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 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0304785N *I ISR & INFO OPERATIONS*							
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	585.027	135.538	135.252	174.271	-	174.271	179.713	168.220	163.655	164.827	Continuing	Continuing
2134: *Shipboard IW Exploit*	483.399	72.947	78.293	103.829	-	103.829	108.832	97.845	92.581	92.297	Continuing	Continuing
2174: *Intelligence Carry-On Program (ICOP)*	1.175	0.645	0.663	0.681	-	0.681	0.682	0.694	0.707	0.722	Continuing	Continuing
2227: *Distributed Common Ground System (DCGS-N) Inc 2*	65.166	30.748	29.339	31.322	-	31.322	31.290	31.810	32.371	33.022	327.060	612.128
2351: *MDA*	4.000	3.846	3.217	3.269	-	3.269	3.105	3.154	3.190	3.255	Continuing	Continuing
2363: *Remote Sensing Capability Development*	0.000	0.000	0.000	4.801	-	4.801	4.696	4.772	4.856	4.953	Continuing	Continuing
3091: *Advanced Cryptological Sys Eng (CCOP)*	9.125	4.386	4.853	8.109	-	8.109	8.221	8.518	8.913	9.117	Continuing	Continuing
3786: *Tactical Edge Targeting*	22.162	22.966	18.887	22.260	-	22.260	22.887	21.427	21.037	21.461	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): M464

A. Mission Description and Budget Item Justification

The Tactical Cryptologic Systems in this budget will implement digital system-of-systems engineering by using tools such as Model Based System Engineering (MBSE) and Digital Twins to create adaptable digital models to optimize system engineering from design, development and testing to operations and sustainment. Programs will use Development, Security and Operations (DevSecOps) processes for continuous development, integration, testing and deployment, along with common platform services such as Agile Core Services (ACS), for faster fielding of capability. Overall program development efforts include the investigation of emerging technologies through study, development and associated testing for feasibility of program insertion.

The Shipboard Information Warfare (IW) Exploit project consists of the Ship's Signal Exploitation Equipment (SSEE) Family of Systems (FoS) Increment F (and variants), Spectral, SSEE Modifications, Integrated Communications and Data Systems (ICADS) Increment II, Horizon and Distributed Operations (DO). These programs are classified Information Warfare/Electronic Warfare (IW/EW) tactical cryptologic systems supporting Command and Control, Battlespace Awareness, Electromagnetic Maneuver Warfare/Integrated Fires (EMW/IF) modes of global engagement. The systems enable power projection at the strategic level and operate in any environment including communications challenged situations across the globe. They provide maritime Signals Intelligence (SIGINT) and offensive Electronic Warfare (EW) capabilities at the tactical level, ensuring surface vessels' ability to disrupt, deny, degrade and defeat adversary (state and non-state) use of the radio frequency spectrum while simultaneously providing advanced Information Related Capabilities (IRC) to maritime warfighters. SSEE FoS detects adversary radio frequency emissions and uses them to provide critical tactical and strategic intelligence, situational awareness, and hostile threat assessment depriving the adversary of enhanced signals exploitation capability and limiting their ability to counterstrike. The systems are managed as incremental acquisition programs designed to pace

adversary communications technology development by using Research, Development, Test and Evaluation (RDT&E) funding to rapidly develop and transition new technologies and to provide new capabilities as Pre-Planned Product Improvement (P3I) upgrades to the systems' hardware/software configuration. These upgrades focus on developing and delivering expanded offensive IW/EW and future Cyberspace capabilities in accordance with Presidential direction and in support of multiple Operational Plans (OPLANS).

The details of the ICADS and Horizon sub-projects are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Distributed Common Ground System (DCGS) is a cooperative effort between the services, agencies, and the DoD to provide systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms. DCGS - Navy (DCGS-N) is the Navy instance of the Under Secretary of Defense, Intelligence (USD (I)) DCGS FoS. DCGS-N system fulfills a critical mission set Afloat and Ashore. DCGS-N processes and exploits tactical and Imagery Intelligence (IMINT) and SIGINT, facilitates precision target geopositioning, mensuration, and imagery capabilities, integrates national IMINT requirements and processing capabilities from the National Geospatial-Intelligence Agency (NGA), and shares Intelligence, Surveillance, Reconnaissance, and Targeting (ISR&T) and Command and Control information via the DCGS Integration Backbone (DIB), Defense Intelligence Information Enterprise (DI2E), and Net-Centric Enterprise Services (NCES) standards with a wide range of customers. The DCGS-N program conducts research and assessments of tactically relevant, emerging technologies program insertion to ensure superiority in the intelligence domain.

Intelligence Carry-On Program (ICOP) provides Indications and Warnings (I&W), battlespace awareness/visualization, pattern of life analysis, Full-Motion Video (FMV) and Intelligence Surveillance and Reconnaissance (ISR) Processing, Exploitation and Dissemination (PED) capabilities in support of Unit-Level Navy surface (CG, DDG, and LPD classes) and expeditionary operations. The ICOP system includes a three-eyed ruggedized workstation that serves as a powerful afloat edge computing device that is capable of operating on all three security domains (NIPR, SIPR and JWICs) and an antenna/receiver set (called Communications Module 3 - CM3) that is used to ingest, process and exploit airborne sensor data. In addition to supporting multi-intelligence capabilities, ICOP/CM3 provides an end-to-end ISR PED architecture that includes processing organic shipboard camera systems to support Navy-wide Operational Task (OPTASK) Visual Information (Strategic Communications - "First to the Truth," pattern of life analysis and use of force/rules of engagement decisions).

The Maritime Domain Awareness (MDA) project is a portfolio of partnerships that leverages the investments of other agencies in MDA tools and data, and funds the enhancement of those tools to meet Navy requirements for worldwide over-the-horizon vessel tracking and vessel data in support of DCGS-N, Navy Tactical Data Manager (NTDM) and Automated Information System (AIS) program. The MDA project manages the partnership with the Department of Transportation to leverage the Maritime Safety and Security Information System (MSSIS) and SeaVision, a non-Public Key Infrastructure (PKI) information sharing tool used by United States Indo-Pacific Command (INDOPACOM), European Command (EUCOM), Africa Command (AFRICOM), other USG agencies, and foreign partner nations to increase maritime security by sharing information. SeaVision is primarily accessed through a web front end where users can visualize tracks and run a growing set of analytics. SeaVision also has Application Programming Interfaces (APIs) for machine-to-machine data exchange with authorized systems including the Navy's AIS. The MDA project manages the partnership with the National Reconnaissance Office (NRO) to leverage the THRESHER system, which provides over-the-horizon vessel tracking and analysis tools. The MDA project is working with NRO to enhance THRESHER Maritime capabilities to improve the correlated and fused track feed over the Integrated Broadcast Service, which provides a track picture to IC systems including Fusion Analysis and Development Effort (FADE) Multi-Intelligence Spatial Temporal (MIST) and to improve the analytics provided by the THRESHER web front end on both JWICS and SIPR net.

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 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0304785N *I ISR & INFO OPERATIONS*

Remote Sensing Capability Development (RSCD) project provides enhanced remote sensing capability to the Fleet to discriminate oceanographic phenomenon from the natural environment. This is achieved by automating tools for tasking, analysis, and dissemination of oceanographic data to increase coverage area, reduce timelines, and decrease analyst workload.

The Cryptologic Carry-on Program (CCOP) rapidly develops augmented SIGINT capabilities in response to Combatant Command requirements by fielding quick-reaction surface, subsurface, and airborne cryptologic carry-on capabilities. There are ~124 cryptologic capable surface ships and shore sites in the current Navy inventory; each of these is a potential user of this carry-on equipment, depending on deployment schedules and tempo of operations. In addition, numerous other Naval and Coast Guard platforms serve as other potential users.

The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	136.134	135.366	147.457	-	147.457
Current President's Budget	135.538	135.252	174.271	-	174.271
Total Adjustments	-0.596	-0.114	26.814	-	26.814
• Congressional General Reductions	-	-0.114			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-0.596	0.000	23.899	-	23.899
• Rate/Misc Adjustments	0.000	0.000	2.915	-	2.915

Change Summary Explanation

The FY 2024 funding request was reduced by $7.338 million to account for the availability of prior year execution balances.

TECHNICAL:
- Remote Sensing Capability Development (RSCD) Program (Project 2363) has been realigned from PE 0604231N to PE 0304785N starting in FY24; RSCD is a Military Intelligence Program (MIP), which aligns to PE 0304785N.

SCHEDULE:

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 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0304785N *I ISR & INFO OPERATIONS*

Project 2134: SSEE INC-F
- Removed FY24 SSEE Inc F (all variants) FRP in accordance with the schedule.

Project 2134: Spectral
- Spectral MS-B shifted from Q3FY22 to Q2FY23 in accordance with the schedule.
- PRA 4 shifted from Q3FY24 to Q2FY24 in accordance with the schedule.
- PRA IT shifted from Q2FY24 to Q3FY24 in accordance with the schedule.

Project 2134: ICADS
- The details of the ICADS sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Project 2134: Horizon and Distributed Ops
- The details of the Horizon sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

FUNDING:

Program Element 0304785N funding increased ($39.019M) from FY 2023 to FY 2024; Major increases/decreases noted below:

Project 2134: SSEE INC-F (-$1.564M)
- FY 2024 decrease is due to completion of development of the Medusa Increment B SIGINT and EW capability.

Project 2134: Spectral (+$4.100M)
- FY 2024 increase supports Developmental Testing (DT) and Operational Assessment (OA), including cybersecurity testing, of PRA systems to support a Limited Deployment Decision/Milestone C.

Project 2134: SSEE Modifications (-$0.481M)
- FY 2024 decrease due to the completion of development of the High Gain Information Operations (HGIO) antenna duplexing improvement capability.

Project 2134: ICADS Inc II (+$23.827M)
- The details of the ICADS sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Project 2134: Horizon and Distributed Operations (DO) (-$0.346)
- The details of the Horizon and Distributed Ops sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

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 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0304785N *I ISR & INFO OPERATIONS*

Project 2174: ICOP (+$0.018M)
- No significant changes from FY 2023 to FY 2024.

Project 2227: DCGS-N Inc 2 (+$1.983M)
- FY 2024 increase is attributed to the development and integration of applications which deliver various capabilities to the Fleet.

Project 2351: MDA (+$0.052M)
- No significant changes from FY 2023 to FY 2024.

Project 2363: RSCD (+$4.801M)
- FY 2024 increase within this PE due to movement of project from PE 0604231N to PE 0304785N.

Project 3091: CCOP (+$3.256M)
- FY 2024 increase is attributed to conducting Limited Objective Experiments (LOEs) for SWAMPDONKEY and VIKING VESPER.

Project 3786: TET (+$3.373M)
- The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy											Date: March 2023	
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*				Project (Number/Name) 2134 / *Shipboard IW Exploit*			
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**
2134: *Shipboard IW Exploit*	483.399	72.947	78.293	103.829	-	103.829	108.832	97.845	92.581	92.297	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Shipboard Information Warfare (IW) programs are classified Information Warfare/Electronic Warfare (IW/EW) tactical cryptologic systems supporting all facets of Assured Command and Control, Battlespace Awareness, and Electromagnetic Maneuver Warfare/Integrated Fires (EMW/IF) modes of global engagement. These programs provide both Carrier and Expeditionary Strike Group combatant commanders with real-time indications and warnings (I&W) through acquisition ("Find") and localization ("Fix") of Signals of Interest (SOIs) as well as the Surface Fleet's only EW non-kinetic capabilities ("Finish"). As incremental acquisition programs, Research, Development, Test and Evaluation (RDT&E) funding is required to: rapidly develop and integrate new technologies and associated new operational capabilities to pace both known and future signal threats and transition Pre-Planned Product Improvement (P3I) upgrades to the systems' hardware/software configuration; and deliver upgrades to fielded systems to satisfy Fleet requirements. Program funding incorporates P3I, new Commercial-Off-The-Shelf (COTS) or Government-Off-the-Shelf (GOTS) based technologies and software into the existing systems to address Fleet priorities and capability gaps or to combat known threats. Funding focuses on developing and delivering expanded non-kinetic EW capabilities and net-centric Service Oriented Architecture (SOA) to meet intended interoperability objectives through Fleet defined Common Core Architectures (CCA) to enable application hosting services. Capability development is in accordance with Presidential direction and strategic objectives while also supporting multiple Operational Plans (OPLANS), Concepts of Operations (CONOPS), and communications challenged or Anti-Access Area Denial (A2AD) scenarios (further details held at a higher classification level). Ship's Signal Exploitation Equipment (SSEE) Family of Systems (FoS) will continue development and integration of capabilities which can operate in communication challenged environments for the SSEE Increment F, SSEE Modifications, and Spectral systems. Funding will bring enhanced signals exploitation and expanded SOIs processing capabilities to fielded systems and supports development and integration efforts to fuse data produced and distributed by Shipboard IW/Information Operations (IO) systems with other intelligence data at multiple classification levels to provide data to shipboard combat systems to support kinetic and non-kinetic fires. Data fusion can also be used to enable a more complete understanding and more agile and effective exploitation within the electromagnetic spectrum.

