Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy												Date: March 2023
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 0604030N *I Rapid Prototyping, Experimentation & Dem*							
COST ($ in Millions)	**Prior Years**	**FY 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	0.000	50.580	214.100	-	214.100	0.000	0.000	0.000	0.000	0.000	264.680
0385: *Rapid Prototype Development*	0.000	0.000	0.000	214.100	-	214.100	0.000	0.000	0.000	0.000	0.000	214.100
2803: *Classified #5*	0.000	0.000	3.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.500
2804: *OCTOPUS*	0.000	0.000	17.580	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	17.580
2805: *GRASP-X*	0.000	0.000	3.750	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.750
2806: *Classified #1*	0.000	0.000	20.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	20.000
2807: *Classified #2*	0.000	0.000	5.750	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.750

Note

The Navy's Rapid Prototyping, Experimentation and Demonstration (RPED) program with oversight and accountability of projects funded by the DON Accelerated Acquisition Board of Directors (AABoD)concluded in FY21. As a result, Navy did not request FY22 RPED funding. To support the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)), Rapid Defense Experimentation Reserve (RDER) initiative, the projects described herein are the Navy RDER projects, or the Navy's portion of joint service RDER projects, as directed by OUSD(R&E).

A. Mission Description and Budget Item Justification

To facilitate rapid modernization of the force, the RDER initiative was established in the Defense Planning Guidance for Fiscal Year 2023-2027, to encourage multi-component experimentation through a campaign of learning. Services, Agencies, and other participating organizations are to identify "best of breed" capabilities developed among the DoD prototyping programs, and execute approved projects through large-scale experiments in order to refine and/or validate the Joint Warfighting Concept (JWC). Organizations are to nominate proposals to the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) that are multi-component involving Joint Services, International partners and/or other government agencies and link to one or more of the four key supporting concepts ("functional battles") of the Joint Warfighting Concept: Joint Concept for Fires, Joint Concept for Command and Control, Joint Concept for Contested Logistics, and Joint Concept for Information Advantage.

The Department will implement multiple RDER experimentation series through Service nominated projects with execution timelines ranging from one to two years. The USD (R&E) will review project progress, and recommend new projects at least annually with the goal of quickly incorporating the most promising innovative prototypes into experiments, and promptly terminating projects that fail to achieve expectations. To incentivize a disciplined approach to rapidly identify, incorporate, and execute projects largely through the Military Services, the Department will fund approved Service projects for the upcoming fiscal year out of the Department reserves. Funding decisions on additional funds in follow-on years for new projects, and funding decrements for project terminations will be incorporated in budgets annually based on emerging requirements and periodic assessments of project viability. Services will execute these funds under oversight of the OSD in a manner consistent with the experimentation scenario for which individual projects were selected.

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
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 0604030N *I Rapid Prototyping, Experimentation & Dem*

Service experimentation outcomes will be designed to validate required capabilities enabling the JWC by evaluating and integrating prototyped technologies in operationally relevant, multi-domain environments. Experimentation results will facilitate Joint Staff analysis in the evaluation of the Joint Warfighting Concept, assist the Joint Requirements Oversight Counsel in requirements determination, and inform the Deputy's Management Action Group to make budget decisions that effect changes throughout the Department.

Advanced Component Development and Prototypes (ACD&P) efforts necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment are funded in this Program Element (PE). Most of the work in this PE can be classified between Technology Readiness Level (TRL) 6 (system/subsystem model or prototype demonstration in a relevant environment) and TRL 7 (system prototype demonstration in an operational environment).

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	0.000	57.000	0.000	-	0.000
Current President's Budget	0.000	50.580	214.100	-	214.100
Total Adjustments	0.000	-6.420	214.100	-	214.100
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-6.420			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	214.100	-	214.100

Change Summary Explanation

FY24 Funding increase supports selection of 24 Rapid Defense Experimentation Reserve (RDER) initiatives for the Department of Navy (DON).

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy												Date: March 2023
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*				Project (Number/Name) 0385 / *Rapid Prototype Development*			
COST ($ in Millions)	**Prior Years**	**FY 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
0385: *Rapid Prototype Development*	0.000	0.000	0.000	214.100	-	214.100	0.000	0.000	0.000	0.000	0.000	214.100
Quantity of RDT&E Articles		-	-	39	-	39	-	-	-	-		

Note

Each planned program contained under project 0385 for FY 2024 will receive the below unique project units for execution to promote acquisition oversight and fiscal clarity of RDER initiatives.

6000 GRANDSTAND
6001 MARKHOR
3468 MTC A/X
2802 MATADOR
6002 JAW BREAKER
6003 KRAKEN
6004 DAWG
3423 LOCUST
6005 Maritime Decoy and Deception
6006 PEGASUS
6007 MADS
6008 METEOR
6009 RLAC
6010 APEX-AIW
6011 SPEARHEAD
6012 SEDNA
6013 STtNG
6014 JTEN
6015 Cyber SHIELD
6016 MIM
6017 DoM
6018 Osprey
6019 CoSyCo
6020 LTAMDS-V

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

A. Mission Description and Budget Item Justification

To facilitate rapid modernization of the force, the RDER initiative was established in the Defense Planning Guidance for Fiscal Year 2023-2027, to encourage multi-component experimentation through a campaign of learning. Services, Agencies, and other participating organizations are to identify "best of breed" capabilities developed among the DoD prototyping programs and execute approved projects through large-scale experiments in order to refine and/or validate the Joint Warfighting Concept (JWC). Organizations are to nominate proposals to the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) that are multi-component involving Joint Services, International partners and/or other government agencies and link to one or more of the four key supporting concepts ("functional battles") of the Joint Warfighting Concept: Joint Concept for Fires, Joint Concept for Command and Control, Joint Concept for Contested Logistics, and Joint Concept for Information Advantage.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: GRANDSTAND	0.000	0.000	10.600	0.000	10.600
Articles:	-	-	-	-	-
Description: Project GRANDSTAND will provide Indications and Warnings (I&W) of adversary communications. Provide warning of impending fires and targeting solutions for potential kinetic solution. Please refer to Top Secret//Sensitive Compartmented Information (TS//SCI) Supplement for more details. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Please refer to Top Secret//Sensitive Compartmented Information (TS//SCI) Supplement for more details. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of GRANDSTAND as a RDER initiative.					
Title: MARKHOR	0.000	0.000	17.000	0.000	17.000
Articles:	-	-	-	-	-
Description: Project MARKHOR will build and experiment on a single threat of interest to the INDOPACOM theatre. Please refer to Top Secret//Sensitive Compartmented Information (TS//SCI) Supplement for more details. ***FY 2023 Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
N/A ***FY 2024 Base Plans:*** Please refer to Top Secret//Sensitive Compartmented Information (TS//SCI) Supplement for more details ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of MARKHOR as a RDER initiative.					
Title: MTC A/X ***Articles:*** ***Description:*** The details of this project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** The details of this project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of MTC-A/X as a RDER initiative.	0.000 -	0.000 -	5.000 -	0.000 -	5.000 -
Title: MATADOR ***Articles:*** ***Description:*** MATADOR will improve upon existing Over The Horizon Radar (OTHR) systems by utilizing known reference points (Targets of Opportunity) to enhance the current target registration. This in turn will increase accuracy on targets of which no information is known. This project will leverage existing contract agreement with WR Systems as well as on-site labor by Naval Research Laboratory to develop the software required to achieve this goal.	0.000 -	0.000 -	4.500 -	0.000 -	4.500 -

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
PRJ 2802-MATADOR, is a new start for FY 2024. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** This project will begin with a period of software development to improve existing MASOR OTHR radar systems to enhance current targeting capabilities by implementing an improved coordination system. After the initial development, an initial data collection and experimentation phase shall occur. The results of the data collection and experimentation shall be used to test the overall software package before final delivery to the OTHR Program Office. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of MATADOR as a RDER initiative.					
Title: JAW BREAKER	0.000	0.000	9.800	0.000	9.800
Articles:	-	-	-	-	-
Description: PRJ 6002- JAW BREAKER is a not a new start for FY2024. JAW BREAKER is tied to the Tactical Edge Targeting (TET) program in PE 0304785N, PU 3786. Project JAW BREAKER supports long-range fires of interest to INDOPACOM. Additional details held at a higher classification. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** FY 2024 JAW BREAKER funds will accelerate development and integration efforts to demonstrate federation of Tactical Edge Targeting (TET) capabilities to key Fleets, Combatant Commands, and Coalition partners; thereby adding scale, capacity, and resiliency to JOINT/COMBINED tracking and targeting architectures. Additional details held at a higher classification. ***FY 2024 OCO Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of JAW BREAKER as a RDER initiative.					
Title: KRAKEN	0.000	0.000	10.000	0.000	10.000
Articles:	-	-	-	-	-
Description: The details of this project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** The details of this project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of KRAKEN as a RDER initiative.					
Title: DAWG	0.000	0.000	1.800	0.000	1.800
Articles:	-	-	-	-	-
Description: The details of this project are classified Top Secret//Sensitive Compartmented Information (TS//SCI) and are submitted annually to Congress in the classified budget justification books. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** The details of this project are classified Top Secret//Sensitive Compartmented Information (TS//SCI) and are submitted annually to Congress in the classified budget justification books. ***FY 2024 OCO Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of DAWG as a RDER initiative.					
Title: LOCUST	0.000	0.000	10.000	0.000	10.000
Articles:	-	-	36	-	36
Description: LOCUST will provide ISR and precision loitering munitions capable of being launched from air, surface, ground, and sub-surface platforms to conduct both singular and swarm operations across battlespace in conjunction with Joint and manned operations. It will demonstrate multi-domain launch and strike operations, heterogeneous air platform payloads, unmanned from unmanned operations, distributed control of the strike mission, and refined cost elements for critical technologies that have supply chain assurance addressed. This effort is not a new start continuing efforts from the LOCUST Innovative Naval Prototype (INP) under the Office of Naval Research (ONR). LOCUST is transitioning to a program office to support combatant commander requirements, PE 0604230N, PU 1130 Expeditionary Loitering Munitions Capability Development (GOALKEEPER) under Naval Sea System Command (NAVSEA) ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Procures 36 All up Rounds (AUR) for operational test assets in support of GOALKEEPER test schedule. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of LOCUST as a RDER initiative.					
Title: Maritime Decoy and Deception	0.000	0.000	5.600	0.000	5.600
Articles:	-	-	-	-	-
Description: Maritime Decoy and Deception will incorporate NSWC Crane Loki Payloads into Wave Glider and Ocean Aero autonomous UAVs to perform missions of interest to USINDOPACOM. This project will leverage several COTS and GOTS hardware/software packages for final integration and testing at Northern Edge 25.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experim entation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
PRJ 6005-Maritime Decoy and Deception, is a new start for FY 2024. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** This project will begin by developing Computer Aided Design (CAD) models of both payloads and autonomous vehicles for integration. M&S capabilities will be utilized to develop a Live Virtual Constructive (LVC) environment for simulating the integrated technology. As a milestone event, integrated technology will be demonstrated at Northern Edge 25. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of Maritime Decoy and Deception as a RDER initiative.					
Title: PEGASUS ***Articles:*** ***Description:*** This C5ISR-T project will explore specific frequency measurements of Department of Navy (DoN) and/or other Service rotorcraft, tilt-rotor and fixed wing aircraft, evaluate the transition of Naval shipboard capabilities to those aircraft including the production of prototype HW and SW algorithms that may be aircraft category or type, model series (TMS) unique. Modelling and development of new Simultaneous Transmit and Receive (STaR) antenna apertures will be explored and prototyped/ integrated onto DoN or DoD representative platforms for flight testing and performance assessments. While testing may be focused on DoN platforms, testing may be conducted on any DoD platform and will be applicable and transferable to all Tri-Service rotorcraft and tilt-rotor platforms. This effort is not a new start as C5ISR-T (PEGASUS) received additional funding ($2.4M) in FY23 from USMC Future Vertical Lift and ($0.3M) from OUSD (A&S) to move capability assessments left. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Finalize specific frequency collection/ analysis	0.000 -	0.000 -	3.410 -	0.000 -	3.410 -

