls, fleet moorings, critical expeditionary waterfront facilities and infrastructure, and port facilities above, at, and below the waterline.

Investment in EABO technologies enables Naval Construction Force (NCF) capability modernization and adaption for Naval Integration. These technologies will enable capabilities such as Expeditionary Ordinance Re-load (ExORD), Expeditionary Fuel Distribution (ExFUEL), and Expeditionary Force Sustainment in a littoral environment. New warfighting concepts and Marine Corps organizational changes will necessitate future changes to NCF capabilities, organization, and table of allowance material outside of the existing ADR and PDR mission areas. Further, mobile infrastructure capabilities are envisioned to supplement these vulnerable fixed airfield and port infrastructure assets.

Development of alternative expeditionary engineering materials will maximize agility and resilience while minimizing supply chain risk. These technologies will enable in-the-field production of parts (including original and spare parts for expeditionary equipment) and in-situ fabrication of expeditionary structures. This includes production equipment (such as additive manufacturing systems), raw materials (such as locally sourced construction materials), inspection and quality certification equipment, as well as support methods and criteria to employ these systems in the expeditionary environment. New concepts for expeditionary engineering equipment technologies enhance expeditionary engineering operations, to include site identification, selection, and planning; site clearing and preparation; construction activities; site operations support (including local material handling, damage repair, etc.); and site deconstruction and retrograde activities. Technologies demonstrated will provide required engineer support capability while maximizing the ability to deploy (by minimizing size and weight) and enhancing operator safety (by providing direct operator protection or allowing for remote or autonomous operation).