SSEE Increment F (and its variants) is the primary, currently fielded system providing full-scope, simultaneous capability, while system variants bring a new dimension of afloat Signals Intelligence (SIGINT) capabilities with advanced scalability and modularity for mission planners to execute.

SSEE Modifications is a classified tactical signals intelligence frequency extension capability integrating and interoperating with the SSEE Increment F host system and is broken into two major components: Paragon, which provides simultaneous detection, collection, processing, IO, and display of communication intelligence data from hostile, high threat, and adversary platforms in select frequency ranges not prosecuted or countered with the host system; and the Graywing subsystem which is an advanced common data link system with SSEE Increment F systems.

Spectral is the Navy's next-generation SIGINT, EMW, and IO weapons system enabling both maritime IW/EW for both Naval Carrier and Expeditionary Strike Group operations. Spectral's primary objective is to provide our Navy's operators with the most capable Radio Frequency (RF) Signals Intelligence (SIGINT) collection and exploitation weapons system available to support the widest range of maritime strategic and tactical mission areas, including I&W, Targeting, and Ship's Self

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

Defense. Spectral provides scalable, mission configurable, and modular capabilities using a common user interface through an open software architecture to allow rapid integration and deployment of special use capabilities satisfying Navy and Joint maritime intelligence requirements beyond what existing systems can provide.

The details of the ICADS and Horizon sub-projects are classified SECRET and are submitted annually to Congress in the classified budget justification books.

In FY 2024, SSEE Increment F will continue P3I and software development to provide enhanced capabilities into the SSEE Increment F system and its variants by continuing to develop, refine, and test new, unexplored and unexploited cyber capabilities in alignment with Joint and service level cryptologic requirements. These include, but are not limited to future Medusa increments and techniques, signal collection and exploitation capabilities through added signal processing capacity and data flows (details held at higher classification), capability drop packages to deliver capability to the Fleet. Develop and deliver SIGINT and EW capabilities based upon the warfighter identified FY 2024 SOIs threats (updated annually) for integration into the SSEE Increment F systems (including its variants) and deliver as required to meet Fleet requirements. Continue the architecture, network performance specifications, and hosting environment to bring NSAnet afloat to all Naval platforms by deploying Navy Tactical Data Network (NTDN) while applying national cybersecurity standards and initiatives to bring advanced inter-strike group network capabilities able to operate in any environment while continuing to integrate cryptologic systems with shipboard combat systems for tightly coupled mission execution across the Navy.

In FY 2024, Spectral will complete development of two PRA systems (Ashore and Afloat) in support of testing events and system certification and continue the delivery of capability drops to SSEE FoS. Continue development efforts to update and deliver new mission modules (including Combat System Integration modules) to capture modern signal sets (e.g., complex wider bandwidth, shorter duration, low probability of detect/low probability of intercept) which will be incrementally delivered to the Fleet through capability drops. Continue development efforts updating enhanced mission modules designed to capture modern signal sets (e.g., more complex wider bandwidth, shorter duration, low probability of detect/low probability of intercept) to be incrementally delivered to the Fleet through capability drops. Continue to build the CI/CD pipeline to improve modularity, automation, and remote delivery for future Capability Drops which will improve overall installation efficiency. Continue virtual software development environment for enhanced configuration management through Web-based services and applications for a robust, open, modular software development environment. Continue development and engineering for Spectral's Advanced RF aperture solutions and AESA topside and execute engineering design in topside maritime antennas to enable execution of full functionality and scope of Spectral requirements. Complete development activities to support combat systems integration with the Surface Electronic Warfare Improvement Program (SEWIP). Commence Developmental Testing (DT) and Operational Assessment (OA), including cybersecurity testing, of PRA systems to support a Limited Deployment Decision/Milestone C in FY25.

In FY 2024, SSEE Modifications will continue hardware and software development to bring advanced capabilities to the Fleet for simultaneous detection, collection, processing, electronic warfare and display of communication intelligence data from hostile, high threat and adversary platforms in select extended frequency ranges not prosecuted today.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Ship's Signal Exploitation Equipment Inc F (SSEE Inc F)	7.019	6.496	4.932	0.000	4.932
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

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: - Continue Pre-Planned Product Improvement (P3I) and software development to provide enhanced capabilities into the Ship's Signal Exploitation Equipment (SSEE) Increment F system and its variants by continuing to develop, refine, and test new, unexplored and unexploited cyber capabilities in alignment with Joint and service level cryptologic requirements. These include, but are not limited to advanced Medusa applications and techniques, signal collection and exploitation capabilities through added signal processing capacity and data flows (details held at higher classification), capability drop packages to deliver capability to the Fleet. -Develop and deliver Signals Intelligence (SIGINT) and Electronic Warfare (EW) capabilities based upon the warfighter identified FY 2023 Signals of Interest (SOI) threats (updated annually) for integration into the SSEE Increment F systems (including its variants) and deliver as required to meet Fleet requirements. - Continue the architecture, network performance specifications, and hosting environment to bring NSAnet afloat to all Naval platforms, after completing NSAnet afloat on large deck platforms in FY22, by deploying Navy Tactical Data Network (NTDN) while applying national cybersecurity standards and initiatives to bring advanced inter-strike group network capabilities able to operate in any environment while continuing to integrate cryptologic systems with shipboard combat systems for tightly coupled mission execution across the Navy.					
FY 2024 Base Plans: - Continue P3I and software development to provide enhanced capabilities into the SSEE Increment F system and its variants by continuing to develop, refine, and test new, unexplored and unexploited cyber capabilities in alignment with Joint and service level cryptologic requirements. These include, but are not limited to future Medusa increments and techniques, signal collection and exploitation capabilities through added signal processing capacity and data flows (details held at higher classification), capability drop packages to deliver capability to the Fleet. - Develop and deliver SIGINT and EW capabilities based upon the warfighter identified FY 2024 SOIs threats (updated annually) for integration into the SSEE Increment F systems (including its variants) and deliver as required to meet Fleet requirements. - Continue the architecture, network performance specifications, and hosting environment to bring NSAnet afloat to all Naval platforms by deploying NTDN while applying national cybersecurity standards and initiatives to bring advanced inter-strike group network capabilities able to operate in any environment while continuing to integrate cryptologic systems with shipboard combat systems for tightly coupled mission execution across the Navy.					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement:					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Ship's Signal Exploitation Equipment Inc F (SSEE Inc F) FY 2023 to FY 2024 decrease (-$1.564M) due to completion of development of the Medusa Increment B SIGNIT and EW capability.					
Title: Spectral	43.724	44.921	49.021	0.000	49.021
Articles:	-	-	-	-	-
FY 2023 Plans: - Continue development of two Production Representative Articles (PRA) systems (Ashore and Afloat) in support of testing events and system certification and will commence the delivery of capability drops to Ship's Signal Exploitation Equipment (SSEE) Family of Systems (FoS) . - Continue development efforts to update and deliver new mission modules (including Combat System Integration modules) to capture modern signal sets (e.g., complex wider bandwidth, shorter duration, low probability of detect/low probability of intercept) which will be incrementally delivered to the Fleet through capability drops. - Continue development efforts updating enhanced mission modules designed to capture modern signal sets (e.g., more complex wider bandwidth, shorter duration, low probability of detect/low probability of intercept) to be incrementally delivered to the Fleet through capability drops. - Continue to build the Continuous Integration/Continuous Deliver (CI/CD) pipeline to improve modularity, automation, and remote delivery for future Capability Drops which will improve overall installation efficiency. - Continue virtual software development environment for enhanced configuration management through Web-based services and applications for a robust, open, modular software development environment. - Continue development and engineering for Spectral's Advanced Radio Frequency (RF) aperture solutions and Active Electronically Steered Array (AESA) topside and execute engineering design in topside maritime antennas to enable execution of full functionality and scope of Spectral requirements. - Conduct development activities to support combat systems integration with the Surface Electronic Warfare Improvement Program (SEWIP).					
FY 2024 Base Plans: - Complete development of two PRA systems (Ashore and Afloat) in support of testing events and system certification and continue the delivery of capability drops to SSEE FoS. - Continue development efforts to update and deliver new mission modules (including Combat System Integration modules) to capture modern signal sets (e.g., complex wider bandwidth, shorter duration, low probability of detect/low probability of intercept) which will be incrementally delivered to the Fleet through capability drops.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Continue development efforts updating enhanced mission modules designed to capture modern signal sets (e.g., more complex wider bandwidth, shorter duration, low probability of detect/low probability of intercept) to be incrementally delivered to the Fleet through capability drops. - Continue to build the CI/CD pipeline to improve modularity, automation, and remote delivery for future Capability Drops which will improve overall installation efficiency. - Continue virtual software development environment for enhanced configuration management through Web-based services and applications for a robust, open, modular software development environment. - Continue development and engineering for Spectral's Advanced RF aperture solutions and AESA topside and execute engineering design in topside maritime antennas to enable execution of full functionality and scope of Spectral requirements. - Complete development activities to support combat systems integration with the Surface Electronic Warfare Improvement Program (SEWIP). - Commence Developmental Testing (DT) and Operational Assessment (OA), including cybersecurity testing, of PRA systems to support a Limited Deployment Decision/Milestone C in FY25. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Spectral FY 2023 to FY 2024 increase (+$4.100M) to conduct Developmental Testing (DT) and Operational Assessment (OA), including cybersecurity testing, of PRA systems to support a Limited Deployment Decision/ Milestone C.					
Title: Ship's Signal Exploitation Equipment Modifications (SSEE Modifications) ***Articles:*** ***FY 2023 Plans:*** - Continue hardware and software development to bring advanced capabilities to the Fleet for simultaneous detection, collection, processing, electronic warfare and display of communication intelligence data from hostile, high threat and adversary platforms in select extended frequency ranges not prosecuted today. ***FY 2024 Base Plans:*** - Continue hardware and software development to bring advanced capabilities to the Fleet for simultaneous detection, collection, processing, electronic warfare and display of communication intelligence data from hostile, high threat and adversary platforms in select extended frequency ranges not prosecuted today. ***FY 2024 OCO Plans:***	1.956 -	1.016 -	0.535 -	0.000 -	0.535 -

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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:*** Ship's Signal Exploitation Equipment Modifications (SSEE Modifications) FY 2023 to FY 2024 decrease of -$0.481M is due to completion of development of the High Gain Information Operations (HGIO) antenna duplexing improvement capability.					
Title: Horizon and Distributed Operations (DO) ***Articles:*** ***FY 2023 Plans:*** The details of the Horizon and Distributed Operations (DO) sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2024 Base Plans:*** The details of the Horizon and Distributed Operations (DO) sub-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:*** The details of the Horizon and Distributed Operations (DO) sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.	18.700 -	24.780 -	24.434 -	0.000 -	24.434 -
Title: Integrated Communications and Data Systems Increment II (ICADS Inc II) ***Articles:*** ***FY 2023 Plans:*** The details of the ICADS sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books. ***FY 2024 Base Plans:*** The details of the ICADS sub-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:***	1.548 -	1.080 -	24.907 -	0.000 -	24.907 -

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
The details of the ICADS sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.					
Accomplishments/Planned Programs Subtotals	72.947	78.293	103.829	0.000	103.829

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN / 2360: *Shipboard IW Exploit*	261.735	289.974	379.230	-	379.230	368.023	397.560	418.278	429.876	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Shipboard Information Warfare (IW) family of systems are incremental acquisition programs, which are required to rapidly develop and integrate new technologies and associated new operational capabilities to pace both known and future signal threats and transition as Pre-Planned Product Improvement (P3I) upgrades into the system's open systems architecture hardware/software configurations and deliver to fielded systems as required to satisfy Fleet needs. Program funding incorporates P3I, new Commercial-Off-The-Shelf (COTS) or Government-Off-the-Shelf (GOTS) based technologies, and software into the existing systems to address Fleet needed priorities, capability gaps or combat known threats and utilizes various competitive multiple award and single source contract activities including Prime Mission Product to develop third-party hardware and software solutions.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 2134 / *Shipboard IW Exploit*	