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Develop requirements for aircraft incorporation of DoN Shipboard capability Initiate rotor craft unique SW algorithm and assess requirement for TMS vice aircraft classification algorithm Initiate prototype hardware matched to rotorcraft SWaP Continue analysis/development of STaR antenna options and evaluate against option for individual transmit and receive antennas Flight test on DoN or DoD representative rotorcraft utlizing DoN Shipboard HW and rotorcraft unique SW algorithms Provide reports/presentations associated with project progress (successes and challenges) to stakeholders ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of Pegasus as a RDER initiative.					
Title: MADS ***Articles:*** ***Description:*** Multi-domain Area Denial from Small-USV (MADS) integrates the fielded FIM-92 Stinger weapons launchers and necessary targeting and fire controls on a high-TRL Navy-funded small USV (SUSV) to provide a low-cost, persistent anti-air and anti-surface maritime defense capability. MADS is intended to be scaled to "n" number of systems where multiple systems deployed simultaneously will overwhelm enemy kill chains as well as be difficult and costly to target. The resulting capability would be unmatched in terms of size, endurance, and cost and is suitable for littoral, chokepoint, and EABO operations, and organic stand-off defense for manned naval vessels such as MSC ships of USTRANSCOM. The experimentation will integrate existing weapons, platform, targeting, fire control and C2 systems into a new CONOP and validate performance and operational utility of stand-off weapons employed from low-cost SUSVs through Live-fire engagement of target drones and small boats. Peer or near peer competitors are building naval forces that will soon be significantly more numerous than those of the US Navy and our allies. During future conflicts, US and allied forces will be greatly outnumbered by peer or near peer competitors in both tactical platforms and munitions. To counter this threat, Distributed Maritime Operations (DMO) are planned that will require large numbers of smaller tactical platforms including unmanned surface vessels (USVs). Large numbers of small, low signature, attributable unmanned missile launching vessels have the potential to improve surface force magazine depth and reduce risk to force in denied areas. Small-USV	0.000 -	0.000 -	5.000 -	0.000 -	5.000 -

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
(GARC) launched surface-to-air missiles (Stinger) neutralize low-altitude red aircraft and provide blue forces with the freedom of maneuver to conduct myriad missions. PRJ 6007- MADS, is a new start for FY 2024 ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** The experiment will consist of a single sensor/shooter platform conducting Live-fire engagements against air target drones to validate the hypothesis that low cost, attributable, small USVs with integrated weapons offer a capable stand-off area denial system. The integrated capability of the system to accomplish the sensor/shooter roles from a single platform and test the datalink architecture required for human-on-the-loop fire control will be proven out. Initial technical feasibility will be established early through a number of land-based smaller system integration and experimentation efforts. The experimentation will develop and validate CONOPS and TTP for employment of MADS. Modeling and simulation, such as Table Top Exercise (TTX) wargaming, will be used to close-in and/or refine architectural frameworks in support of USN and USMC joint operations. The TTX and real-world experimentation results will inform refinement of CONOPS and CONEMP for scaling the capability to large-n number of platforms. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of MADS as a RDER initiative.					
Title: METEOR	0.000	0.000	1.590	0.000	1.590
Articles:	-	-	-	-	-
Description: Currently, the Joint Force suffers from a lack of redundant, resilient hard kill/soft kill options against stressing stream raid threats of Anti-Ship Ballistic Missiles (ASBM). The issue is particularly acute in the USINDOPACOM AOR due to the vast geographic distances involved, ship magazine size and adversary actions. Without additional hard kill/soft kill options preserving magazine depth, US forces in the AOR face unacceptably high risks to the mission and to the force. Available assets in the AOR are limited with a limited number of missile inventory. HPM payload capability will solve this problem by supplementing and conserving the ships kinetic defensive weapons. HPM Acceleration will also develop novel Radio Frequency waveforms					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
to improve HPM effectiveness. When combined with other non-kinetic capabilities and integrated with the ship's command and control (C2), the program will provide a low cost-per-shot, deep magazine capability for significantly expanding the self-defense capabilities of afloat and ashore platforms. Rapid engagement of targets for large threat raid defeat is a major feature of the system. The system will demonstrate full kill chain integration from find to assess. The payoffs for the program include integrated non-kinetic air defense systems to improve the layered defense, optimized use of defensive kinetic weapons and improved sensor and control systems. PRJ 6008-METEOR, is a new start in FY 2024. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** The program will begin development by leveraging ONR's ongoing technology maturation projects for pulsed power driver, energy magazine, embedded controls and weapon console. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of METEOR as a RDER initiative.					
Title: RLAC	0.000	0.000	10.200	0.000	10.200
Articles:	-	-	-	-	-
Description: Rapid Large Area Clearance for EOD Missions (RLAC) will develop new tools and equipment for EOD technicians. RLAC will decrease the unexploded ordnance (UxO) clearance timeline for bases and ports by using a distributed networked system of (2) person portable unmanned capabilities, advanced sensors, automated target recognition, directed energy, and standoff technologies. Additionally, cooperative autonomy developed under this program will reduce human cognitive loads and improve human/machine teaming. PRJ 6009-RLAC, is a new start for FY 2024. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Phase 1 of this project includes building, integrating, and testing small UAS and ATR algorithms against potential UxO items. UGV Cooperative Autonomy, Target Recognition, and Deep Detection algorithms will be developed. Standoff neutralization of submunitions and testing of individual capabilities will occur at the end of the FY. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of RLAC as a RDER initiative.					
Title: APEX-AIW	0.000	0.000	10.100	0.000	10.100
Articles:	-	-	-	-	-
Description: Allied & Partnered/Expeditionary Asymmetric Industrial Warfare (APEX-AIW) will augment organic Additive/Advanced Manufacturing (AM) capability that resides within our Expeditionary forces, Allies, and Partners with a large-format Foundry Operational Prototype. This project will provide a digital design eco-system for Joint Warfighter and Allies and Partners to manufacture vessels, structures, and parts in theatre. APEX-AIW will exercise the Foundry through a series of builds to demonstrate military utility via the production of useful prototypes in relevant quantities, including Littoral Maneuver Piers, Low-Profile Vessels, Quick Reaction Small USVs, and Allied and Partner replacement parts. This project leverages technology developed under the Manufacturing Autonomous System at Scale (MASS) Innovative Naval Prototype (INP) effort at ONR. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Work in FY24 is broken into 3 tasks: Task 1: Foundry Design Tool sizing to meet product size and build rate Tooling final Design Hardware for Advanced Manufacturing Task 2: Littoral Maneuver Pier System Integration Stakeholders User Requirement/Use Case for Demo System analysis and requirements					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Inflatable Causeway Design Modifications AIW Dock Conceptual Design Task 3: Small USV Concept Design (White Team) Component/module identify (e.g. propulsion, autonomy kit) Manufacturing support from foundry ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of APEX-AIW as a RDER initiative.					
Title: SPEARHEAD	0.000	0.000	9.000	0.000	9.000
Articles:	-	-	-	-	-
Description: SPEARHEAD is a multicomponent fuel management system, driven by AI/ML models, that supports distributed fuel operations for survivability and enhanced logistics. This project will utilize existing fuel monitoring systems to develop a robust logistics pipeline for increased visibility into fuel delivery and status throughout an AOR and permit strategic fuel placement and prepositioning for force projection. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Phase 1 efforts include initial integration of SPEARHEAD system software and performing a proof-of-concept demonstration. Also, a preliminary design review will take place and go/no go decisions will determine way ahead. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of SPEARHEAD as a RDER initiative.					
Title: SEDNA	0.000	0.000	10.000	0.000	10.000
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Description: The details of this project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** The details of this project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of SEDNA as a RDER initiative.					
Title: STtNG ***Articles:***	0.000 -	0.000 -	8.300 2	0.000 -	8.300 2
Description: Satellite Terminal (transportable) Non-Geostationary (STtNG) is a militarized terminal and common interface system to access Non-Geostationary Satellite Orbits (NGSO) Proliferated Low/Medium/High Earth Orbit (PLEO/MEO/HEO) constellations. STtNG will enhance resilient communications in support of long-range fires. STtNG augments the CBSP family of terminals, taking advantage of additional commercial space segments, to provide a simultaneous multiband failover capability to current MIL/COMSATCOM systems. STtNG falls under the CBSP CPD dated 27 Apr 2009 and has been validated by Fleet war gaming exercises. STtNG supports the Naval Operational Architecture (NOA) by adding satellite frequency diversity through a transportable system which will support current and future modems. Satellite Terminal (transportable) Non-Geostationary (STtNG) is a not a new start for FY 2024. STtNG is a subvariant of CBSP. STtNG efforts are currently being funded under PE 0604280N, PRJ C887 (FY23 Congressional Add), and the FY 2024 funding is an extension of the efforts. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Phase one includes design and initial prototyping of mobile, tactical edge node systems, and Common Submarine Radio Room (CSRR) variants including software/hardware development, integration and laboratory testing. Once developed, the program will test connectivity of procured prototypes, which will be measured and studied for best performance. Submarine antennas will utilize Luneberg Lens technology. Inc 3 brings enhanced capabilities including: Assured PNT, S-band connectivity, and special mode connectivity. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of STtNG as a RDER initiative.					
Title: JTEN ***Articles:*** ***Description:*** The Joint Tactical Edge Network (JTEN) is an overlay network and data architecture for tactical communications systems helps enable information sharing across dissimilar communications and datalinks. JTEN's approach is to build the network by leveraging technology from the Service efforts that have already been established with the end goal being a leave-behind hardware agnostic capability that enables the Joint Warfighter to share relevant data across domains. This budget requirement provides resources to integrate each of the Service projects into JTEN, and conduct an experiment during a major Joint force exercise evaluating JTEN's use to close specific long range kill chains in the USINDOPACOM AOR. The intent is to leverage ongoing Navy, Air Force and Army JADC2-related projects to provide the opportunity to share time-critical data across the joint tactical grid created through JTEN. An investment by the RDER program will enable the critical activities of integrating the Service solutions to provide Joint interoperability. Specifically, the RDER funds will be used to conduct live-fly demonstrations, extensive high-fidelity virtual constructive modeling and military utility assessments that will yield data in support of a commitment by each service to a production and fielding decision of JTEN to the operating forces. This effort is not a new start and builds upon FY22 and FY23 JADC2 efforts. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:***	0.000 -	0.000 -	15.100 -	0.000 -	15.100 -