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Airfield Damage Repair (ADR)	0.240	1.280	0.252	0.000	0.252
Articles:	-	-	-	-	-
FY 2022 Plans: Continue to address technological and construction criteria products that facilitate both conventional and autonomous rapid assessment, repair, and re-constitution of expeditionary airfields. This includes the development, testing, and validation of materials and solutions in the areas of saltwater concrete, full-depth reclamation, rapid battle damage repair, and autonomous airfield inspection and survey. - Saltwater Concrete: Year 2 of 2, effort continues with full-scale testing, verification, and transition of criteria for expeditionary airfield concrete mixtures. - Full-depth Reclamation: Year 1 of 3, effort focused on identifying and evaluating commercial roadway pavement reclamation techniques and equipment for expeditionary airfield rehabilitation. - AoA Technical Gap: Year 1 of 3, effort focusing on transitioning EADR JCTD crater damage repair methods and equipment capability sets into the Naval Construction Forces Expeditionary Rapid Airfield Damage Repair (NCF ExRADR) table of allowance (TOA) and unified facilities criteria (UFC).					
FY 2023 Base Plans: Aligning with National Defense Strategy, this Program Element provides for investment in technologies, materials, and process solutions that facilitate rapid airfield damage repair including saltwater concrete, full-depth reclamation, autonomous airfield inspection and survey, and follow-on RDTE for transition of Joint Capability Technology Demonstration (JCTD) products. The results of this effort will greatly reduce the risks associated with logistically supporting Distributed Maritime Operations (DMO), Expeditionary Advanced Base Operations (EABO), and Littoral Operations in Contested Environments (LOCE) in multiple GCC AORs. Additionally, new Technical Manuals with tested and validated Tactics, Techniques, and Procedures for the employment of these solutions in operational environments will be developed and fielded. - Full-depth Reclamation: Year 2 of 3, effort continues with the integration and validation of commercial roadway pavement reclamation techniques and equipment for military use in the rehabilitation of expeditionary airfields.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
- AoA Technical Gap: Year 2 of 3, effort continues with the integration and optimization of crater damage repair methods and equipment into capability sets for the Naval Construction Forces Expeditionary Rapid Airfield Damage Repair (NCF ExRADR) table of allowance (TOA) and unified facilities criteria (UFC). ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of -1.028 million is in accordance with planned program requirements. Partial resolution of ADR analysis of alternatives (AoA) R&D gaps has resulted in a decrease in requirements for FY23.					
Title: Port Damage Repair (PDR)	1.681	3.565	1.125	0.000	1.125
Articles:	-	-	-	-	-
FY 2022 Plans: Continue to address technological and construction criteria products that facilitate just-in-time assessment and rapid repair of piers, quay-walls, fleet moorings, critical expeditionary waterfront facilities and infrastructure, and port facilities above, at, and below the waterline. This includes the development, testing, and validation of materials and solutions in the areas of PDR JCIDS products, mini robotic salvage dredge research, expedient pier assessment, quaywall repair, port assessment, and enhancing the speed and agility of repair planning and execution. - AoA Technical Gap: Year 2 of 6, effort focused on identifying capability gaps resulting from revised ExPDRO CONOPs and completed PDR AoA. - MRSD Testing: Year 2 of 2, effort focused on integrating Mini Robotic Salvage Dredge (MRSD) with Naval Construction Forces Expeditionary Port Damage Repair Operations(NCF ExPDRO) table of allowance and assessing its ability to meet ExPDRO dredging capability requirements through exercise training, test and evaluation. - Expedient Pier Assessment and Repair: Year 2 of 4, effort progressing to evaluate potential integration of PIER JCTD repair equipment and methods into NCF table of allowance, class IV materials, and repair criteria in support of ExPDRO CONOPs.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