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
Product Development Prior Years	Various	Various : Various	291.496	0.000		0.000		0.000		-		0.000	0.000	291.496	-
Software Development SSEE	C/CPFF	Classified Contracts : Classified Contracts	15.522	4.978	Dec 2021	4.661	Dec 2022	3.223	Dec 2023	-		3.223	Continuing	Continuing	Continuing
System Engineering SSEE	C/CPFF	Classified Contracts : Classified Contracts	1.810	0.719	Dec 2021	0.683	Dec 2022	0.525	Dec 2023	-		0.525	Continuing	Continuing	Continuing
Software Development SSEE	WR	NIWC PAC : San Diego, CA	1.223	0.405	Oct 2021	0.384	Oct 2022	0.349	Oct 2023	-		0.349	Continuing	Continuing	Continuing
Hardware Development SSEE	WR	NIWC PAC : San Diego, CA	0.942	0.310	Oct 2021	0.295	Oct 2022	0.227	Oct 2023	-		0.227	Continuing	Continuing	Continuing
Software Development SSEE	WR	NRL : Washington, DC	4.250	1.337	Oct 2021	1.269	Oct 2022	0.975	Oct 2023	-		0.975	Continuing	Continuing	Continuing
Hardware Development Spectral	C/CPFF	Classified Contracts : Classified Contracts	26.909	24.670	Dec 2021	25.038	Dec 2022	25.683	Dec 2023	-		25.683	Continuing	Continuing	Continuing
Software Development Spectral	C/CPAF	Classified Contracts : Classified Contracts	5.278	8.087	Dec 2021	7.792	Dec 2022	7.919	Dec 2023	-		7.919	Continuing	Continuing	Continuing
System Engineering Spectral	WR	NIWC PAC : San Diego, CA	7.606	4.550	Oct 2021	4.598	Oct 2022	5.213	Oct 2023	-		5.213	Continuing	Continuing	Continuing
Requirements Analysis Spectral	C/CPFF	Classified Contracts : Classified Contracts	0.862	0.471	Dec 2021	0.493	Dec 2022	0.501	Dec 2023	-		0.501	Continuing	Continuing	Continuing
System Engineering Spectral	C/CPFF	Classified Contracts : Classified Contracts	7.823	4.287	Dec 2021	4.483	Dec 2022	4.556	Dec 2023	-		4.556	Continuing	Continuing	Continuing
ICADS-Classified	Various	Not Specified : Not Specified	13.657	1.461	Dec 2021	1.019	Dec 2022	24.907	Dec 2023	-		24.907	Continuing	Continuing	Continuing
Horizon - Classified	Various	Not Specified : Not Specified	0.000	18.700	Dec 2021	24.780	Dec 2022	24.434	Dec 2023	-		24.434	Continuing	Continuing	Continuing
		Subtotal	377.378	69.975		75.495		98.512		-		98.512	Continuing	Continuing	N/A

Remarks

FY2024 funding increase due to ICADS. The details of the ICADS sub-project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 2134 / *Shipboard IW Exploit*	

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
Support Prior Years	Various	Various : Various	29.574	0.000		0.000		0.000		-		0.000	0.000	29.574	-
System Eng Mgmt SSEE	C/CPFF	NIWC LANT/PAC : Various	0.575	0.232	Oct 2021	0.220	Oct 2022	0.169	Oct 2023	-		0.169	Continuing	Continuing	Continuing
		Subtotal	30.149	0.232		0.220		0.169		-		0.169	Continuing	Continuing	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
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	27.582	0.000		0.000		0.000		-		0.000	0.000	27.582	-
Developmental Test & Evaluation (DT&E)	C/CPFF	Classified Contracts : Classified Contracts	1.271	0.394	Dec 2021	0.391	Dec 2022	1.660	Dec 2023	-		1.660	0.000	3.716	-
Developmental Test & Evaluation (DT&E)	WR	NIWC LANT/PAC : Various	1.934	0.600	Oct 2021	0.391	Oct 2022	1.666	Oct 2023	-		1.666	0.000	4.591	-
Developmental Test & Evaluation (DT&E)	Various	Classifed : Classifed	0.738	0.087	Oct 2021	0.061	Oct 2022	0.000	Oct 2023	-		0.000	Continuing	Continuing	Continuing
		Subtotal	31.525	1.081		0.843		3.326		-		3.326	Continuing	Continuing	N/A

Remarks

FY2024 funding increase due to Spectral Developmental Testing (DT) and Operational Assessment (OA), including cybersecurity testing, of PRA systems to support a Limited Deployment Decision/Milestone C.

Each Line Represents (by sort order): 1) Test & Evaluation Prior Years (All Programs); 2) Developmental Test & Evaluation SSEE and Spectral; 3) Developmental Test & Evaluation SSEE and Spectral; 4) ICADS-Classified.

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
Management Prior Years	Various	Various : Various	41.312	0.000		0.000		0.000		-		0.000	0.000	41.312	-
Acqusition Management Spectral	C/CPFF	BAH : San Diego, CA	3.035	1.659	Oct 2021	1.735	Oct 2022	1.822	Oct 2023	-		1.822	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 2134 / *Shipboard IW Exploit*	

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
		Subtotal	44.347	1.659		1.735		1.822		-		1.822	Continuing	Continuing	N/A

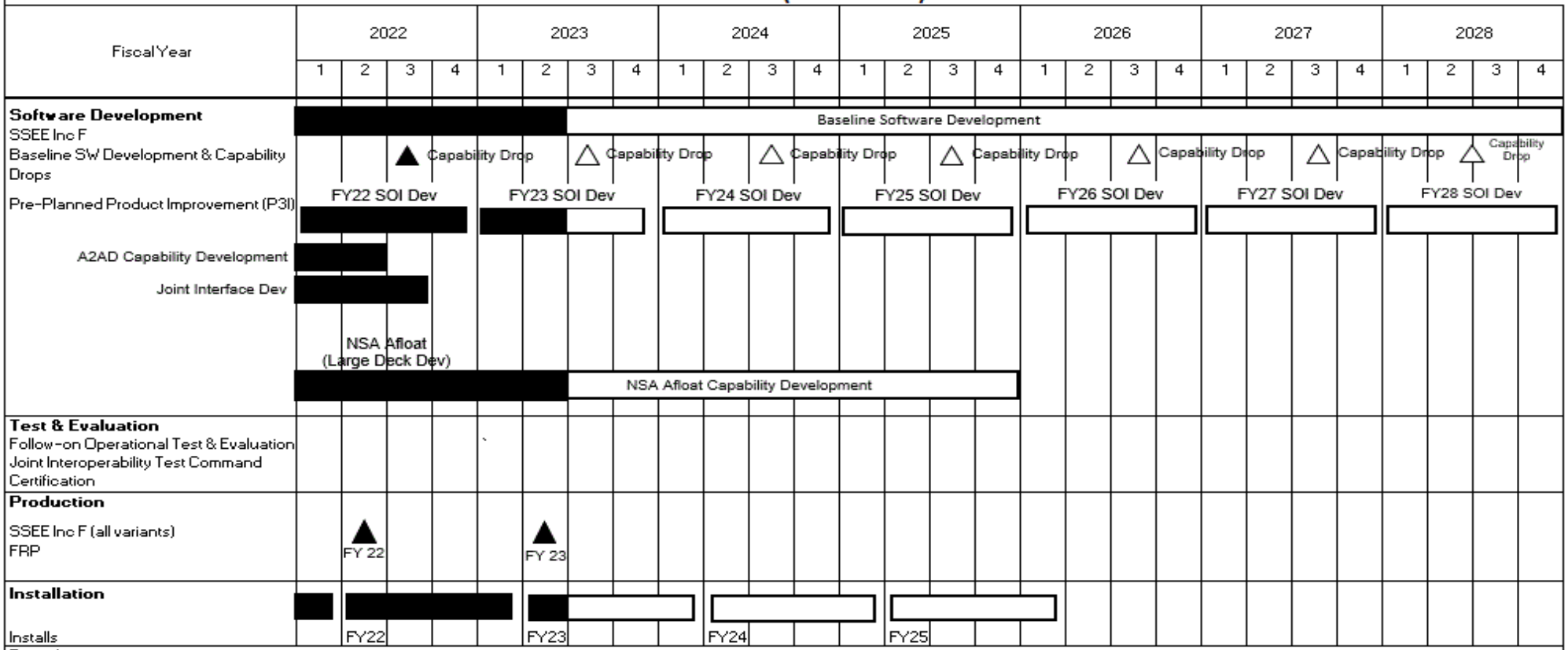
	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	483.399	72.947		78.293		103.829		-		103.829	Continuing	Continuing	N/A

Remarks

- The details of the ICADS and Horizon sub-projects are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

SSEE Inc F (all variants)



Remarks:
1) Shipboard Information Warfare (IW) Exploit / 2134 (SSEE Inc F)
2) Production milestones reflect contract award dates.
3) FY22-FY23 Production reflects SSEE Inc F (V)7/8 units only

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

Spectral

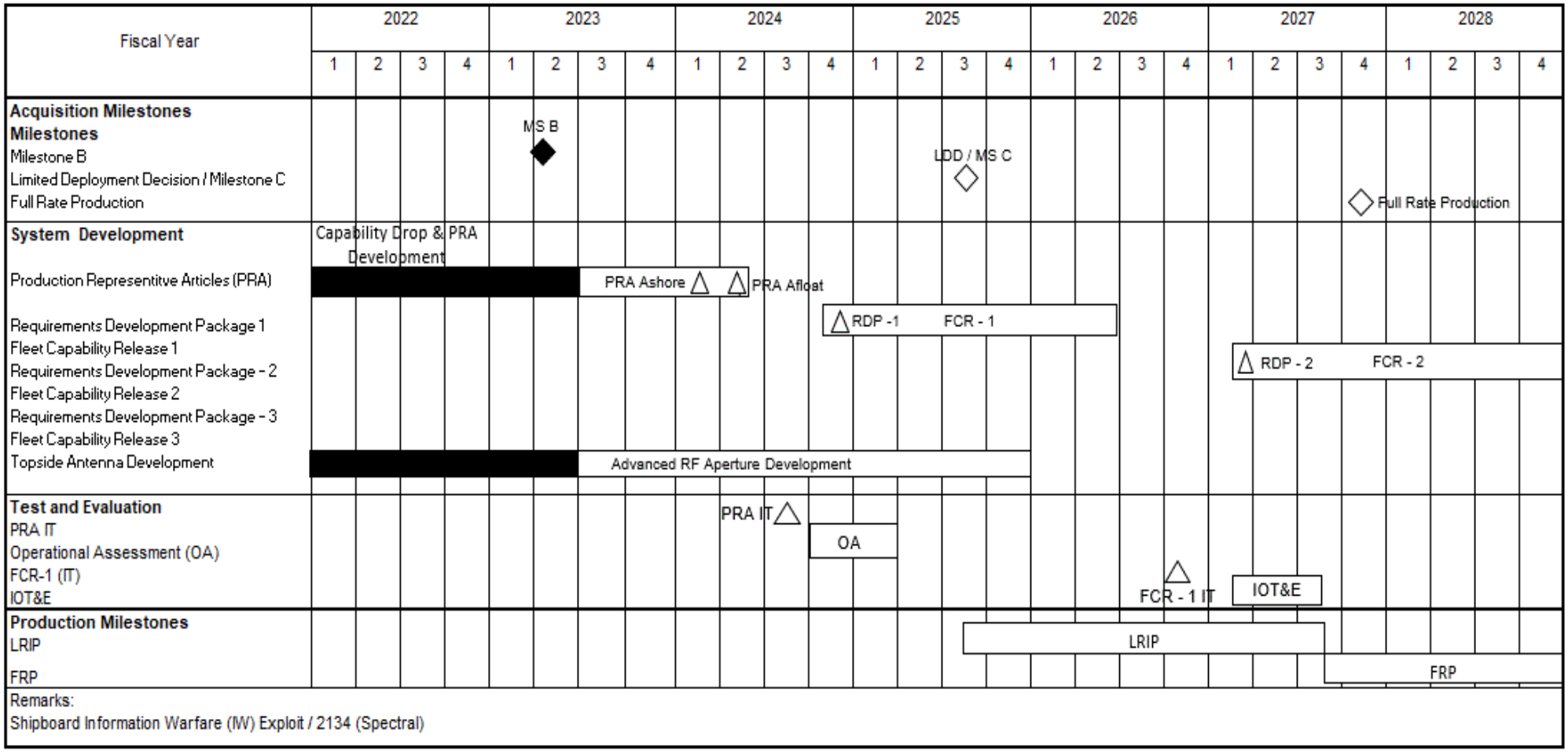
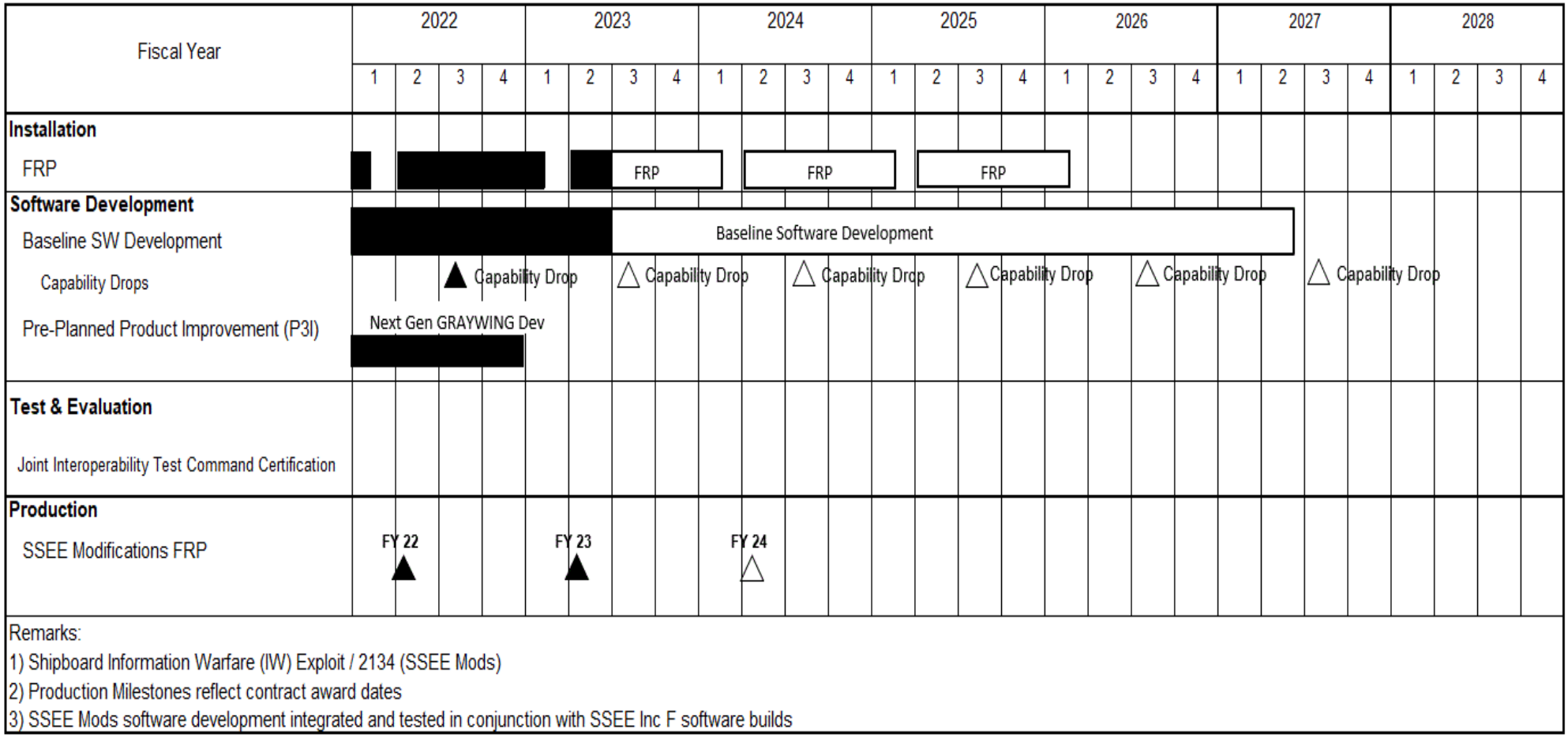


Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

SSEE Modifications



Remarks:
1) Shipboard Information Warfare (IW) Exploit / 2134 (SSEE Mods)
2) Production Milestones reflect contract award dates
3) SSEE Mods software development integrated and tested in conjunction with SSEE Inc F software builds

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SSEE Inc F				
Production: Inc F - FY22 FRP Production Milestone	2	2022	2	2022
Production: Inc F - FY23 FRP Production Milestone	2	2023	2	2023
Software Development: Inc F - FY22 Capability Drop	3	2022	3	2022
Software Development: Inc F - FY23 Capability Drop	3	2023	3	2023
Software Development: Inc F - FY24 Capability Drop	3	2024	3	2024
Software Development: Inc F - FY25 Capability Drop	3	2025	3	2025
Software Development: Inc F - FY26 Capability Drop	3	2026	3	2026
Software Development: Inc F - FY27 Capability Drop	3	2027	3	2027
Software Development: Inc F - FY28 Capability Drop	3	2028	3	2028
Software Development: Inc F - FY22 SOI Development	1	2022	4	2022
Software Development: Inc F - FY23 SOI Development	1	2023	4	2023
Software Development: Inc F - FY24 SOI Development	1	2024	4	2024
Software Development: Inc F - FY25 SOI Development	1	2025	4	2025
Software Development: Inc F - FY26 SOI Development	1	2026	4	2026
Software Development: Inc F - FY27 SOI Development	1	2027	4	2027
Software Development: Inc F - FY28 SOI Development	1	2028	4	2028
Software Development: Inc F - A2AD Capability Development	1	2022	2	2022
Software Development: Inc F - Joint Interface Development	1	2022	3	2022
Software Development: Inc F - NSA Afloat (Large Deck Development)	1	2022	1	2023
Software Development: Inc F - NSA Afloat Capability Development	1	2023	4	2025
Installation: Inc F - FRP Installation FY21	1	2022	1	2022
Installation: Inc F - FRP Installation FY22	2	2022	1	2023

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Installation: Inc F - FRP Installation FY23	2	2023	1	2024
Installation: Inc F - FRP Installation FY24	2	2024	1	2025
Installation: Inc F - FRP Installation FY25	2	2025	1	2026
Spectral				
Spectral - Milestone B	2	2023	2	2023
Spectral - Limited Deployment Decision (LDD)/ Milestone C	3	2025	3	2025
Spectral - Full Rate Production	4	2027	4	2027
Spectral - Production Representative Articles (PRA) Ashore	1	2024	1	2024
Spectral - Production Representative Articles (PRA) Afloat	2	2024	2	2024
Spectral - EDM Development /PRA Development	1	2022	2	2024
Spectral - Advanced RF Aperture Development	1	2022	4	2025
Spectral - Fleet Capability Release 1	4	2024	2	2026
Spectral - Requirements Development Package (RDP) - 1	4	2024	4	2024
Spectral - Fleet Capability Release 2	1	2027	4	2028
Spectral - Requirements Development Package (RDP) - 2	1	2027	1	2027
Spectral - FCR-1 (IT)	4	2026	4	2026
Spectral - PRA IT	3	2024	3	2024
Spectral - Initial Operational Test & Evaluation (IOT&E)	1	2027	3	2027
Spectral - Operational Assessment (OA)	4	2024	2	2025
Spectral - Low Rate Initial Production (LRIP)	3	2025	3	2027
Spectral - Full Rate Production (FRP)	3	2027	4	2028
SSEE Modifications				
SSEE Modifications - FRP Installation FY21	1	2022	1	2022
SSEE Modifications - FRP Installation FY22	2	2022	1	2023
SSEE Modifications - FRP Installation FY23	2	2023	1	2024
SSEE Modifications - FRP Installation FY24	2	2024	1	2025

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2134 / *Shipboard IW Exploit*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SSEE Modifications - FRP Installation FY25	2	2025	1	2026
SSEE Modifications - Baseline Software Development	1	2022	2	2027
SSEE Modifications - FY22 Capability Drop	3	2022	3	2022
SSEE Modifications - FY23 Capability Drop	3	2023	3	2023
SSEE Modifications - FY24 Capability Drop	3	2024	3	2024
SSEE Modifications - FY25 Capability Drop	3	2025	3	2025
SSEE Modifications - FY26 Capability Drop	3	2026	3	2026
SSEE Modifications - FY27 Capability Drop	3	2027	3	2027
SSEE Modifications - Next Generation - Graywing Development	1	2022	4	2022
SSEE Modifications - FY22 FRP Production Modification	2	2022	2	2022
SSEE Modifications - FY23 FRP Production Modification	2	2023	2	2023
SSEE Modifications - FY24 FRP Production Modification	2	2024	2	2024
ICADS Inc II				
Classified	1	2022	1	2028
Horizon and Distributed Operations (DO)				
Classified	1	2022	1	2028

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 2174 / *Intelligence Carry-On Program (ICOP)*	

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
2174: *Intelligence Carry-On Program (ICOP)*	1.175	0.645	0.663	0.681	-	0.681	0.682	0.694	0.707	0.722	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Intelligence Carry-On Program (ICOP) provides Indications and Warnings (I&W), battlespace awareness/visualization, pattern of life analysis, Full-Motion Video (FMV) and Intelligence Surveillance and Reconnaissance (ISR) Processing, Exploitation and Dissemination (PED) capabilities in support of Unit-Level Navy surface (CG, DDG, and LPD classes) and expeditionary operations. The ICOP system includes a three-eyed ruggedized workstation that serves as a powerful afloat edge computing device that is capable of operating on all three security domains (NIPR, SIPR, and JWICs) and an antenna/receiver set (called Communications Module 3 - CM3) that is used to ingest, process and exploit airborne sensor data. In addition to supporting multi-intelligence capabilities, ICOP/CM3 provides an end-to-end ISR PED architecture that includes processing organic shipboard camera systems to support Navy-wide Operational Task (OPTASK) Visual Information (Strategic Communications - "First to the Truth," pattern of life analysis and use of force/rules of engagement decisions).

In FY 2024, ICOP will continue to conduct a formal system engineering assessment of the system design for the Sensitive Compartmented Information (SCI) ICOP Mission Module. This will lead into the development and testing of the mission module. In addition, the ICOP engineering team will continue the containerization of the ICOP software stack, which will allow an additional variant to be employed on platforms that have severe space constraints such as LCS and DDG 1000 platforms.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Intelligence Carry-On Program (ICOP)	0.645	0.663	0.681	0.000	0.681
Articles:	-	-	-	-	-
FY 2023 Plans: - Commence a formal system engineering assessment of the Sensitive Compartmented Information (SCI) ICOP Mission Module system design. - Commence SCI ICOP Mission Module development and testing. - Continue system engineering efforts to containerize the ICOP software stack. - Continue integration testing with NAVAIR-sponsored manned and unmanned platforms to allow ICOP to establish data links for access to the aircrafts' full-motion video and targeting data. Supports DWO-sponsored Information Warfare Family of Systems initiative. - Continue Fusion Analysis and Development Effort (FADE) Desktop integration into the SCI ICOP Mission module baseline. FADE capability will support TIFE efforts (renamed to High Side Fusion-Afloat (HSF-A)).					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2174 / *Intelligence Carry-On Program (ICOP)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Continue to leverage Condition-Based Maintenance Plus (CBM+) SBIR Phase III contract with Charles River Analytics to mature a proactive sustainment approach to ICOP hardware deployed aboard afloat units. ***FY 2024 Base Plans:*** - Continue a formal system engineering assessment of the Sensitive Compartmented Information (SCI) ICOP Mission Module system design. - Continue system engineering efforts to containerize the ICOP software stack. - Continue integration testing with NAVAIR-sponsored manned and unmanned platforms to allow ICOP to establish data links for access to the aircrafts' full-motion video and targeting data. Supports DWO-sponsored Information Warfare Family of Systems initiative. - Finalize Fusion Analysis and Development Effort (FADE) Desktop integration into the SCI ICOP Mission module baseline and conduct sea test. FADE capability will support High Side Fusion-Afloat (HSF-A)) and Over-the-Horizon Targeting (OTH-T), a CNO priority. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** No significant changes from FY 2023 to FY 2024.					
Accomplishments/Planned Programs Subtotals	0.645	0.663	0.681	0.000	0.681

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN/2914: *Distributed Common Ground System-Navy (DCGS-N)*	16.691	15.606	16.579	-	16.579	16.452	16.881	17.249	17.631	318.640	761.693

Remarks

D. Acquisition Strategy

ICOP will continue to implement a cross-decking methodology that incorporates a two phased delivery, a permanent foundation kit which supports carry-on equipment (rotatable pool of assets) to include workstation and Communications Module 3 (CM3) antenna / receiver set. This methodology supports speed-to-fleet principles. SCI ICOP Mission Module will employ the same cross-decking methodology.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2174 / *Intelligence Carry-On Program (ICOP)*

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
ICOP Development	WR	NIWC PAC : San Diego, CA	0.901	0.645	Oct 2021	0.663	Oct 2022	0.681	Oct 2023	-		0.681	Continuing	Continuing	Continuing
DCGS-N (Inc 1) Development	Various	Various : Various	0.274	0.000		0.000		0.000		-		0.000	0.000	0.274	-
		Subtotal	1.175	0.645		0.663		0.681		-		0.681	Continuing	Continuing	N/A