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Funding will be used to conduct a joint service field experiment either at White Sands Missile Range or a pre-established operational exercise such as Trident Warrior 24. To get to this milestone, the services will develop joint architecture to provide a guideline for subsequent development, integration, and test activities. This will include development of the necessary system interfaces to allow integration of these technologies for experimentation and eventual operational use. Exploratory integration and test will be conducted to assist in identify the necessary interfaces. In FY24, we planned Live-Virtual-Constructive simulations of JTEN systems-of-systems architecture in order to identify and resolve technical issues in order to reduce risks during our field experimentation. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of JTEN as a RDER initiative.					
Title: Cyber SHIELD ***Articles:*** ***Description:*** Cyber Systems Hardening of Infrastructure to Ensure Land-based Defense (Cyber SHIELD) is a follow on to the MOSAICS Joint Capabilities Technology Demonstration (JCTD) project which developed and demonstrated cyber defensive capabilities for USINDOPACOM critical infrastructure control systems (electrical, natural gas, water). Cyber SHIELD will continue to build upon work demonstrated by the MOSAICS JCTD for cyber defensive capabilities. PRJ 6015-Cyber SHIELD, is a new start for FY 2024. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Efforts will support the application and validation of the MOSAICS foundation for a cyber resilient capability and extensibility to a new infrastructure domain (e.g., water). Additionally, demonstrate the level of resilience improvement of incorporating automated technologies, such as Software Defined Networking (SDN), to reduce the time to mitigated response. Cyber security for control system critical infrastructure is necessary for the DOD to provide combat-credible mission readiness to deter war and protect the nation's safety.	0.000 -	0.000 -	6.900 -	0.000 -	6.900 -

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
-Spiral 0. Primary Objectives: Develop, deploy, integrate, and test enhanced capability based on the MOSAICS JCTD MUA demonstration and OT SDN technology in lab testbeds. Examine automated build, configuration, and deployment capabilities. -Spiral 1. Primary Objectives: Complete evaluation of alternate technologies; Integrate OT SDN data into architecture for network alerting; Integrate OT SDN control to support fine-grained mitigations; Develop extended mitigations playbook(s); Finalize automated build and deployment approach. -Spiral 2. Primary Objectives: Perform Guam site survey; Integrate alternate COTS technologies selected for Baselining, Alerting, and Visualization; Complete development of automated failover and recovery playbooks to improve resiliency; Integrate PLC technologies into architecture for improved resiliency. -Spiral 3. Primary Objectives: Transition integrity checking to a Windows/Unix service implementation; Begin transition of orchestration playbooks; Extend Information Sharing architecture to support situational awareness requirements; Perform second Guam site survey; Build automated deployment packages(s). -Spiral 4. Primary Objectives: Deploy all virtual images and capabilities to Guam facility; Integrate with Guam control system environment; Perform end-to-end functional test; Back fit images to Naval pilot deployment. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of Cyber SHIELD as a RDER initiative.					
Title: MIM	0.000	0.000	6.700	0.000	6.700
Articles:	-	-	3	-	3
Description: The Rapidly Fieldable Moored Influence Mine (MIM) project seeks to augment the fielded bottom mine (Quick Strike, CDM) with moored systems and reestablish a surface launch capability. This prototyping effort will develop novel methods of mine deployment and incorporate technical advancements in mining technology while leveraging legacy hardware designs and concepts from demilitarized moored mines. PRJ 6016-MIM, is a new start for FY 2024.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
FY 2023 Plans: N/A ***FY 2024 Base Plans:*** -Develop Moored Influence Mine (MIM) system -Modify launcher prototype for use with MIM -Commence fabrication of three MIM prototypes and one MIM launcher prototype ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of MIM as a RDER initiative.					
Title: DoM	0.000	0.000	3.500	0.000	3.500
Articles:	-	-	-	-	-
Description: Data on the Move (DoM) will test and evaluate emerging operational level-of-war planning (days to 30+ days) to assist Joint Force Maritime Component Command staff's ability to generate what if courses of actions to understand the relationship between fires, contested logistics, and maneuver for joint maritime forces. This combined Operations and Logistics planner schedules high-volume multi-domain fires, including heterogeneous salvos, against defended targets while accounting for contested logistics to support that Operations plan. That is, do we have enough stuff for the operational duration, and can we get it there in time? In FY 2023 Q2, MARFORPAC and COMPACFLT used DoM planning software to support Logisitics Rehearsal of Concept event to help generate class 5 (ammunition) requirements for a future engagement. They intend to use Dreamcatcher for the next four LOG ROCs to help define requirements for Class of Supplies IV (fortification materials), III (fuel), I (food), and VIII (medical). To reduce risk of DoM RDER's FY 2024 fleet evaluation exercises, ONR in partnership with C7F, C3F, I MEF, 3d MLR, COMSUBPAC, COMPACFLT, MARFORPAC, and OPNAV N4 will evaluate DoM software for a simulated stressing INDOPACOM engagement in October 2023 at Oahu. The October evaluation will identify areas that need to be corrected before the RDER 24-2 FY 2024 fleet evaluation exercise. PRJ 6017-DoM, is not a new start for FY 2024.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
FY 2023 Plans: N/A ***FY 2024 Base Plans:*** Task 1 - Integrate and deploy DoM planning software to RDER FY24-2's FY24 fleet testing event (e.g., Valient Shield 24). DoM funding will allow Joint Force Maritime Component Command, Maritime Operations Centers, and Marine Expeditionary Force staffs to access DoM planning software from their SIPR watch stations. Task 2 - develop DoM user and training guides to FY24 test event. Task 3 - revise planning software based on fleet feedback from October 2023 test event at Oahu. Task 4 - participate in RDER FY24-2's FY24 fleet test event planning conferences to ensure DoM software accounts for joint needs ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of DoM as a RDER initiative.					
Title: Osprey	0.000	0.000	20.000	0.000	20.000
Articles:	-	-	-	-	-
Description: The Osprey program explores advanced anti-surface warfare (ASuW) and antisubmarine warfare (ASW) weapons concepts. The Osprey program will conduct detailed design, risk reduction, and development of the weapons concepts culminating in final demonstrations against representative targets. Osprey will continue work funded by DARPA in the area of ASuW and ASW and is jointly connected to both the Navy and USMC. Additional details at a higher classification. ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Additional details at a higher classification.					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: FY 2024 funding increase reflects selection of Osprey as a RDER initiative.					
Title: CoSyCo	0.000	0.000	10.000	0.000	10.000
Articles:	-	-	-	-	-
Description: Control Systems for Coordinated Operations (CoSyCo) will validate and rapidly deliver field-able datalinks and Command and Control networks, along with CONOPS and Tactics, Techniques, and Procedures (TTPs), for manned-unmanned teaming (MUM-T) between aircraft. This project will attempt to prove out the concept for in live-fly operations, accelerate the community understanding of acceptable cognitive loads for fighter pilots, and discover unrecognized synergy between these platforms. The CoSYCo effort is lead by the USAF out of Air Combat Command and the Navy will be playing a supporting role to their overall effort, aligning USN aerial target and autonomy development and demonstration efforts to reduce risk and field "playbooks" early (a playbook is a set of behaviors air vehicles will fly). The intent is to leverage ongoing USN projects and develop technology to provide the opportunity to fly USAF developed CoSyCo playbooks in a live environment on Navy targets. This risk reducing activity will create an organic ability to fly design reference missions (DRM) that are pertinent to adversary air, combat collaborative aircraft (CCA), and weapon system behavior development. Additionally, due to the lower Technology Readiness Level (TRL) or the end state USAF aerial platform, Navy targets is positioned to provide a "fly early" opportunity for the CoSyCo effort. The Navy will be focused on the rapid fielding capability of the autonomous behaviors required by the playbooks. Project 6019 funds Phase 1. PRJ 6019-CoSyCo, is a new start for FY 2024.					
FY 2023 Plans: N/A					
FY 2024 Base Plans: In preparation for Playbook flight test, begin digital engineering for software, networks, and autonomy. Start BQM-177 hardware design and procurement. Design and integrate Hyman Machine Interface (HMI)/Ground Control System (GCS) which will leverage Strategic Capabilities office (SCO) Avatar program to allow for target					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
control on a tablet and explore the technology transfer of that functionality to a more traditional ground station. Begin software and hardware system integration and installation. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of CoSyCo as a RDER initiative.					
Title: LTAMDS-V ***Articles:*** ***Description:*** Lower Tier Anti-Missile Defense System - Variance (LTAMDS-V) is an experiment building on the Army's LTAMDS program of record. This experiment will incorporate a multi-mission expeditionary sensor capabile of conducting cruise missile defense, counter air breathing threat (ABT) missions, and cUAS missions while supporting a broader kill chain. This project will test hardware and software implementation for possible inclusion into the SPY RADAR families. PRJ 6020-LTAMDS-V, is a new start for FY 2024 ***FY 2023 Plans:*** N/A ***FY 2024 Base Plans:*** Phase 1 will involve three tasks: Task 1: Draft experimental details, including scenarios, test systems, location, and time frame Task 2: Develop and test TBD C2 Interface Task 3: Refinement and further development of CUAS capability ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** FY 2024 funding increase reflects selection of LTAMDS-V as a RDER initiative.	0.000 -	0.000 -	20.000 -	0.000 -	20.000 -
Accomplishments/Planned Programs Subtotals	0.000	0.000	214.100	0.000	214.100

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experim entation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

MATADOR-PRJ 2802- Improved software will be transitioned to current Relocatable Other The Horizon Radar (ROTHR) Program Office to operate the improved MASOR system.