- Quay wall Repair: Year 2 of 3, effort continues with full-scale test and evaluation of identified quay wall repair methods and equipment. - Port Assessment Sensor Integration: Year 1 of 2, effort begins with an analysis of existing survey tools in the UCT and NCF table of allowance and identification of capability gaps and technology opportunities. State-of-the-art tools are then identified to be operationally assessed. - Expeditionary 3D Virtual Assessments (Scan to Publish): Year 2 of 3, effort continues with the implementation and coordination of site-specific survey/construction/engineering information repositories and evaluation of end-to-end survey to constructable design process ***FY 2023 Base Plans:*** Aligning with National Defense Strategy, this Program Element provides for investment in technologies and process solutions that facilitate port damage repair including mini robotic salvage dredge research, expedient pier assessment and repair, quay wall repair technologies, port assessment sensor integration of survey data for real time operational decisions, integration of collected meta data to create 3D virtual assessments. The results of this effort will greatly reduce the risks associated with logistically supporting Distributed Maritime Operations (DMO), Expeditionary Advanced Base Operations (EABO), and Littoral Operations in Contested Environments (LOCE) in multiple GCC AORs. Additionally, new Technical Manuals with tested and validated Tactics, Techniques, and Procedures for the employment of these solutions in operational environments will be developed and fielded. - AoA Technical Gap: Year 3 of 6, effort continues with a solicitation of proposals for the mitigation of identified capability gaps and down selection of proposals informed by operational risk assessments. - Expedient Pier Assessment and Repair: Year 3 of 4, effort continues with full-scale destructive testing of PIER JCTD class IV materials and components to validate working load limits and ability to meet pier side logistics/ seaport-of-debarkation offload requirements. - Quay wall Repair: Year 3 of 3, effort continues with the finalized documentation and transition of recommended quay wall repair equipment and methodologies into the NCF table of allowance and relevant criteria products.					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
- Port Assessment Sensor Integration: Year 2 of 2, effort continues with the demonstration and validation of identified pier/port survey tools and sensors; culminating in a transition recommendation for the UCT and NCF table of allowance. - Pillar Training Package & Pier Recon & Assessment Tool (PRAT): Year 1 of 1, effort focuses on providing necessary updates to the PRAT software tool and transitioning the tool for operational use within the NCF. - Aerial Port Assessment System (APAS): Year 1 of 3, effort begins with the identification of relevant commercial technologies to enable rapid autonomous pier condition surveys to assess operational utility of expeditionary and host nation facilities. - Expeditionary 3D Virtual Assessments (Scan to Publish): Year 3 of 3, effort culminates with the final documentation and publication of site survey/assessment, tools, processes, and vignettes. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of -2.44 million is aligned with planned program requirements decrease.					
Title: Expeditionary Engineering Materials and Equipment (EEME)	0.330	0.200	0.129	0.000	0.129
Articles:	-	-	-	-	-
FY 2022 Plans: Continue to address technological and construction criteria products that enable automated construction of expeditionary structures and facilities. Specific efforts include Navy matching funds and participation in the Automated Construction of Expeditionary Structures (ACES) Joint Capability Technology Demonstration (JCTD) and transition management activities. - ACES JCTD: Year 2 of 3, effort continues with operational demonstration and assessment of the automated construction system, operationally relevant structural designs, and indigenous material utilization. Structural designs under development for gap crossing, berthing, and ballistic protection. ***FY 2023 Base Plans:*** Aligning with National Defense Strategy, this Program Element provides for continued investment in materials and equipment that facilitate expeditionary battle damage repair and reduce the logistics burden of Class					