	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
Project Cost Totals	1.175	0.645		0.663		0.681		-		0.681	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2174 / *Intelligence Carry-On Program (ICOP)*

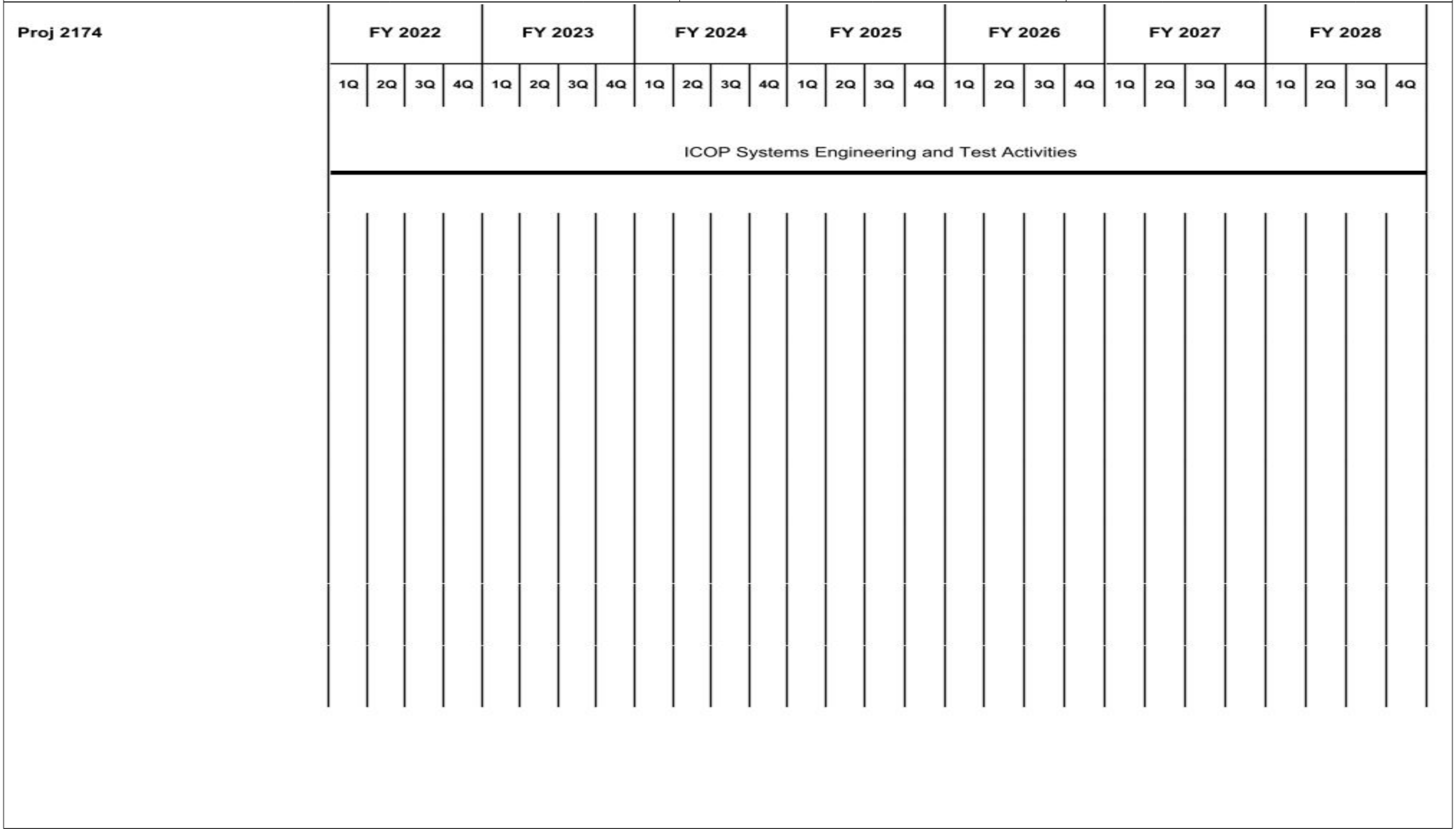


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2174 / *Intelligence Carry-On Program (ICOP)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2174				
ICOP Systems Engineering and Test Activities	1	2022	4	2028

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy												Date: March 2023
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*				Project (Number/Name) *2227 / Distributed Common Ground System (DCGS-N) Inc 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**
2227: *Distributed Common Ground System (DCGS-N) Inc 2*	65.166	30.748	29.339	31.322	-	31.322	31.290	31.810	32.371	33.022	327.060	612.128
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: M464

A. Mission Description and Budget Item Justification

DCGS-N Inc 2 is the Navy Service component version of the DCGS Family of Systems (FoS) and is deployed on force level platforms and ashore nodes to include Maritime Operations Centers (MOCs), delivering Intelligence, Surveillance, Reconnaissance, and Targeting (ISR&T) capabilities to the warfighter. DCGS-N Inc 2 is also a critical component of the Intelligence, Surveillance, and Reconnaissance (ISR) FoS, which is comprised of DCGS-N, Intelligence Carry-On Program (ICOP), Maritime Domain Awareness (MDA), Tactical Edge Targeting (TET), and Remote Sensing Capability Development (RSCD). The Programs within the ISR FoS deliver a robust suite of complimentary ISR capabilities to the Navy and Marine Corps. DCGS-N operates during peacetime, crisis, and war in afloat and shore-based operational configurations, sharing information and intelligence between the Navy, DoD, and IC. It serves as a tactical gateway to share Navy-unique sensor data (e.g., MQ-25, RAQ-35, MQ-4, and P-8, etc.) across the IC. DCGS-N will enable users to identify, locate, and confirm threats and targets using the all-source data store, support Intelligence Preparation of the Operational Environment, battle management, target nomination, and execute collection planning and requests. The program integrates this data with available Command and Control systems, weapons, combat, and Meteorological and Oceanographic forecast and sensor data. DCGS-N provides situational awareness to the operational decision-maker.

As a Software Acquisition Program (SWP), DCGS-N Inc 2 decomposes the validated Information Systems Capability Development Document (IS-CDD) requirements into six modular capability areas (CA), further defined in the DCGS-N Capabilities Need Statement (CNS), and implement agile development processes to incrementally deliver capability through the entire life cycle of the program. In alignment with the DCGS-N User Agreement (UA), requirements are prioritized through the DCGS-N Requirements Governance Board (DRGB). The Capability Needs Statement (CNS) is reviewed annually and scopes DCGS-N Inc 2 development priorities and inform near-term programmatic planning aligned to the program roadmap. User feedback informs each Iterative Release (IR) through a robust requirements process characterized by annual Fleet User Symposiums and consistent action officer coordination.

DCGS-N Inc 2 maximizes use of government off-the-shelf (GOTS) and commercial software tools and standards. DCGS-N uses an enduring Adopt-Buy-Create (ABC) methodology to identify and integrate mature GOTS and commercial items currently in use with the Defense Intelligence Security Enterprise, the DCGS FoS, broader IC Information Technology Enterprise, and existing Joint and Navy Science and Technology efforts. The program employs an agile approach to requirements management, new software development, commercial items, GOTS integration, testing, and delivery of incremental functionality aligned to user priorities. Features will be completed within the financial resources allocated to the program, with less important features deferred and prioritized based on user requirements

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

FY 2024 continues software integration and improvements resulting in IRs that are ready for testing/fielding. Additionally, DCGS-N will leverage the development and integration of applications which deliver Over the Horizon Targeting (OTH-T) and Command, Control, Communications, Computers and Counter-Intelligence (C5) ISR capabilities to the fleet.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Distributed Common Ground System-Navy (DCGS-N) Increment 2	30.748	29.339	31.322	0.000	31.322
Articles:	-	-	-	-	-
FY 2023 Plans: - Begin to leverage the development and integration of applications which deliver Over the Horizon Targeting (OTH-T) and Command, Control, Communications, Computers and Counter-Intelligence (C5) ISR capabilities to the fleet. - Continue software integration and improvements resulting in IRs that are ready for testing/fielding. - Begin optimization of Development, Security and Operations (DevSecOps) processes and environments to increase the rate of release for the fielding of Iterative Releases (IRs) by using the Enterprise infrastructure. - Commence the design and development of mission modules based systems for accelerated deployment. - Continue to design architecture which supports Denied, Disconnected, Intermittent and Limited (D-DIL) operations and development of the fundamental infrastructure delivering capability at the tactical edge. - Commence the enhancement and expansion of the Knowledge Base (KB) to support new Joint and maritime data sets such as Machine-assisted Analytic Rapid repository System (MARS). - Continue to assess developing technologies for incorporation into future baselines in support of emerging fleet capability gaps. Continue to work closely with governmental and non-governmental agencies and organizations in order to align fleet requirements with capabilities across various Technology Readiness Levels (TRLs). - Continue to target a Fleet demonstration/exercise (TRIDENT WARRIOR, Enterprise Challenge and other Fleet exercises) to test system in a large-scale, at-sea experiment. - Commence DCGS Enterprise Node (DEN) implementation of Common Data Fabric (CDF) for data sharing.					
FY 2024 Base Plans: - Leverage the development and integration of Counter-Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance, and Targeting (C-C5ISRT) capabilities for the Fleet. - Leverage the development and integration of Real-Time Spectrum Operations (RTSO) capabilities for the Fleet. - Leverage the development and integration of Minotaur capabilities for the Fleet. - Continue modernization of targeting hardware. - Continue software integration and improvements resulting in IRs that are ready for testing/fielding.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Continue optimization of DevSecOps processes and environments to increase the rate of release for the fielding of IRs by using the Enterprise infrastructure. - Commence the design and development of mission modules based systems for accelerated deployment. - Continue deployment of DCGS-N Ashore System (DAS) across Maritime Operations Centers (MOCs) and training sites. - Continue the enhancement and expansion of the KB to support new Joint and maritime data sets such as MARS. - Continue to assess developing technologies for incorporation into future baselines in support of emerging Fleet capability gaps. - Continue to work closely with governmental and non-governmental agencies and organizations in order to align Fleet requirements with capabilities across various Technology Readiness Levels (TRLs). - Continue to target a Fleet demonstration/exercise (TRIDENT WARRIOR, Enterprise Challenge and other Fleet exercises) to test system in a large-scale, at-sea experiment. - Continue DCGS Enterprise Node (DEN) implementation of Common Data Fabric (CDF) for data sharing. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase of $1.983M from FY 2023 to FY 2024 is attributed to the development and integration of applications which deliver various capabilities to the Fleet.					
Accomplishments/Planned Programs Subtotals	30.748	29.339	31.322	0.000	31.322

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN/2914: *Distributed Common Ground System-Navy (DCGS-N)*	16.691	15.606	16.579	-	16.579	16.452	16.881	17.249	17.631	318.640	761.693

Remarks

D. Acquisition Strategy

The DCGS-N Inc 2 acquisition strategy (AS) will follow the Software Acquisition Pathway (SWP) to incrementally deliver capability through the entire lifecycle of the program. The evolutionary approach will consist of multiple, iterative releases (IR) that collectively update the system to meet or exceed all Capability Needs Statement

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
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(CNS) and Information Systems Capability Development Document (IS-CDD), Key Performance Parameter (KPP) / Key System Attribute (KSA) threshold requirements. Each product line will be integrated and adapted to ensure viability and effectiveness of capabilities for operational use. The approach incorporates test and evaluation and cyber hardening requirements in an integrated Development, Security and Operations (DevSecOps) environment and is integral to the program's IR delivery methodology.