JAW Breaker- PRJ 6002- Aligns to the Tactical Edge Targeting (TET) program which is a Middle Tier Acquisition (MTA) Rapid Prototyping program within the Program Executive Office (PEO) Command, Control, Communications, Computers, Intelligence (C4I) and Space Systems. JAW BREAKER will support the development and integration of a new capability, and the refinement of Concepts of Operations, to enhance the ability of our warfighters to track and target adversaries in tactically challenging environments.

Maritime Decoy and Deception-PRJ 6005- Hardware and software design, integration, and testing to demonstrate a new capability in support of fleet requirements and to further inform Joint operations. Various performers will be funded on their technology and level of effort to support integration and test events.

PEGASUS- PRJ 6006- Design and develop Software and Hardware suitable for rotorcraft SWaP and frequency specific requirements, prototype, integrate, test and assess performance of capability to inform leadership as to the applicability for transition to a Program of Record.

MADS-PRJ 6007- Short-term: Potential transition of experiment system to Fleet for risk-reduction activities and experimentation (current plan is to use a GFE GARC funded under separate program lines). Marinized Stinger launcher will be immediately available as an operational prototype for use by services on other vessels. Long-term: Full certification of the weapons and C3 system and new Program of Record to field the capability.

METEOR-PRJ 6008- will transition to N96 upon completion. Hardware leave-behind for future operational experiments and incremental development. Transition to N96 for sustainment and inform future HPM increments, Terminal Defense NIF and emerging programs.

RLAC-PRJ 6009- prototypes will transition to N957 and PMS 408.

APEX-AIW-PRJ 6010- Hardware and software design, integration, and testing to demonstrate a new capability in support of the Joint force.

STtNG- PRJ 6013- STtNG technology will be transitioned to OPNAV N2N6 and the CBSP program. Funding will be placed on SBIR II contract and will leverage NUWC Engineers.

JTEN- PRJ 6014- Digital Engineering for modeling and Simulation will be a co-development between NIWC-PAC and NRL

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

Software development, integration and Test will be contracted on existing NRL contract with MITRE. Joint Architecture development will be a co-development between NRL and NIWC-PAC working with JTEN Architecture Working Group (government labor)
Live-Virtual-Constructive (LVC) testing will be executed by the NIWC-PAC and NRL Navy team working with the other service labs (government labor). Analysis will be led by NIW-Pacific with NRL supported by MITRE Corp (using NRL's existing contract with MITRE). LVC, lab and field experiments will be led by NIWC-PAC/NRL supported by a contract (TBD) on existing NIWC-PAC contract.

Cyber SHIELD- PRJ 6015- Validated design prototype at NAVFAC Power & Water Facilities at PACOM site. Architectures and training plans to support Service facilities commands & Industry. TTP and automation to NAVFAC plus other Services & Utilities.

Key Partners / Participants:
CCMD Sponsor(s): USINDOPACOM / USNORTHCOM
Service Sponsor(s): USN / USMC / USARMY / USAF
Government Technical Manager: NIWC LANT Mr. Salvatore (Rich) Scalco
Overall Design Lead: JHU/APL Mr. Harley Parkes
DOE Technical Lead: PNNL Mr. Mark Hadley
Cyber Test Team: USAF 47th & USAF 346th

Other Partners:
UARC National Labs: JHU-APL, Sandia , PNNL, INL
Industry partners: Cisco, SEL Inc.,Palo Alto Networks, Dragos, Siemens (*Commercial vendors are pre-decisional pending OT site evaluations).

MIM-PRJ 6016- The technology developed in this program will transition to PMS-495 and be resourced by OPNAV N952.

DoM- PRJ 6017- Technology developed from this project will be used to inform Joint Force Maritime Component Command operational planners in the INDOPACOM theatre. Individual components will transition to USMC Tactical Services Oriented Architecture program of record and Navy's Distributed Operations program of record.

CoSyCo-PRJ 6019- Digital engineering for software, networks, and autonomy development will be contracted on an existing contract with the Johns Hopkins University Applied Physics Laboratory. BQM-177 autonomy payload design, hardware procurement, and integration will be contracted on an existing PMA-208 contract with Kratos. Human Machine Interface (HMI)/SNTC Ground Control Station (GCS) modification will be contracted on an existing PMA-208 contract with MSI. Flight testing will be conducted at a the Pt Mugu Sea Range. Fund flight test costs at range(s). Fund BQM-177 launch and recovery at the Pacific Targets Management Office (PTMO).

LTAMDS-V-PRJ 6020- Technology developed in this experiment is directly aligned with the Army's LTAMDS program and will transition to that program of record.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 0385 / *Rapid Prototype Development*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CoSyCo-Software Development and testing	SS/CPFF	JHU APL : Laurel, MD	0.000	0.000		0.000		2.000	Dec 2023	-		2.000	0.000	2.000	-
CoSyCo-BQM Hardware Development and Procurement	SS/CPFF	Kratos Defense and Security Solution : Sacramento, CA	0.000	0.000		0.000		2.750	Dec 2023	-		2.750	0.000	2.750	-
MATADOR- Govt Software Eng Support	WR	NRL : Washington D.C.	0.000	0.000		0.000		0.500	Oct 2023	-		0.500	0.000	0.500	-
MATADOR- Software Development	Various	WR Systems : Fairfax, VA	0.000	0.000		0.000		3.500	Oct 2023	-		3.500	0.000	3.500	-
RLAC- Develop and demonstrate standoff neutralization with Silent Saber, Compact Laser for Explosive Ordnance Disposal Neutralization	C/CPFF	Applied Research Associates : Albuquerque, New Mexico	0.000	0.000		0.000		1.100	Nov 2023	-		1.100	0.000	1.100	-
RLAC- Deliver small Unmanned Airborne Systems (sUAS) with automated target recognition and sensors for Explosive Ordnance Disposal detection, location and identification of unexploded ordnance	WR	NRL : Washington, D.C.	0.000	0.000		0.000		2.100	Nov 2023	-		2.100	0.000	2.100	-
RLAC- Deliver explosive tools, diagnostic capabilities and detection capabilities for subsurface targets	WR	NSWC IHD : Indian Head, Maryland	0.000	0.000		0.000		2.500	Nov 2023	-		2.500	0.000	2.500	-
RLAC- Provide damage repair detection and sensing capabilities for test and demonstration	WR	NSWC PCD : Panama City, Florida	0.000	0.000		0.000		2.500	Nov 2023	-		2.500	0.000	2.500	-
DoM- Task 1	Various	Various : Various	0.000	0.000		0.000		2.000	Oct 2023	-		2.000	0.000	2.000	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 0385 / *Rapid Prototype Development*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DoM- Task 2	Various	Various : Various	0.000	0.000		0.000		0.750	Dec 2023	-		0.750	0.000	0.750	-
DoM- Task 3	Various	Various : Various	0.000	0.000		0.000		0.650	Jan 2024	-		0.650	0.000	0.650	-
DoM- Task 4	Various	Various : Various	0.000	0.000		0.000		0.100	Oct 2023	-		0.100	0.000	0.100	-
MIM- Development & Demo	WR	NSWC PCD : Panama City, Florida	0.000	0.000		0.000		3.350	Oct 2023	-		3.350	0.000	3.350	-
MIM- Development & Demo	WR	NSWC CD : Bethesda, MD	0.000	0.000		0.000		1.675	Oct 2023	-		1.675	0.000	1.675	-
MIM- Development & Demo	C/CPFF	JHU APL : Laurel, MD	0.000	0.000		0.000		1.675	Nov 2023	-		1.675	0.000	1.675	-
JAW BREAKER	Various	Classified : Classified	0.000	0.000		0.000		9.800	Nov 2023	-		9.800	0.000	9.800	-
MTC A/X	Various	Classified : Classified	0.000	0.000		0.000		5.000	Oct 2023	-		5.000	0.000	5.000	-
STtNG- Inc. 3 Prototyping	C/CPFF	BASCOM : Baton Rouge, LA	0.000	0.000		0.000		7.000	Jan 2024	-		7.000	0.000	7.000	-
APEX-AIW- Govt Eng Support	WR	NSWC Carderock : Washington D.C.	0.000	0.000		0.000		0.300	Jan 2024	-		0.300	0.000	0.300	-
APEX-AIW- Hardware for Advanced Manufacturing	TBD	TBD : TBD	0.000	0.000		0.000		2.750	Jan 2024	-		2.750	0.000	2.750	-
APEX-AIW-USV and connector development	WR	various : various	0.000	0.000		0.000		1.550	Jan 2024	-		1.550	0.000	1.550	-
LOCUST-All Up Round Hardware	C/CPFF	Raytheon : Tuscon, AZ	0.000	0.000		0.000		10.000	Apr 2024	-		10.000	0.000	10.000	-
GRANDSTAND	Various	Classified : Classified	0.000	0.000		0.000		10.600	Nov 2023	-		10.600	0.000	10.600	-
MARKHOR	Various	Classified : Classified	0.000	0.000		0.000		17.000	Nov 2023	-		17.000	0.000	17.000	-
KRAKEN	Various	Classified : Classified	0.000	0.000		0.000		10.000	Nov 2023	-		10.000	0.000	10.000	-
DAWG	Various	Classified : Classified	0.000	0.000		0.000		1.800	Nov 2023	-		1.800	0.000	1.800	-
SEDNA	Various	Classified : Classified	0.000	0.000		0.000		10.000	Nov 2023	-		10.000	0.000	10.000	-
JTEN- Software develoment, Integration and testing	C/CPFF	MITRE : Boston, MA	0.000	0.000		0.000		2.100	Dec 2023	-		2.100	0.000	2.100	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
JTEN- Joint Architecture development and interface definition	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.900	Oct 2023	-		0.900	0.000	0.900	-
JTEN- Scenario development/Test plan	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.720	Dec 2023	-		0.720	0.000	0.720	-
JTEN- Model development	WR	NIWC PAC : San Diego, CA	0.000	0.000		0.000		0.800	Dec 2023	-		0.800	0.000	0.800	-
Osprey	Various	Classified : Classified	0.000	0.000		0.000		20.000	Nov 2023	-		20.000	0.000	20.000	-
SPEARHEAD	WR	GTRI : Atlanta, GA	0.000	0.000		0.000		9.000	Dec 2023	-		9.000	0.000	9.000	-
LTAMDS-V- Development of C2 interface and CUAS capability	Various	Various : Various	0.000	0.000		0.000		20.000	Dec 2023	-		20.000	0.000	20.000	-
Cyber SHIELD- Development of cyber defense capabilities	Various	Various : Various	0.000	0.000		0.000		6.900	Oct 2023	-		6.900	0.000	6.900	-
Maritime Decoy and Deception	Various	Various : Various	0.000	0.000		0.000		5.600	Dec 2023	-		5.600	0.000	5.600	-
PEGASUS	Various	Various : Various	0.000	0.000		0.000		3.410	Oct 2023	-		3.410	0.000	3.410	-
MADS	Various	Various : Various	0.000	0.000		0.000		5.000	Nov 2023	-		5.000	0.000	5.000	-
METEOR	Various	Various : Various	0.000	0.000		0.000		1.590	Nov 2023	-		1.590	0.000	1.590	-
CoSyCo-HMI/GCS Modification	SS/CPFF	MSI : Fort Walton Beach, FL	0.000	0.000		0.000		2.750	Dec 2023	-		2.750	0.000	2.750	-
		Subtotal	0.000	0.000		0.000		191.720		-		191.720	0.000	191.720	N/A