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
IV construction materials. The results of this effort will greatly reduce the risks associated with logistically supporting Distributed Maritime Operations (DMO), Expeditionary Advanced Base Operations (EABO), and Littoral Operations in a Contested Environment (LOCE) in multiple GCC AORs. Additionally, new technical criteria and equipment with tested and validated Tactics, Techniques, and Procedures for the employment of these solutions in operational environments will be developed and fielded. - ACES JCTD: Year 3 of 3, effort culminates with the integration of the expeditionary automated construction system into an operational prototype for evaluation at the final military utility assessment event. Program deliverables are finalized and readied for transition to program of record. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of -0.071 million is due to a decrease in planned program requirements.					
Title: Expeditionary Advance Base Operations (EABO) ***Articles:*** ***FY 2022 Plans:*** Invest in technologies that enable expeditionary advanced base operations (EABO) and distributed maritime operations to include test and evaluation oversight of continuing portfolio efforts ***FY 2023 Base Plans:*** Aligning with National Defense Strategy, this Program Element provides for continued investment in NECF table of allowance gap identification, prioritization, and mitigation supporting Distributed Maritime Operations (DMO), Expeditionary Advanced Base Operations (EABO), and Littoral Operations in a Contested Environment (LOCE) in multiple GCC AORs. ***FY 2023 OCO Plans:*** N/A ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of -0.045 million is due to decrease in planned program requirements.	0.000 -	0.245 -	0.200 -	0.000 -	0.200 -
Accomplishments/Planned Programs Subtotals	2.251	5.290	1.706	0.000	1.706

Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Projects identified in this budget are carefully selected to respond to resiliency considerations of evolving and aging airfields, ports, expeditionary operations, and to facilitate rational risk based decisions and solutions to protect and decrease risk levels for Department of the Navy-critical expeditionary waterfront facilities and infrastructure. The results of these projects will be the development of design and construction criteria and/or components that directly influence Navy-critical expeditionary waterfront facilities and infrastructure.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Airfield Damage Repair	WR	NAVFAC EXWC : Pt Hueneme, CA	0.000	0.240	Mar 2021	1.280	Jan 2022	0.252	Dec 2022	-		0.252	Continuing	Continuing	Continuing
Port Damage Repair	WR	NAVFAC EXWC : Pt Hueneme, CA	0.000	0.681	Mar 2021	2.065	Jan 2022	0.330	Dec 2022	-		0.330	Continuing	Continuing	Continuing
Port Damage Repair	Various	ERDC : Vicksburg, MS	0.000	1.000	Mar 2021	1.500	Feb 2022	0.795	Dec 2022	-		0.795	Continuing	Continuing	Continuing
Expeditionary Engineering Materials and Equipment	Reqn	NAVFAC EXWC : Pt Hueneme, CA	0.000	0.080	Apr 2021	0.200	Jan 2022	0.000		-		0.000	Continuing	Continuing	Continuing
Expeditionary Engineering Materials and Equipment	Reqn	ERDC : Vicksburg, MS	0.000	0.250	Apr 2021	0.000		0.129	Dec 2022	-		0.129	Continuing	Continuing	Continuing
EABO(Expeditionary Advance Base Operations)	Various	NAVFAC EXWC : Pt Hueneme, CA	0.000	0.000		0.245	Jan 2022	0.200	Dec 2022	-		0.200	Continuing	Continuing	Continuing
		Subtotal	0.000	2.251		5.290		1.706		-		1.706	Continuing	Continuing	N/A