Key elements of the DCGS-N Inc 2 AS include frequent iterative releases (IR), maximum leverage of mature capabilities through a multi-faceted ABC methodology, a robust Open System Architecture (OSA) centered on a core knowledge base with common Application Programming Interfaces (APIs), flexible contracting, tailored test and evaluation (T&E) strategy, and release authorizations informed by demonstrations and user acceptance. In accordance with DoDI 5000.02 requirements, DCGS-N Inc 2 IRs will incrementally deliver major capability releases when the system meets user defined Minimum Viable Product (MVP), Minimum Viable Capability Release (MVCR), and a culminating Operational Release (OR). The Adopt-Buy-Create (ABC) methodology shall incorporate new product functionality and on-ramp new Capability Area (CA) informed by a Continuous Technology Assessment (CTA) throughout the lifecycle of the program. Industry standards for agile development will be implemented to increase speed and consistencies of deliveries, enabling the program office to rapidly respond to Fleet requirements.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
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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 Software Development	C/CPFF	TBD : TBD	0.000	0.000		6.055	Nov 2022	6.340	Nov 2023	-		6.340	0.000	12.395	-
Primary Software Development	C/CPFF	LEIDOS : Reston, VA	33.246	13.797	Nov 2021	4.826	Nov 2022	5.053	Nov 2023	-		5.053	0.000	56.922	-
Primary Software Development	MIPR	Classified Contracts : Classified Contracts	0.000	0.000		3.396	Dec 2022	3.555	Dec 2023	-		3.555	0.000	6.951	-
Primary Software Development	C/CPFF	Various : Various	0.000	0.000		2.923	Dec 2022	3.060	Dec 2023	-		3.060	0.000	5.983	-
Primary Software Development	C/CPFF	BAE : Arlington, VA	0.000	0.000		1.317	Dec 2022	1.379	Dec 2023	-		1.379	0.000	2.696	-
Integration Assembly & Test	WR	NIWC PAC : San Diego, CA	12.181	7.857	Oct 2021	3.448	Oct 2022	3.610	Oct 2023	-		3.610	0.000	27.096	-
Integration Assembly & Test	C/CPFF	KAB : San Diego, CA	3.222	1.738	Nov 2021	0.550	Nov 2022	0.576	Nov 2023	-		0.576	0.000	6.086	-
Government Technical Oversight (Dev)	WR	NIWC LANT : Charleston, SC	3.350	1.865	Oct 2021	1.083	Oct 2022	1.738	Oct 2023	-		1.738	0.000	8.036	-
Government Technical Oversight(Dev)	WR	NIWC PAC : San Diego, CA	0.543	0.298	Oct 2021	0.307	Oct 2022	0.321	Oct 2023	-		0.321	0.000	1.469	-
Product Development Prior Years	Various	Various : Various	2.727	0.000		0.000		0.000		-		0.000	0.000	2.727	-
		Subtotal	55.269	25.555		23.905		25.632		-		25.632	0.000	130.361	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
Systems Engineering	C/CPFF	SAIC : Columbia, MD	3.010	1.449	Feb 2022	1.438	Dec 2022	1.506	Dec 2023	-		1.506	0.000	7.403	-
Logistics Engineering	Various	Various : Various	1.438	0.815	Oct 2021	0.839	Oct 2022	0.878	Oct 2023	-		0.878	0.000	3.970	-
		Subtotal	4.448	2.264		2.277		2.384		-		2.384	0.000	11.373	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

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)	WR	NIWC LANT : Charleston, SC	0.937	0.579	Oct 2021	0.696	Dec 2022	0.729	Dec 2023	-		0.729	0.000	2.941	-
Developmental Test & Evaluation (DT&E)	WR	NIWC PAC : San Diego, CA	1.162	0.700	Oct 2021	0.700	Dec 2022	0.733	Dec 2023	-		0.733	0.000	3.295	-
Developmental Test & Evaluation (DT&E)	C/CPFF	Various : Various	0.740	0.500	Dec 2021	0.512	Dec 2022	0.536	Dec 2023	-		0.536	0.000	2.288	-
		Subtotal	2.839	1.779		1.908		1.998		-		1.998	0.000	8.524	N/A

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
Acquisition Management	C/CPFF	BAH : San Diego, CA	2.109	0.950	Nov 2021	0.979	Feb 2023	1.025	Feb 2024	-		1.025	0.000	5.063	-
Travel	Allot	NAVWAR : San Diego, CA	0.501	0.200	Nov 2021	0.270	Nov 2022	0.283	Nov 2023	-		0.283	0.000	1.254	-
		Subtotal	2.610	1.150		1.249		1.308		-		1.308	0.000	6.317	N/A

	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
Project Cost Totals	65.166	30.748		29.339		31.322		-		31.322	0.000	156.575	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
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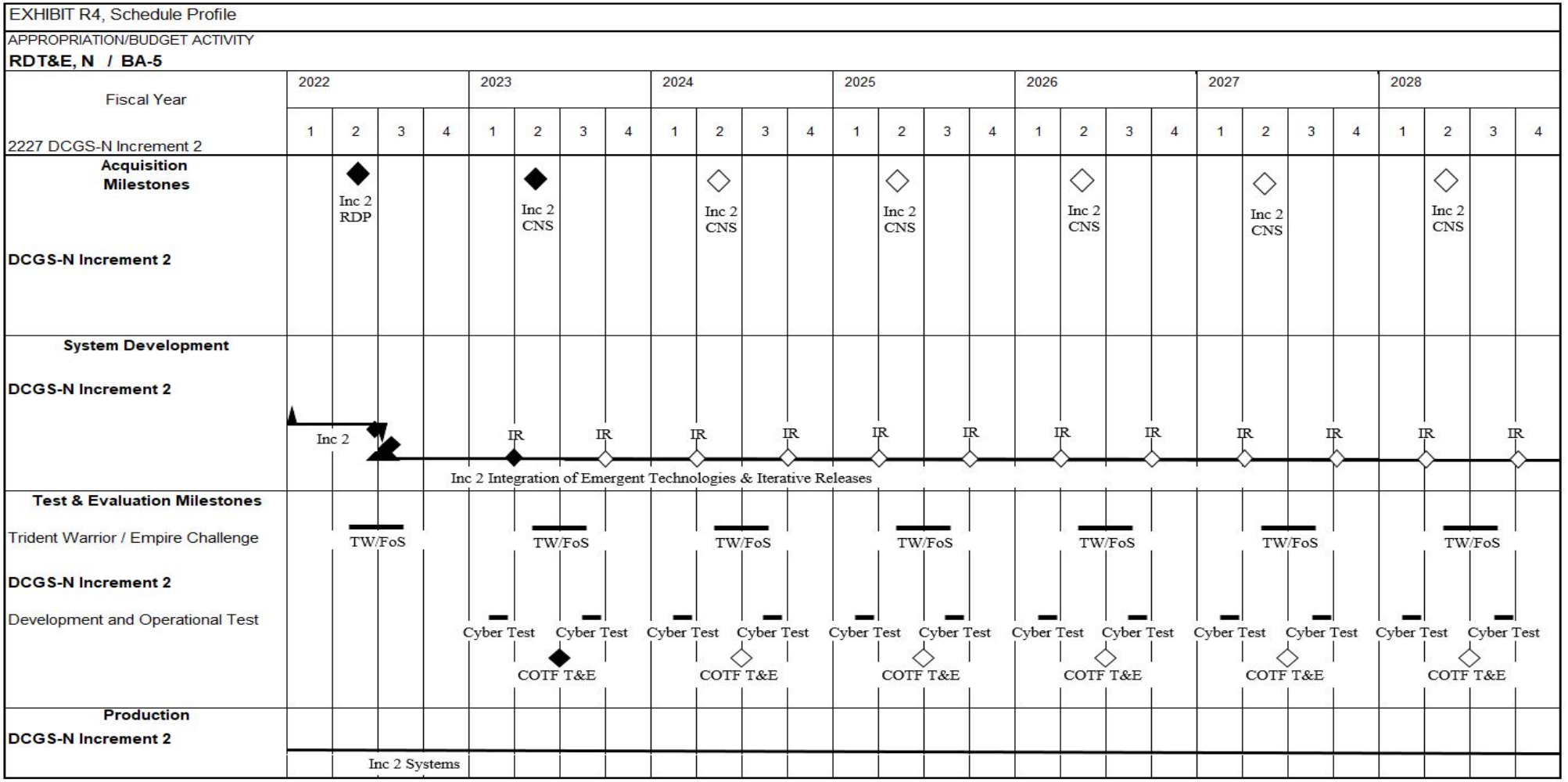

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2227				
Software Acquisition Pathway (SWAP) Acquisition Decision Memorandum (ADM)	3	2022	3	2022
DCGS-N Inc 2 Requirements Definition Package (RDP)	2	2022	2	2022
DCGS-N Inc 2 Capability Needs Statement (CNS) FY22	2	2022	2	2022
DCGS-N Inc 2 Capability Needs Statement (CNS) FY23	2	2023	2	2023
DCGS-N Inc 2 Capability Needs Statement (CNS) FY24	2	2024	2	2024
DCGS-N Inc 2 Capability Needs Statement (CNS) FY25	2	2025	2	2025
DCGS-N Inc 2 Capability Needs Statement (CNS) FY26	2	2026	2	2026
DCGS-N Inc 2 Capability Needs Statement (CNS) FY27	2	2027	2	2027
DCGS-N Inc 2 Capability Needs Statement (CNS) FY28	2	2028	2	2028
DCGS-N Inc 2 Fleet Capability Release (FCR) Development FY22	1	2022	2	2022
DCGS-N Inc 2 Integration of Emergent Technologies & Iterative Releases	3	2022	4	2028
Iterative Release (IR) FY23Q2	2	2023	2	2023
Iterative Release (IR) FY23Q4	4	2023	4	2023
Iterative Release (IR) FY24Q2	2	2024	2	2024
Iterative Release (IR) FY24Q4	4	2024	4	2024
Iterative Release (IR) FY25Q2	2	2025	2	2025
Iterative Release (IR) FY25Q4	4	2025	4	2025
Iterative Release (IR) FY26Q2	2	2026	2	2026
Iterative Release (IR) FY26Q4	4	2026	4	2026
Iterative Release (IR) FY27Q2	2	2027	2	2027
Iterative Release (IR) FY27Q4	4	2027	4	2027

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
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	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Iterative Release (IR) FY28Q2	2	2028	2	2028
Iterative Release (IR) FY28Q4	4	2028	4	2028
Trident Warrior/DCGS Family of Systems (FoS) 2022	2	2022	3	2022
Trident Warrior/DCGS Family of Systems (FoS) 2023	2	2023	3	2023
Trident Warrior/DCGS Family of Systems (FoS) 2024	2	2024	3	2024
Trident Warrior/DCGS Family of Systems (FoS) 2025	2	2025	3	2025
Trident Warrior/DCGS Family of Systems (FoS) 2026	2	2026	3	2026
Trident Warrior/DCGS Family of Systems (FoS) 2027	2	2027	3	2027
Trident Warrior/DCGS Family of Systems (FoS) 2028	2	2028	3	2028
Cyber Test FY23 Q1	1	2023	1	2023
Cyber Test FY23 Q3	3	2023	3	2023
Cyber Test FY24 Q1	1	2024	1	2024
Cyber Test FY24 Q3	3	2024	3	2024
Cyber Test FY25 Q1	1	2025	1	2025
Cyber TestFY25 Q3	3	2025	3	2025
Cyber Test FY26 Q1	1	2026	1	2026
Cyber TestFY26 Q3	3	2026	3	2026
Cyber Test FY27 Q1	1	2027	1	2027
Cyber Test FY27 Q3	3	2027	3	2027
Cyber Test FY28 Q1	1	2028	1	2028
Cyber Test FY28 Q3	3	2028	3	2028
COTF T&E FY23	2	2023	2	2023
COTF T&E FY24	2	2024	2	2024
COTF T&E FY25	2	2025	2	2025
COTF T&E FY26	2	2026	2	2026

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
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	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
COTF T&E FY27	2	2027	2	2027
COTF T&E FY28	2	2028	2	2028
DCGS-N Inc 2 Procurement	1	2022	4	2028

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
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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
2351: *MDA*	4.000	3.846	3.217	3.269	-	3.269	3.105	3.154	3.190	3.255	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Maritime Domain Awareness (MDA) project is a portfolio of partnerships that leverages the investments of other agencies in MDA tools and data, and funds the enhancement of those tools to meet Navy requirements for worldwide over-the-horizon vessel tracking and other MDA data in support of Distributed Common Ground System-Navy (DCGS-N), Automated Identification System (AIS) program of record, MDA analysts at Fleet Maritime Operations Centers, and at the Office of Naval Intelligence. The MDA project manages the partnership with the Department of Transportation to leverage the Maritime Safety and Security Information System (MSSIS) and SeaVision, an unclassified non-Public Key Infrastructure (PKI) information-sharing tool used by United States Indo-Pacific Command (INDOPACOM), European Command (EUCOM), Africa Command (AFRICOM), Southern Commnd (SOUTHCOM), other USG agencies, and foreign partner nations to increase maritime security by sharing information. SeaVision produces a track picture based data contributed by MSSIS partners such as costal AIS and costal radar and augmented with commercially procured data. SeaVision is a cloud-based system where users can visualize vessel tracks, access vessel information and run a growing set of analytics. SeaVision also has Application Programming Interfaces (APIs) for machine-to-machine data exchange with authorized systems including the Navy's AIS program of record.

The MDA project manages the partnership with the National Reconnaissance Office (NRO) to leverage the THRESHER system. THRESHER is a cloud-based system that provides over-the-horizon vessel tracking and analysis tools enhanced by Artificial Intelligence/Machine Learning (AI/ML). The MDA project is working with NRO to enhance THRESHER capabilities to improve the correlated and fused track feed provided over the Integrated Broadcast Service and improve THRESHER analytics on both JWICS and SIPR net.