Remarks

MIM- This project will develop and deliver three prototype MIMs, modify and deliver a prototype surface ship MIM launcher, and conduct an in-water demonstration on a Navy test range in Panama City, FL.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 0385 / *Rapid Prototype Development*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CoSyCo-Program Management	WR	NAWCAD : Pax River, MD	0.000	0.000		0.000		0.300	Dec 2023	-		0.300	0.000	0.300	-
CoSyCo- Range Support	WR	Pt.Mugu Sea Range : NAS Ventura County, CA	0.000	0.000		0.000		0.800	Jan 2024	-		0.800	0.000	0.800	-
CoSyCo-Target Launch Support	WR	Pacific Targets Management Office : NAS Ventura County, CA	0.000	0.000		0.000		1.300	Feb 2024	-		1.300	0.000	1.300	-
RLAC- Labor, shipment and test execution for damage repair test events	WR	NSWC Panama City : Panama City, Florida	0.000	0.000		0.000		1.500	Nov 2023	-		1.500	0.000	1.500	-
APEX-AIW- Small test event demonstrations	WR	various : various	0.000	0.000		0.000		2.500	Jan 2024	-		2.500	0.000	2.500	-
APEX-AIW-Preperation for large test event (Talisman Saber)	WR	various : various	0.000	0.000		0.000		3.000	Jan 2024	-		3.000	0.000	3.000	-
JTEN- Software test	C/CPFF	TBD : TBD	0.000	0.000		0.000		2.500	Dec 2023	-		2.500	0.000	2.500	-
JTEN- Architecture validation	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.620	Oct 2023	-		0.620	0.000	0.620	-
JTEN- System Engineering Review	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.270	Oct 2023	-		0.270	0.000	0.270	-
JTEN- Test Planning/ validation	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.450	Oct 2023	-		0.450	0.000	0.450	-
JTEN- M&S Support	C/CPFF	TBD : TBD	0.000	0.000		0.000		2.500	Dec 2023	-		2.500	0.000	2.500	-
JTEN- LVC Lab Capability Analysis	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.780	Oct 2023	-		0.780	0.000	0.780	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
JTEN- LVC Lab Prep/Test Execution	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.780	Oct 2023	-		0.780	0.000	0.780	-
JTEN- Field Experiment	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		1.800	Oct 2023	-		1.800	0.000	1.800	-
JTEN- Range Cost	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.500	Oct 2023	-		0.500	0.000	0.500	-
		Subtotal	0.000	0.000		0.000		19.600		-		19.600	0.000	19.600	N/A

Remarks

Identification of technology candidates and prototypes approved by the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) Rapid Defense Experimentation Reserve (RDER) initiative

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation (OT&E)	WR	NRL : Washington, D.C.	0.000	0.000		0.000		0.500	Oct 2023	-		0.500	0.000	0.500	-
		Subtotal	0.000	0.000		0.000		0.500		-		0.500	0.000	0.500	N/A

Remarks

OT&E related to PRJ 2802, MATADOR

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CoSyCo-Engineering Services Support	TBD	TBD : TBD	0.000	0.000		0.000		0.100	Mar 2024	-		0.100	0.000	0.100	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 0385 / *Rapid Prototype Development*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
RLAC-Management Services includes support for cost, schedule and performance tracking	SS/CPFF	Proteq : Herndon, Virginia	0.000	0.000		0.000		0.500	Nov 2023	-		0.500	0.000	0.500	-
STtNG- Engineering Services Support	WR	NUWC Newport : Newport, RI	0.000	0.000		0.000		1.300	Jan 2024	-		1.300	0.000	1.300	-
JTEN- Program Management	WR	NIWC PAC and NRL : San Diego, CA and Washington, D.C	0.000	0.000		0.000		0.380	Dec 2023	-		0.380	0.000	0.380	-
		Subtotal	0.000	0.000		0.000		2.280		-		2.280	0.000	2.280	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		0.000		214.100		-		214.100	0.000	214.100	N/A

Remarks

JTEN- This project will coordinate with USAF CTEN project and US Army's Tactical Software Defined Network projects (e.g. ModRF).
CoSyCo- Thie project will collaborate with the USAF CoSyCo team to host playbooks on Navy targets that are modified to provide this capability.