Remarks

The decrease of -3.584 million from FY 2022 to FY 2023 in product development is due to partial resolution of ADR analysis of alternatives (AoA) R&D gaps, resulting in a decrease in requirements for identification of PDR AoA gaps in material, tactics, techniques, and procedures.

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	2.251		5.290		1.706		-		1.706	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

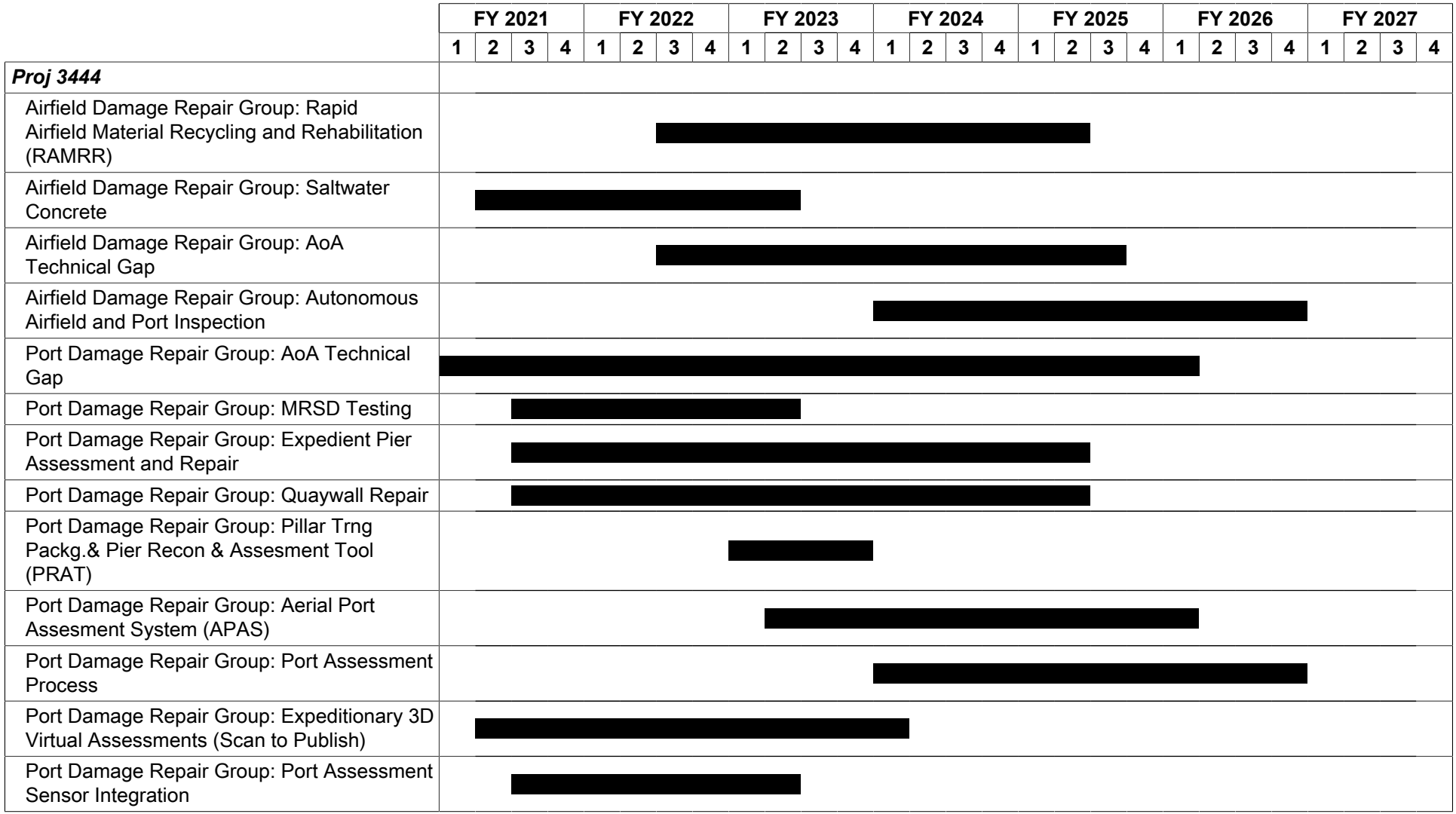

Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

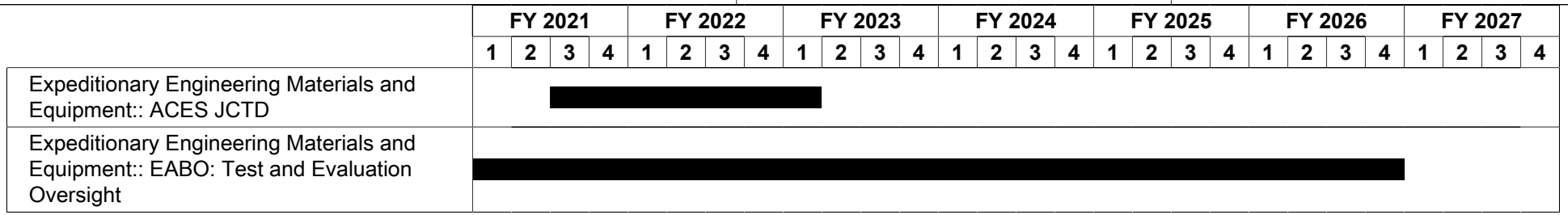

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603239N / *(U)NAVAL CONSTRUCTION FORCES*	**Project (Number/Name)** 3444 / *Airfield/Port Damage Repair*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3444				
Airfield Damage Repair Group: Rapid Airfield Material Recycling and Rehabilitation (RAMRR)	3	2022	2	2025
Airfield Damage Repair Group: Saltwater Concrete	2	2021	2	2023
Airfield Damage Repair Group: AoA Technical Gap	3	2022	3	2025
Airfield Damage Repair Group: Autonomous Airfield and Port Inspection	1	2024	4	2026
Port Damage Repair Group: AoA Technical Gap	1	2021	1	2026
Port Damage Repair Group: MRSD Testing	3	2021	2	2023
Port Damage Repair Group: Expedient Pier Assessment and Repair	3	2021	2	2025
Port Damage Repair Group: Quaywall Repair	3	2021	2	2025
Port Damage Repair Group: Pillar Trng Packg.& Pier Recon & Assesment Tool (PRAT)	1	2023	4	2023
Port Damage Repair Group: Aerial Port Assesment System (APAS)	2	2023	1	2026
Port Damage Repair Group: Port Assessment Process	1	2024	4	2026
Port Damage Repair Group: Expeditionary 3D Virtual Assessments (Scan to Publish)	2	2021	1	2024
Port Damage Repair Group: Port Assessment Sensor Integration	3	2021	2	2023
Expeditionary Engineering Materials and Equipment:: ACES JCTD	3	2021	1	2023
Expeditionary Engineering Materials and Equipment:: EABO: Test and Evaluation Oversight	1	2021	4	2026