FY 2024 efforts for MDA SeaVision include user driven and prioritized feature enhancements documented in the System Requirements Specification 8.0, which was developed with the stakeholder community in 2023. Major capabilities include the integration with AI/ML platforms to improve analysis, and enhanced interoperability with Office of Naval Intelligence Authoritative Maritime Services. These efforts also include back-end enhancements to the MSSIS to facilitate better data throughput and conditioning. Efforts for THRESHER include user driven feature enhancements to analytics and improved correlation and fusion algorithms.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Maritime Domain Awareness (MDA)	3.846	3.217	3.269	0.000	3.269
Articles:	-	-	-	-	-
FY 2023 Plans: - Continue improvement of SeaVision analytics through enhancements that were documented in the System Requirements Specification 7.0 - Continue integration of additional data sources into SeaVision					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2351 / *MDA*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Continue improvements to Maritime Safety Security Information System (MSSIS) to increase data throughput capacity and conditioning - Continue improvements to THRESHER analytics based on direct Fleet input - Continue enhancement of THRESHER algorithms to improve correlation and fusion of tracks ***FY 2024 Base Plans:*** - Continue improvement of SeaVision analytics through enhancements that were documented in the System Requirements Specification 8.0 - Continue integration of additional data sources into SeaVision - Continue improvements to Maritime Safety Security Information System (MSSIS) to increase data throughput capacity and conditioning - Continue improvements to THRESHER analytics based on direct Fleet input - Continue enhancement of THRESHER algorithms to improve correlation and fusion of tracks ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** No significant changes from FY 2023 to FY 2024.					
Accomplishments/Planned Programs Subtotals	3.846	3.217	3.269	0.000	3.269

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

MDA is governed under the Program Executive Office for Command, Control, Communications, Computers, Intelligence, and Space (PEO C4I and Space) instruction for non-ACAT projects. MDA will fund partner agencies for the enhancement of existing tools to satisfy Navy requirements.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 2351 / *MDA*	

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
Software Development	WR	NIWC PAC : San Diego, CA	1.316	1.326	Oct 2021	1.333	Oct 2022	1.397	Oct 2023	-		1.397	Continuing	Continuing	Continuing
Software Development	MIPR	DOT Volpe Center : Cambridge, MA	0.769	0.874	Oct 2021	0.706	Oct 2022	0.702	Oct 2023	-		0.702	Continuing	Continuing	Continuing
Software Development	MIPR	Classified Contracts : Classified Contracts	1.915	1.646	Oct 2021	1.178	Oct 2022	1.170	Oct 2023	-		1.170	Continuing	Continuing	Continuing
		Subtotal	4.000	3.846		3.217		3.269		-		3.269	Continuing	Continuing	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	4.000	3.846		3.217		3.269		-		3.269	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2351 / *MDA*

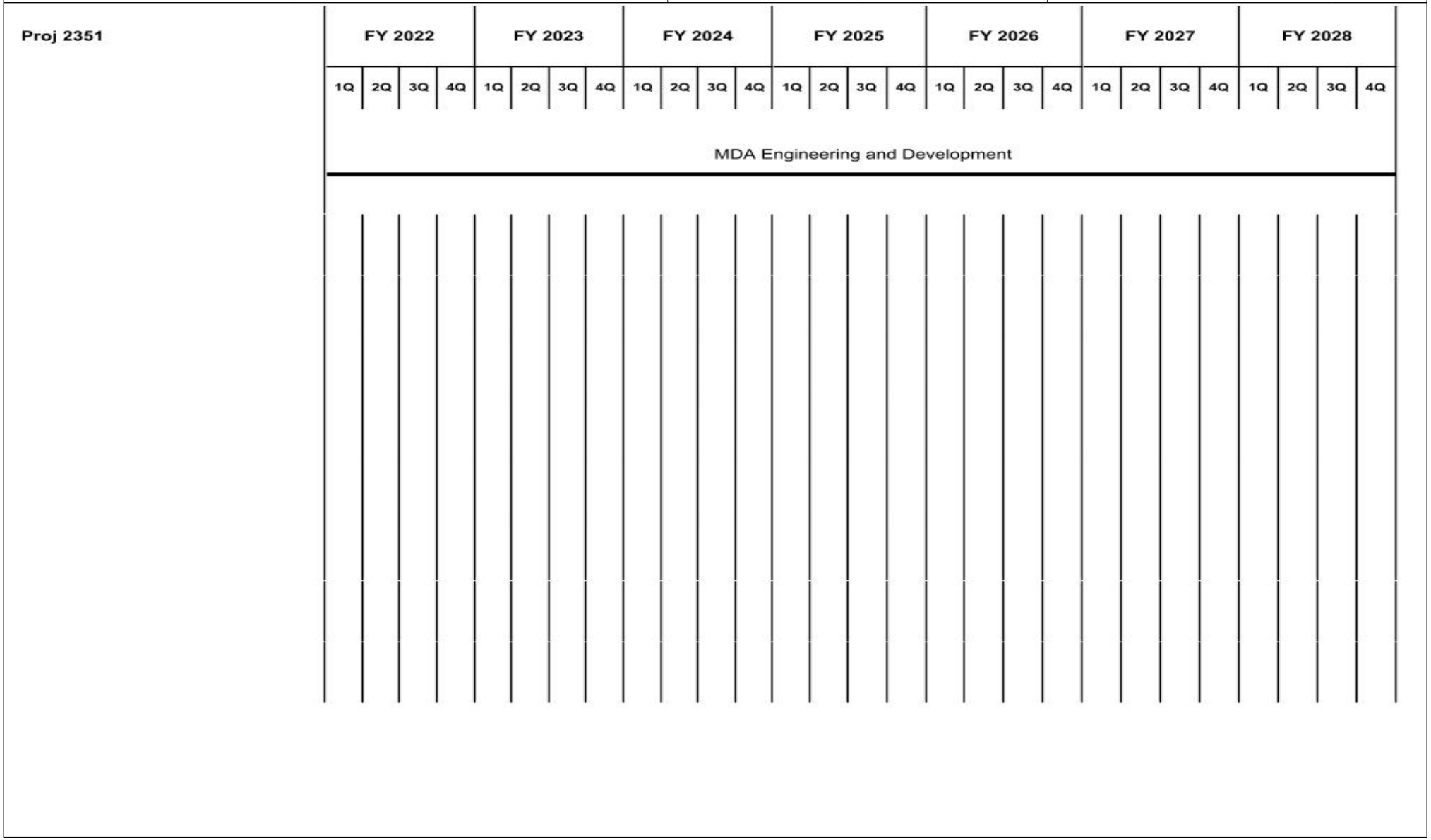


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2351 / *MDA*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2351				
MDA Engineering and Development	1	2022	4	2028

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 2363 / *Remote Sensing Capability 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
2363: *Remote Sensing Capability Development*	0.000	0.000	0.000	4.801	-	4.801	4.696	4.772	4.856	4.953	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

Remote Sensing Capability Development (RSCD) Program (Project 2363) has been realigned from PE 0604231N to PE 0304785N starting in FY24; RSCD is a Military Intelligence Program (MIP), which aligns to PE 0304785N.

A. Mission Description and Budget Item Justification

The RSCD project integrates and fields capabilities to enhance maritime domain awareness using non-organic sensors under the Top Secret / Sensitive Compartmented Information (TS/SCI) SEAHORSE process. The system addresses Fleet Integrated Prioritized Capability List (IPCL) and capabilities gaps for increasing Battlespace Awareness and Intelligence Surveillance and Reconnaissance (ISR) capabilities to support Fleet Tasking, Collections, Processing, Exploitation, and Dissemination (TCPED) processes. RSCD employs automation concepts to produce intelligence with significantly less Fleet manpower than traditional processes. The project is also working to shorten and streamline the SEAHORSE TCPED cycle to meet speed of service and accuracy requirements. RSCD incorporates state of the art software in the form of machine/continuous learning technologies to achieve a significant reduction of false alarm rates. SEAHORSE is relied upon by INDOPACOM, CENTCOM, and EUCOM to provide intelligence solutions (detail held at a higher classification). RSCD supporting the transition of SEAHORSE to a fully integrated, cloud-based, operational system.

FY 2024 funding will continue the planned data collection, algorithm enhancement, algorithm performance assessment, and system integration activities

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Remote Sensing Capability Development (RSCD)	0.000	0.000	4.801	0.000	4.801
Articles:	-	-	-	-	-
FY 2023 Plans: FY23 Plans captured under PE 0604231N in FY23. The Remote Sensing Capability Development (RSCD) program has been realigned from PE 0604231N to PE 0304785N starting in FY24.					
FY 2024 Base Plans: - Continue to collect data in various weather and sea states to broaden the range of environmental conditions, reduce uncertainty in environmental prediction, and generate training data sets for Machine Learning.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2363 / *Remote Sensing Capability Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Continue to conduct software algorithm performance analysis and enhancements to automatically detect oceanographic phenomena and data repository to test and evaluate, create performance metrics, and understand computational performance of algorithms and technologies that enhance the fleet's battle space awareness. - Continue to conduct software algorithm enhancements to address improvements identified through performance analysis. - Continue to integrate software algorithm enhancements. - Continue to coordinate Tasking, Collections, Processing, Exploitation, and Dissemination (TCPED) process amongst inter-agencies to support Navy Missions. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Increase of $4.801M from FY 2023 to FY 2024 is attributed to realignment of Proj 2363 from PE 0604231N to PE 0304785N starting in FY24.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	4.801	0.000	4.801

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Remote Sensing Capabilities Development (RSCD) acquisition strategy is being managed by the Program Executive Office Command, Control, Communications, Computers and Intelligence (PEO C4I) and Space, via a Project Definition Document (PDD) construct for acquisition rigor and oversight.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2363 / *Remote Sensing Capability 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
RSCD Software Development	C/FFP	SAIC : Reston, VA	0.000	0.000		0.000		0.518	Feb 2024	-		0.518	Continuing	Continuing	Continuing
RSCD Software Development	WR	NRL : Various	0.000	0.000		0.000		0.614	Nov 2023	-		0.614	Continuing	Continuing	Continuing
RSCD Software Development	C/FFP	Cubic/Valiant : San Diego, CA	0.000	0.000		0.000		1.089	Apr 2024	-		1.089	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		2.221		-		2.221	Continuing	Continuing	N/A

Remarks

FY22/FY23 cost captured under PE 0604231N. The Remote Sensing Capability Development (RSCD) program has been realigned from PE 0604231N to PE 0304785N starting in FY24.

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
RSCD Architecture	WR	NIWC PAC : San Diego, CA	0.000	0.000		0.000		0.774	Nov 2023	-		0.774	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		0.774		-		0.774	Continuing	Continuing	N/A

Remarks

FY22/FY23 cost captured under PE 0604231N. The Remote Sensing Capability Development (RSCD) program has been realigned from PE 0604231N to PE 0304785N starting in FY24.