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

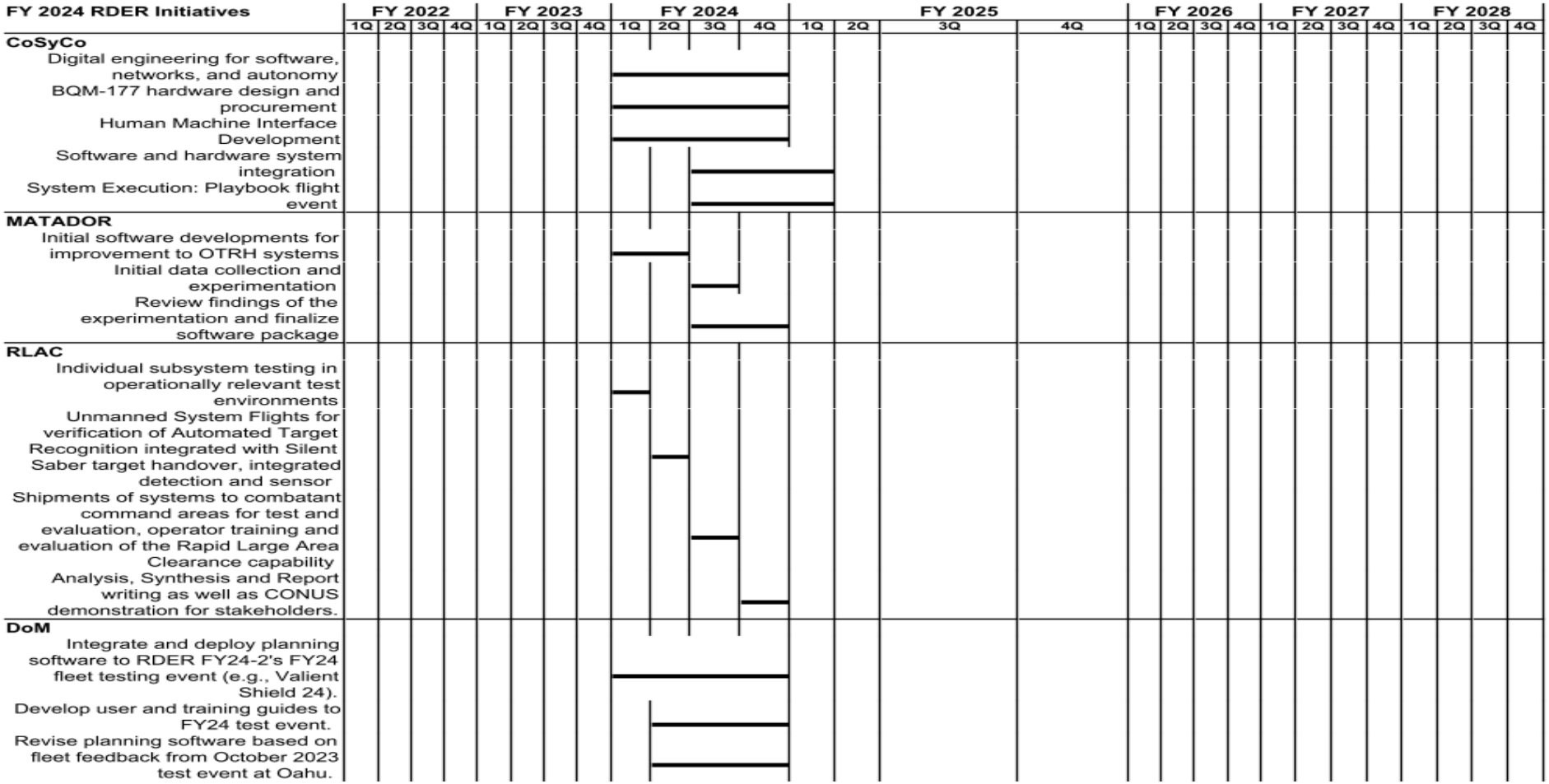


Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

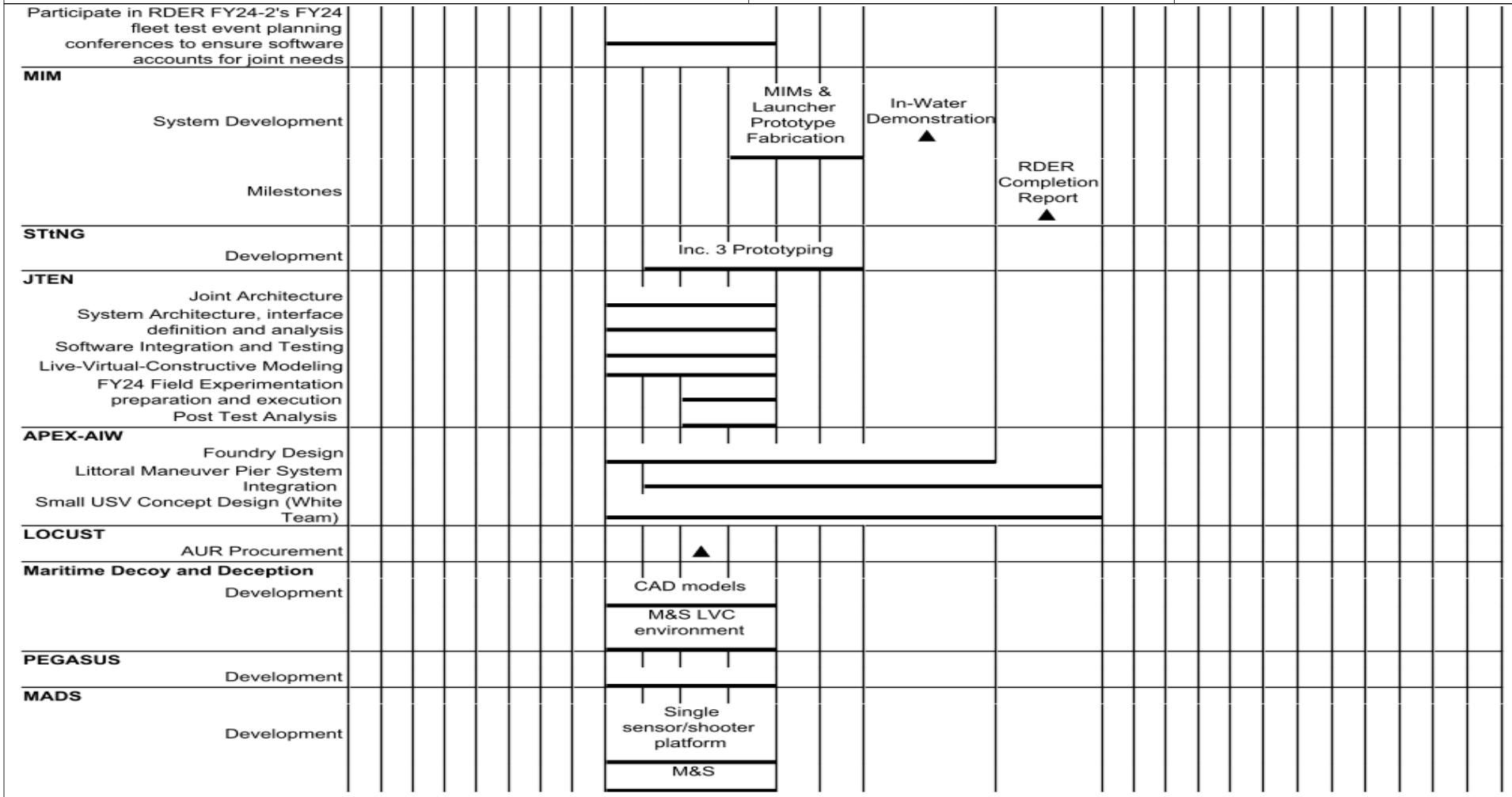
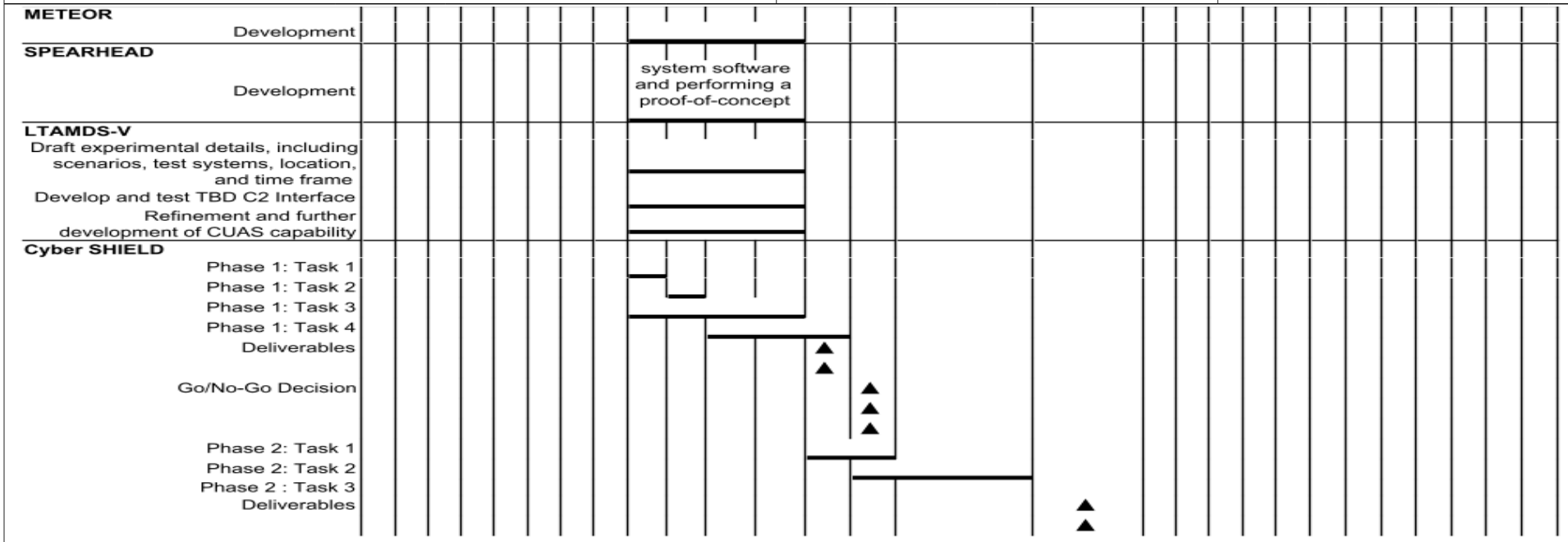


Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*



2024PB - 0604030N - 0385

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
FY 2024 RDER Initiatives				
CoSyCo: Digital engineering for software, networks, and autonomy:	1	2024	4	2024
CoSyCo: BQM-177 hardware design and procurement:	1	2024	4	2024
CoSyCo: Human Machine Interface Development:	1	2024	4	2024
CoSyCo: Software and hardware system integration:	3	2024	1	2025
CoSyCo: System Execution: Playbook flight event:	3	2024	1	2025
MATADOR: Initial software developments for improvement to OTRH systems: Task 1	1	2024	2	2024
MATADOR: Initial data collection and experimentation: Task 2	3	2024	3	2024
MATADOR: Review findings of the experimentation and finalize software package: Task 3	3	2024	4	2024
RLAC: Individual subsystem testing in operationally relevant test environments: Q1	1	2024	1	2024
RLAC: Unmanned System Flights for verification of Automated Target Recognition integrated with Silent Saber target handover, integrated detection and sensor: Q2	2	2024	2	2024
RLAC: Shipments of systems to combatant command areas for test and evaluation, operator training and evaluation of the Rapid Large Area Clearance capability: Q3	3	2024	3	2024
RLAC: Analysis, Synthesis and Report writing as well as CONUS demonstration for stakeholders.: Q4	4	2024	4	2024
DoM: Integrate and deploy planning software to RDER FY24-2's FY24 fleet testing event (e.g., Valient Shield 24).: Task 1	1	2024	4	2024
DoM: Develop user and training guides to FY24 test event.: Task 2	2	2024	4	2024
DoM: Revise planning software based on fleet feedback from October 2023 test event at Oahu.: Task 3	2	2024	4	2024
DoM: Participate in RDER FY24-2's FY24 fleet test event planning conferences to ensure software accounts for joint needs: Task 4	1	2024	4	2024

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
MIM: System Development: System Development	1	2024	4	2024
MIM: System Development: Launcher Design Modification	2	2024	4	2024
MIM: System Development: MIMs & Launcher Prototype Fabrication	4	2024	2	2025
MIM: System Development: In-Water Demonstration	3	2025	3	2025
MIM: Milestones: RDER Completion Report	4	2025	4	2025
STtNG: Development: Inc. 3 Prototyping	2	2024	2	2025
JTEN: Joint Architecture:	1	2024	4	2024
JTEN: System Architecture, interface definition and analysis:	1	2024	4	2024
JTEN: Software Integration and Testing:	1	2024	4	2024
JTEN: Live-Virtual-Constructive Modeling:	1	2024	4	2024
JTEN: FY24 Field Experimentation preparation and execution:	3	2024	4	2024
JTEN: Post Test Analysis:	3	2024	4	2024
APEX-AIW: Foundry Design: Task 1	1	2024	3	2025
APEX-AIW: Littoral Maneuver Pier System Integration: Task 2	2	2024	4	2025
APEX-AIW: Small USV Concept Design (White Team): Task 3	1	2024	4	2025
LOCUST: AUR Procurement:	3	2024	3	2024
Maritime Decoy and Deception: Development: CAD models	1	2024	4	2024
Maritime Decoy and Deception: Development: M&S LVC environment	1	2024	4	2024
PEGASUS: Development:	1	2024	4	2024
MADS: Development: Single sensor/shooter platform	1	2024	4	2024
MADS: Development: M&S	1	2024	4	2024
METEOR: Development:	1	2024	4	2024
SPEARHEAD: Development: System software and proof-of-concept	1	2024	4	2024
LTAMDS-V: Draft experimental details, including scenarios, test systems, location, and time frame: Task 1	1	2024	4	2024
LTAMDS-V: Develop and test TBD C2 Interface: Task 2	1	2024	4	2024

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experim entation & Dem*	**Project (Number/Name)** 0385 / *Rapid Prototype Development*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
LTAMDS-V: Refinement and further development of CUAS capability: Task 3	1	2024	4	2024
Cyber SHIELD: Phase 1: Task 1: Spiral 0 - Integrate OT SDN into Testbed	1	2024	1	2024
Cyber SHIELD: Phase 1: Task 2: Spiral 1 - Integrate OT SDN into Architecture	2	2024	2	2024
Cyber SHIELD: Phase 1: Task 3: Spiral 2 - Guam Site Survey for two sectors (e.g., water and power utility), including decomposition	1	2024	4	2024
Cyber SHIELD: Phase 1: Task 4: Spiral 3 - Transition Integrity Checks/Orchestration	3	2024	1	2025
Cyber SHIELD: Deliverables: Technical Report (Build/Deployment Approach)	1	2025	1	2025
Cyber SHIELD: Deliverables: Extended Mitigation Playbook(s)	1	2025	1	2025
Cyber SHIELD: Go/No-Go Decision: Decision 1- Guam site survey validation	2	2025	2	2025
Cyber SHIELD: Go/No-Go Decision: Decision 2- Testbed Success	2	2025	2	2025
Cyber SHIELD: Go/No-Go Decision: Decision 3- OT SDN functionality capability cybersecurity demonstration	2	2025	2	2025
Cyber SHIELD: Phase 2: Task 1: Spiral 4 - Guam Deployment	1	2025	2	2025
Cyber SHIELD: Phase 2: Task 2: Final design specifications and As-built installation drawings	2	2025	3	2025
Cyber SHIELD: Phase 2 : Task 3: DOD CIO Cybersecurity Reference Architecture Appendix D for Control Systems update	2	2025	3	2025
Cyber SHIELD: Deliverables: Comprehensive Final Report	4	2025	4	2025
Cyber SHIELD: Deliverables: Design guide updates to the DOD Unified Capabilities Requirements (UCR) Unified Facilities	4	2025	4	2025

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2803 / *Classified #5*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2803: *Classified #5*	0.000	0.000	3.500	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.500
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Details held at a higher classification

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Classified #5	0.000	3.500	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2023 Plans: Details held at a higher classification					
FY 2024 Base Plans: N/A					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: Details held at a higher classification					
Accomplishments/Planned Programs Subtotals	0.000	3.500	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2803 / *Classified #5*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
classified	TBD	TBD : TBD	0.000	0.000		3.500	Nov 2022	0.000		-		0.000	0.000	3.500	-
		Subtotal	0.000	0.000		3.500		0.000		-		0.000	0.000	3.500	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		3.500		0.000		-		0.000	0.000	3.500	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2803 / *Classified #5*

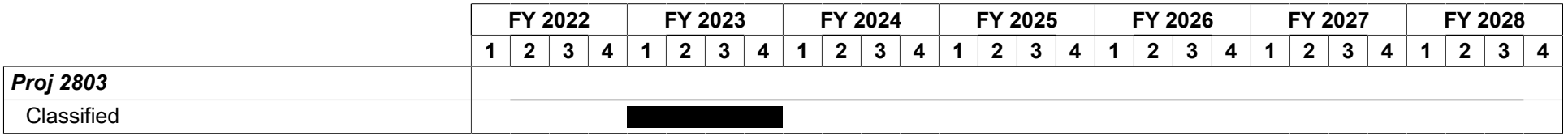


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2803 / *Classified #5*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2803				
Classified	1	2023	4	2023

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2804 / *OCTOPUS*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2804: *OCTOPUS*	0.000	0.000	17.580	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	17.580
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

PRJ 2804- OCTOPUS, is a new start for FY2023.

A. Mission Description and Budget Item Justification

Octopus is an integration of multi-modal communication technologies enabling multi-domain remote command and control (C2), long-range fires, and enhanced communications to support Joint Warfighting operations in a contested environment. Octopus will enable remote C2 by leveraging a rapidly deployed, cabled infrastructure, to employ acoustic, optical, and Radio Frequency (RF) communications and allow remote operators to communicate with air, surface, and subsurface assets. Octopus provides resilient communications to the battlespace Commander in a denied environment. This effort directly supports several of the Combatant Commands Integrated Priority List (IPLs), and will provide insight into Concept of Operations (CONOPs) development in support of the Joint Warfighting Concept (JWC).

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Octopus	0.000	17.580	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2023 Plans: This system will integrate and test various existing technologies by first modeling each integrated capability into a Live Virtual Constructed (LVC) operation and mission planning event. Each one of these technologies will be integrated into a common C2 suite, that will allow operators to utilize each type of communication method based on situational requirements and needs. As a milestone test event, Octopus will participate in a Fleet Experiment (Northern Edge 2023) from a remote location to exercise its remote C2 and communications capabilities.					
FY 2024 Base Plans: N/A					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: Decrease due to project completion.					
Accomplishments/Planned Programs Subtotals	0.000	17.580	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2804 / *OCTOPUS*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Hardware and software design, integration and testing to demonstrate a new capability in support of fleet requirements and to further inform Joint operations. Various performers will be funded based on their technology and level of effort to support integration and test events.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2804 / *OCTOPUS*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
C2 Integration, software development and communications enabler development	MIPR	NUWC NP : Newport RI	0.000	0.000		1.100	Mar 2023	0.000		-		0.000	0.000	1.100	-
Communications equipment procurement and cyber security development	MIPR	NUWC NP : Newport RI	0.000	0.000		0.300	Mar 2023	0.000		-		0.000	0.000	0.300	-
System Engineering/ Integration; Technical Management; Subsystem Development; Independent Assesor	MIPR	NIWC PAC : San Diego, CA	0.000	0.000		6.880	Mar 2023	0.000		-		0.000	0.000	6.880	-
Product Procurements for Communications Nodes and mission engineering	MIPR	NIWC PAC : San Diego, CA	0.000	0.000		2.200	Mar 2023	0.000		-		0.000	0.000	2.200	-
		Subtotal	0.000	0.000		10.480		0.000		-		0.000	0.000	10.480	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	MIPR	NAVFAC EXWC : Port Hueneme, CA	0.000	0.000		4.800	Mar 2023	0.000		-		0.000	0.000	4.800	-
Developmental Test & Evaluation (DT&E)	MIPR	NIWC PAC : San Diego, CA	0.000	0.000		1.400	Mar 2023	0.000		-		0.000	0.000	1.400	-
Developmental Test & Evaluation (DT&E)	MIPR	NUWC NP : Newport RI	0.000	0.000		0.200	Mar 2023	0.000		-		0.000	0.000	0.200	-
		Subtotal	0.000	0.000		6.400		0.000		-		0.000	0.000	6.400	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2804 / *OCTOPUS*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Management and Oversight	MIPR	USINDOPACOM : Aiea, HI	0.000	0.000		0.700	Apr 2023	0.000		-		0.000	0.000	0.700	-
		Subtotal	0.000	0.000		0.700		0.000		-		0.000	0.000	0.700	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		17.580		0.000		-		0.000	0.000	17.580	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experim entation & Dem*	**Project (Number/Name)** 2804 / *OCTOPUS*

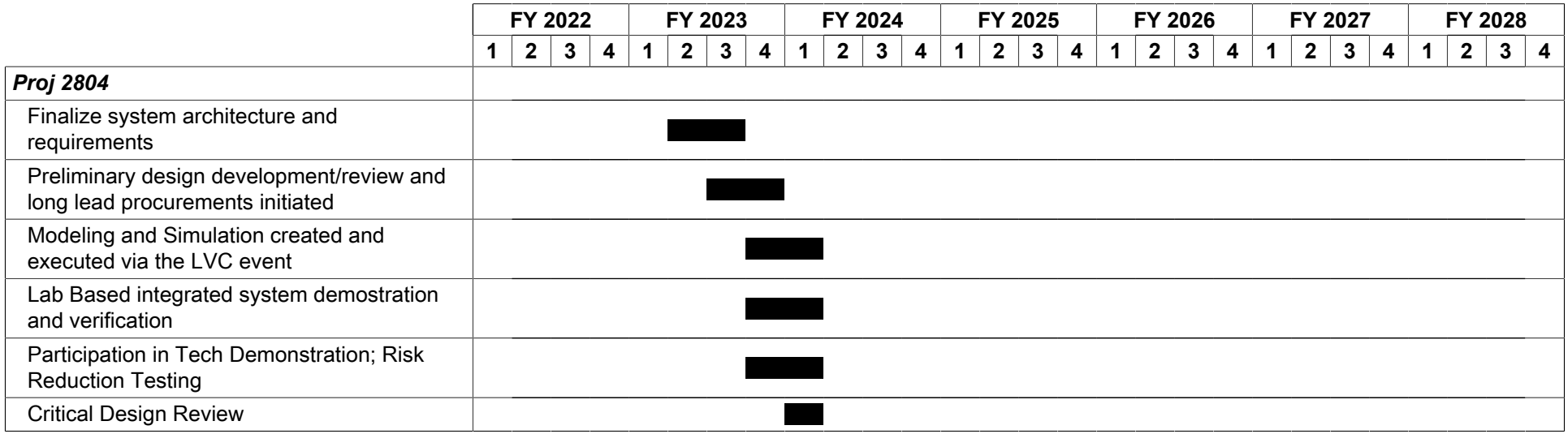


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2804 / *OCTOPUS*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2804				
Finalize system architecture and requirements	2	2023	3	2023
Preliminary design development/review and long lead procurements initiated	3	2023	4	2023
Modeling and Simulation created and executed via the LVC event	4	2023	1	2024
Lab Based integrated system demostration and verification	4	2023	1	2024
Participation in Tech Demonstration; Risk Reduction Testing	4	2023	1	2024
Critical Design Review	1	2024	1	2024

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2805 / *GRASP-X*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2805: *GRASP-X*	0.000	0.000	3.750	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.750
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

PRJ 2805- GRASP-X, is a new start for FY2023.

GRASP-X is a follow-on to the FY-20 GRASP Warfighter Lab Incentive Fund (WLIF) project which automated geolocation and reporting against a single threat threat system of interest to USINDOPACOM and the EA-18G Growler. In addition to addressing additional, new signals of interest, GRASP-X also integrates and demonstrates an interface to more rapidly obtain additional overhead collection. GRASP WLIF project was previously funded in Program Element 0603829J.

A. Mission Description and Budget Item Justification

Geo-location and Reporting of Advanced Signals Pacific - eXpanded (GRASP-X) project 2805 is a follow-on project to expand the GRASP capability to additional threat signals of interest to USINDOPACOM. NAVAIR PMA-265 Program Office, EA-18G will transition capability into base Command & Control (C2) and Electromagnetic Support (ES) programs. Initial Operational Capability (IOC) by Q2 FY24.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: GRASP-X	0.000	3.750	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2023 Plans: -GRASPX interface to AIM enabled -Field demo, software mods to add 2 new threats, AARGM-ER Precision Strike Options -GRASPx Limited Operations					
FY 2024 Base Plans: N/A					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: decrease due to project completion.					
Accomplishments/Planned Programs Subtotals	0.000	3.750	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2805 / *GRASP-X*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Leverage existing USINDOPACOM FFRDC (GTRI), AFRL, and NRO contracts to develop, integrate, test, and deliver new capability.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2805 / *GRASP-X*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	SS/CPFF	NGC : Falls Church, VA	0.000	0.000		0.800	Mar 2023	0.000		-		0.000	0.000	0.800	0.800
Software Development	SS/CPFF	ZETA : Fairfax, VA	0.000	0.000		0.600	Mar 2023	0.000		-		0.000	0.000	0.600	0.600
Primary Hardware Development	SS/CPFF	MSRL : Lorton, VA	0.000	0.000		0.950	Mar 2023	0.000		-		0.000	0.000	0.950	0.950
		Subtotal	0.000	0.000		2.350		0.000		-		0.000	0.000	2.350	N/A

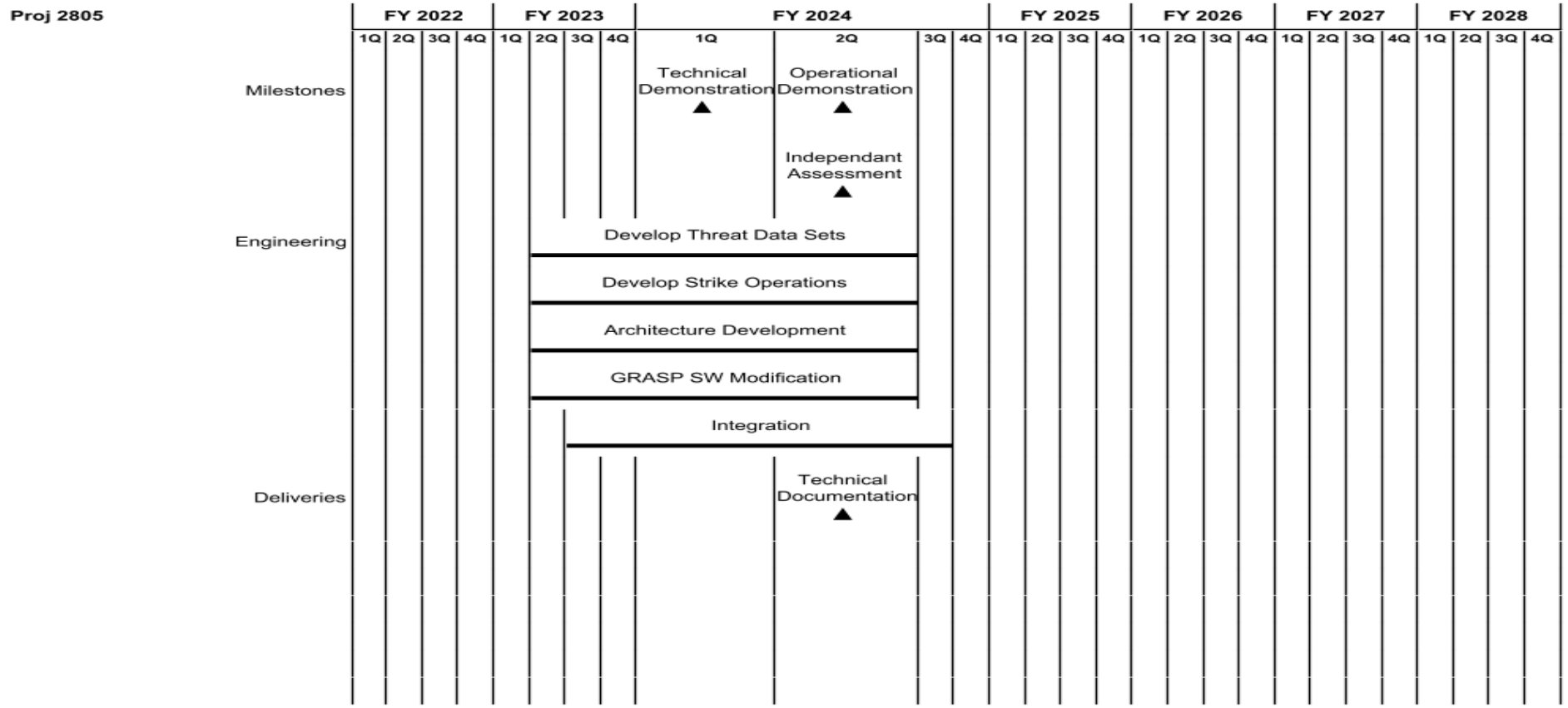
Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Eng & Tech Services	TBD	NSWC : Crane, IN	0.000	0.000		0.800	Mar 2023	0.000		-		0.000	0.000	0.800	0.800
Development Support	SS/CPFF	GTRI : Atlanta, GA	0.000	0.000		0.600	Mar 2023	0.000		-		0.000	0.000	0.600	0.600
		Subtotal	0.000	0.000		1.400		0.000		-		0.000	0.000	1.400	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		3.750		0.000		-		0.000	0.000	3.750	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2805 / *GRASP-X*



2024PB - 0604030N - 2805

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2805 / *GRASP-X*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2805				
Milestones: Technical Demonstration	1	2024	1	2024
Milestones: Operational Demonstration	2	2024	2	2024
Milestones: Independant Assessment	2	2024	2	2024
Engineering: Develop Threat Data Sets	2	2023	2	2024
Engineering: Develop Strike Operations	2	2023	2	2024
Engineering: Architecture Development	2	2023	2	2024
Engineering: GRASP SW Modification	2	2023	2	2024
Engineering: Integration	3	2023	3	2024
Deliveries: Technical Documentation	2	2024	2	2024

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2806 / *Classified #1*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2806: *Classified #1*	0.000	0.000	20.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	20.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Details held at a higher classification

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Classified #1	0.000	20.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2023 Plans: Details held at a higher classification					
FY 2024 Base Plans: N/A					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: Details held at a higher classification					
Accomplishments/Planned Programs Subtotals	0.000	20.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2806 / *Classified #1*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
classified	TBD	TBD : TBD	0.000	0.000		20.000	Nov 2022	0.000		-		0.000	0.000	20.000	-
		Subtotal	0.000	0.000		20.000		0.000		-		0.000	0.000	20.000	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		20.000		0.000		-		0.000	0.000	20.000	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2806 / *Classified #1*

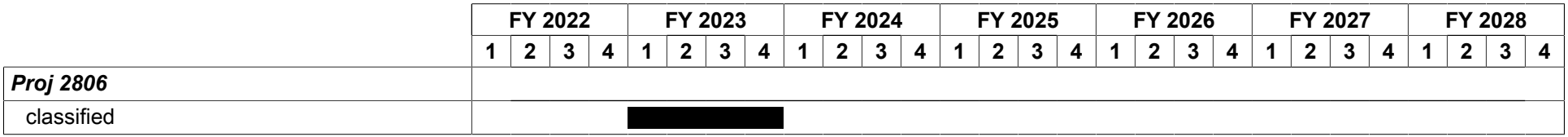


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2806 / *Classified #1*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2806				
classified	1	2023	4	2023

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2807 / *Classified #2*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2807: *Classified #2*	0.000	0.000	5.750	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.750
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Details held at a higher classification

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Hyperspectral Upgrade to Classified #2	0.000	5.750	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2023 Plans: Details held at a higher classification					
FY 2024 Base Plans: N/A					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: Details held at a higher classification					
Accomplishments/Planned Programs Subtotals	0.000	5.750	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	Project (Number/Name) 2807 / *Classified #2*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
classified	TBD	TBD : TBD	0.000	0.000		5.750	Nov 2022	0.000		-		0.000	0.000	5.750	-
		Subtotal	0.000	0.000		5.750		0.000		-		0.000	0.000	5.750	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		5.750		0.000		-		0.000	0.000	5.750	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2807 / *Classified #2*

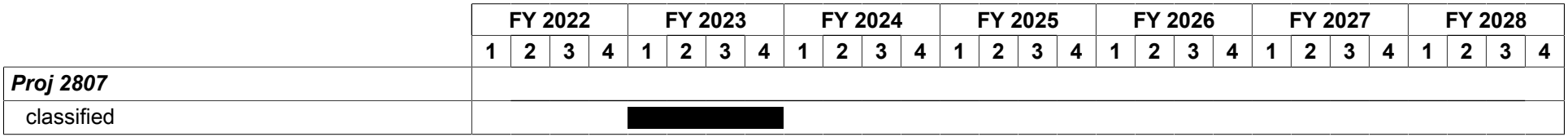


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604030N / *Rapid Prototyping, Experimentation & Dem*	**Project (Number/Name)** 2807 / *Classified #2*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2807				
classified	1	2023	4	2023