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)	WR	SNL (DOE) : Albuquerque, NM	0.000	0.000		0.000		0.774	Nov 2023	-		0.774	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	C/FFP	Cubic/Valiant : San Diego, CA	0.000	0.000		0.000		1.032	Apr 2024	-		1.032	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2363 / *Remote Sensing Capability Development*

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
Subtotal			0.000	0.000		0.000		1.806		-		1.806	Continuing	Continuing	N/A

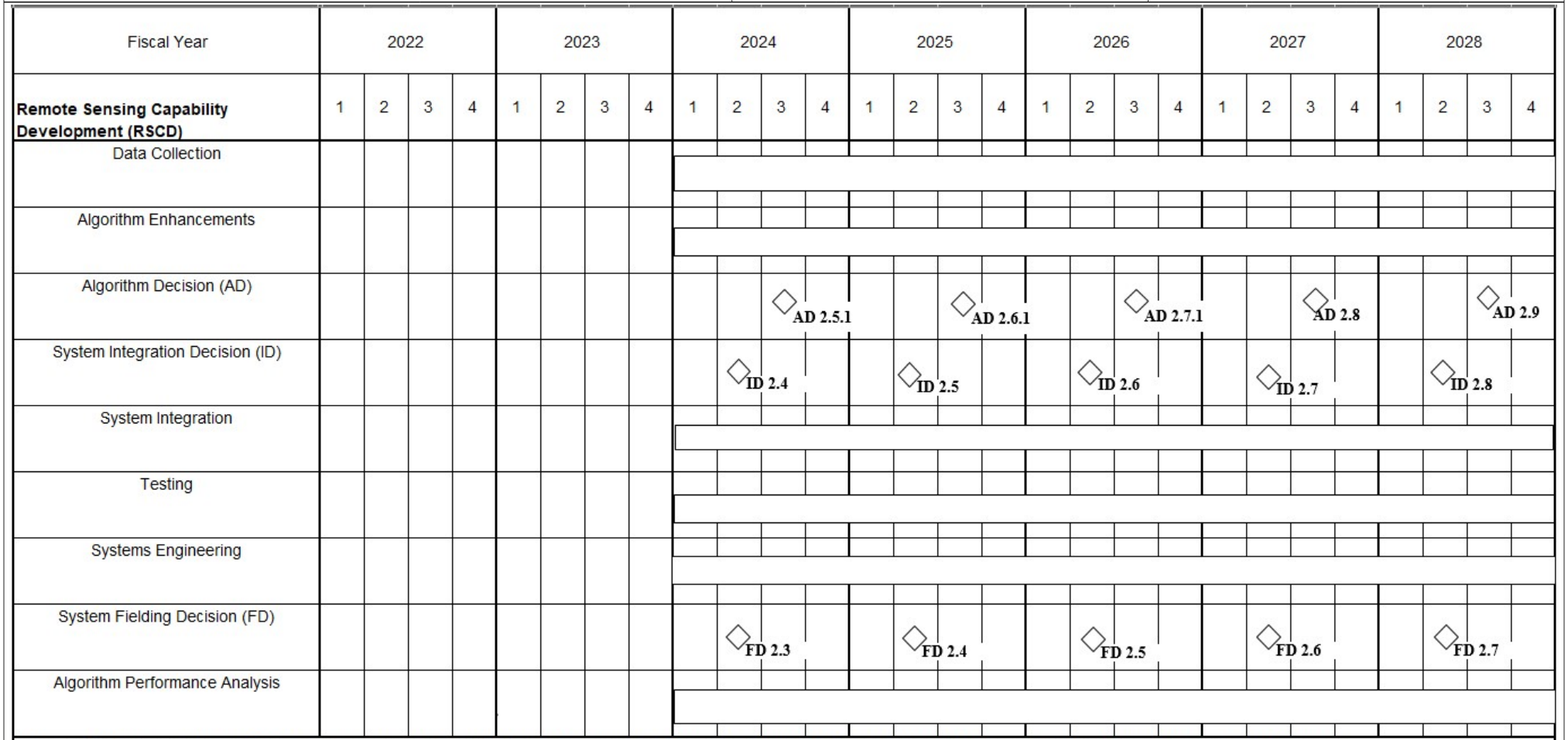
Remarks

FY22/FY23 cost captured under PE 0604231N. The Remote Sensing Capability Development (RSCD) program has been realigned from PE 0604231N to PE 0304785N starting in FY24.

	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		4.801		-		4.801	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		**Date:** March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2363 / *Remote Sensing Capability Development*



Notes: RSCD Program (Project 2363) has been realigned from PE 0604231N to PE 0304785N starting in FY24; RSCD is a Military Intelligence Program (MIP), which aligns to PE 0304785N.

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 2363 / *Remote Sensing Capability Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2363				
Data Collection	1	2024	4	2028
Algorithm Enhancements	1	2024	4	2028
Algorithm Decision (AD) 2.5.1	3	2024	3	2024
Algorithm Decision (AD) 2.6.1	3	2025	3	2025
Algorithm Decision (AD) 2.7.1	3	2026	3	2026
Algorithm Decision (AD) 2.8	3	2027	3	2027
Algorithm Decision (AD) 2.9	3	2028	3	2028
System Integration Decision (ID) 2.4	2	2024	2	2024
System Integration Decision (ID) 2.5	2	2025	2	2025
System Integration Decision (ID) 2.6	2	2026	2	2026
System Integration Decision (ID) 2.7	2	2027	2	2027
System Integration Decision (ID) 2.8	2	2028	2	2028
System Integration	1	2024	4	2028
Testing	1	2024	4	2028
System Engineering	1	2024	4	2028
System Fielding Decision (FD) 2.3	2	2024	2	2024
System Fielding Decision (FD) 2.4	2	2025	2	2025
System Fielding Decision (FD) 2.5	2	2026	2	2026
System Fielding Decision (FD) 2.6	2	2027	2	2027
System Fielding Decision (FD) 2.7	2	2028	2	2028
Algorithm Performance Analysis	1	2024	4	2028

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 3091 / *Advanced Cryptological Sys Eng (CCOP)*	

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
3091: *Advanced Cryptological Sys Eng (CCOP)*	9.125	4.386	4.853	8.109	-	8.109	8.221	8.518	8.913	9.117	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Advanced Cryptologic Systems Engineering - Cryptologic Carry On Program (CCOP) rapidly develops and fields state-of-the-art signal acquisition capabilities in response to Combatant Command requirements to provide augmentable, quick-reaction surface, subsurface and airborne cryptologic carry-on capabilities. There are approximately 124 cryptologic capable surface ships and shore sites in the current Naval inventory; a potential user of this carry-on equipment, depending on deployment schedules and the tempo of operations. In addition, there are other numerous Naval platforms (including U.S. Coast Guard, Patrol Craft and USNS) that could serve as potential users. This funding line provides resources to enable rapid transition of available Commercial Off-The-Shelf (COTS) and Government Off - The-Shelf (GOTS) technologies that apply to Fleet requirements for carry-on system functionalities. These technologies typically require various levels of integration to leverage on-board systems providing system and mission management, product reporting, and data analysis. COTS / GOTS system documentation and training materials require adaptation or modification to meet fleet operator requirements, or entirely new training materials may need to be developed. Prior to operational deployment, systems must be systematically tested to ensure suitable and reliable operation, tested for network vulnerabilities if connected to shipboard Local Area Networks, and tested relative to interoperability requirements. Certification testing is conducted to meet Office of Naval Intelligence security requirements, and network testing is conducted in accordance with Information Technology (IT) requirements to allow connection to Navy networks. Funding will also provide resources to address rapid deployment of enhancements or improvements to the common hardware and/or software baseline of all other carry-on subsystems to meet emergent requirements. Funding will support development and integration efforts to fuse data produced and distributed by Shipboard Information Warfare (IW) / Information Operations (IO) systems with other intelligence data at multiple classification levels which is then provided to shipboard combat systems to support kinetic (bombs, mortars, missiles, bullets, etc.) and non-kinetic fires (electronic attack, lasers, cyber) in order to enable a more agile, effective and complete exploitation of the electromagnetic spectrum.

In FY 2024, the Advanced Cryptologic Systems Engineering - CCOP program will integrate, test, and document identified COTS and GOTS augmentable technologies and subsystems to meet emergent Fleet requirements as specified in the Signal of Interest (SOI) and target threat lists. CCOP will develop upgrades to existing systems and subsystems according to Fleet requirements and Integrated Fleet Priority lists. CCOP will develop new signal processing algorithms and software based solutions to continue enabling rapid transition of capability to permanently installed Ship's Signal Exploitation Space (SSES) systems, including SSEE Family of Systems (FoS) and its variants. CCOP will conduct research and development of Adaptive Mission Modules for rapid insertion to counter specific threats or provide intelligence in specific areas of operation. More details are available at higher classification. CCOP will conduct a Limited Objective Experiments (LOEs) for SWAMPDONKEY which will provide shipboard operators to conduct electronic countermeasures against a specific class of signals and for VIKING VESPER which will provide SSES operators with capability to provide collection and recording on high data rate signals.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3091 / *Advanced Cryptological Sys Eng (CCOP)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Advanced Cryptological Sys Eng - Cryptologic Carry On Program (CCOP)	4.386	4.853	8.109	0.000	8.109
Articles:	-	-	-	-	-
FY 2023 Plans: - Continue to integrate, test, and document identified Commercial Off the Shelf (COTS) and Government Off the Shelf (GOTS) augmentable technologies and subsystems to meet emergent Fleet requirements as specified in the Signal of Interest (SOI) and target threat lists. - Continue to develop upgrades to existing systems and subsystems according to Fleet requirements and Integrated Fleet Priority lists. - Continue to develop new signal processing algorithms and software based solutions to continue enabling rapid transition of capability to permanently installed Ship's Signal Exploitation Space (SSES) systems, including SSEE Family of Systems (FoS)and its variants. - Continue to conduct research and development of Adaptive Mission Modules for rapid insertion to counter specific threats or provide intelligence in specific areas of operation. More details are available at higher classification. - Completed Limited Objective Experiment (LOE) for the BLUEKRYPTONITE tool suite which provides the ability to track, collect, and exploit a critical SOI.					
FY 2024 Base Plans: - Begin LOE for SWAMPDONKEY which will allow shipboard operators to conduct electronic countermeasures against a specific class of signals (details held at higher classification). - Begin LOE for VIKING VESPER which will provide SSES operators with capability to provide collection and recording on high data rate signals (details held at higher classification). - Continue to integrate, test, and document identified COTS and GOTS augmentable technologies and subsystems to meet emergent Fleet requirements as specified in the SOI and target threat lists. - Continue to develop upgrades to existing systems and subsystems according to Fleet requirements and Integrated Fleet Priority lists. - Continue to develop new signal processing algorithms and software based solutions to continue enabling rapid transition of capability to permanently installed SSES systems, including SSEE FoS and its variants. - Continue to conduct research and development of Adaptive Mission Modules for rapid insertion to counter specific threats or provide intelligence in specific areas of operation. More details are available at higher classification.					
FY 2024 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3091 / *Advanced Cryptological Sys Eng (CCOP)*

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:*** Advanced Cryptological Sys Eng - Cryptologic Carry On Program (CCOP) FY 2023 to FY 2024 increase (+ $3.256M) is attributed to beginning new Limited Objective Experiments (LOEs) for SWAMPDONKEY and VIKING VESPER (details held at higher classification).					
Accomplishments/Planned Programs Subtotals	4.386	4.853	8.109	0.000	8.109

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN/3501: *Cryptologic Communications Equip*	17.809	28.832	17.483	-	17.483	15.642	15.844	15.875	16.226	Continuing	Continuing

Remarks

OPN BLI 3501 includes multiple programs; CCOP is only a portion of that budget

D. Acquisition Strategy

The Advanced Cryptologic Systems Engineering - Cryptologic Carry On Program (CCOP) program delivers state-of-the-art signal acquisition software for CCOP systems in response to Combatant Command requirements for a quick-reaction surface, subsurface and airborne cryptologic carry-on capability.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 3091 / *Advanced Cryptological Sys Eng (CCOP)*	

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
Software Development	C/CPFF	Classified Contract : Classified Contract	5.727	2.649	Jan 2022	2.713	Jan 2023	4.487	Jan 2024	-		4.487	Continuing	Continuing	Continuing
Software Development	WR	NIWC PAC : San Diego, CA	1.128	0.577	Nov 2021	0.573	Nov 2022	0.980	Nov 2023	-		0.980	Continuing	Continuing	Continuing
Software Development	WR	NIWC LANT : Charleston, SC	0.582	0.298	Nov 2021	0.322	Nov 2022	0.550	Nov 2023	-		0.550	Continuing	Continuing	Continuing
		Subtotal	7.437	3.524		3.608		6.017		-		6.017	Continuing	Continuing	N/A

Remarks

FY2024 funding increase reflects the start of new Limited Objective Experiments SWAMPDONKEY and VIKING VESPER.

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
Systems Engineering	C/CPFF	Classified Contract : Classified Contract	0.891	0.454	Jan 2022	0.491	Jan 2023	0.803	Jan 2024	-		0.803	Continuing	Continuing	Continuing
Govt Tech Oversight	WR	NIWC PAC : San Diego	0.428	0.219	Nov 2021	0.237	Nov 2022	0.405	Nov 2023	-		0.405	Continuing	Continuing	Continuing
		Subtotal	1.319	0.673		0.728		1.208		-		1.208	Continuing	Continuing	N/A

Remarks

FY2024 funding increase reflects the start of new Limited Objective Experiments SWAMPDONKEY and VIKING VESPER.

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)	WR	NIWC LANT : Charleston, SC	0.369	0.189	Nov 2021	0.517	Nov 2022	0.884	Nov 2023	-		0.884	Continuing	Continuing	Continuing
		Subtotal	0.369	0.189		0.517		0.884		-		0.884	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3091 / *Advanced Cryptological Sys Eng (CCOP)*

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

Remarks

FY2024 funding increase reflects the start of new Limited Objective Experiments SWAMPDONKEY and VIKING VESPER. Each Line Represents (by sort order): 5) Developmental Test & Evaluation CCOP.

	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	9.125	4.386		4.853		8.109		-		8.109	Continuing	Continuing	N/A

Remarks

FY2024 funding increase to Product Development, Support, Test and Evaluation and Management Services reflects the start of new Limited Objective Experiments for SWAMPDONKEY and VIKING VESPER.

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3091 / *Advanced Cryptological Sys Eng (CCOP)*

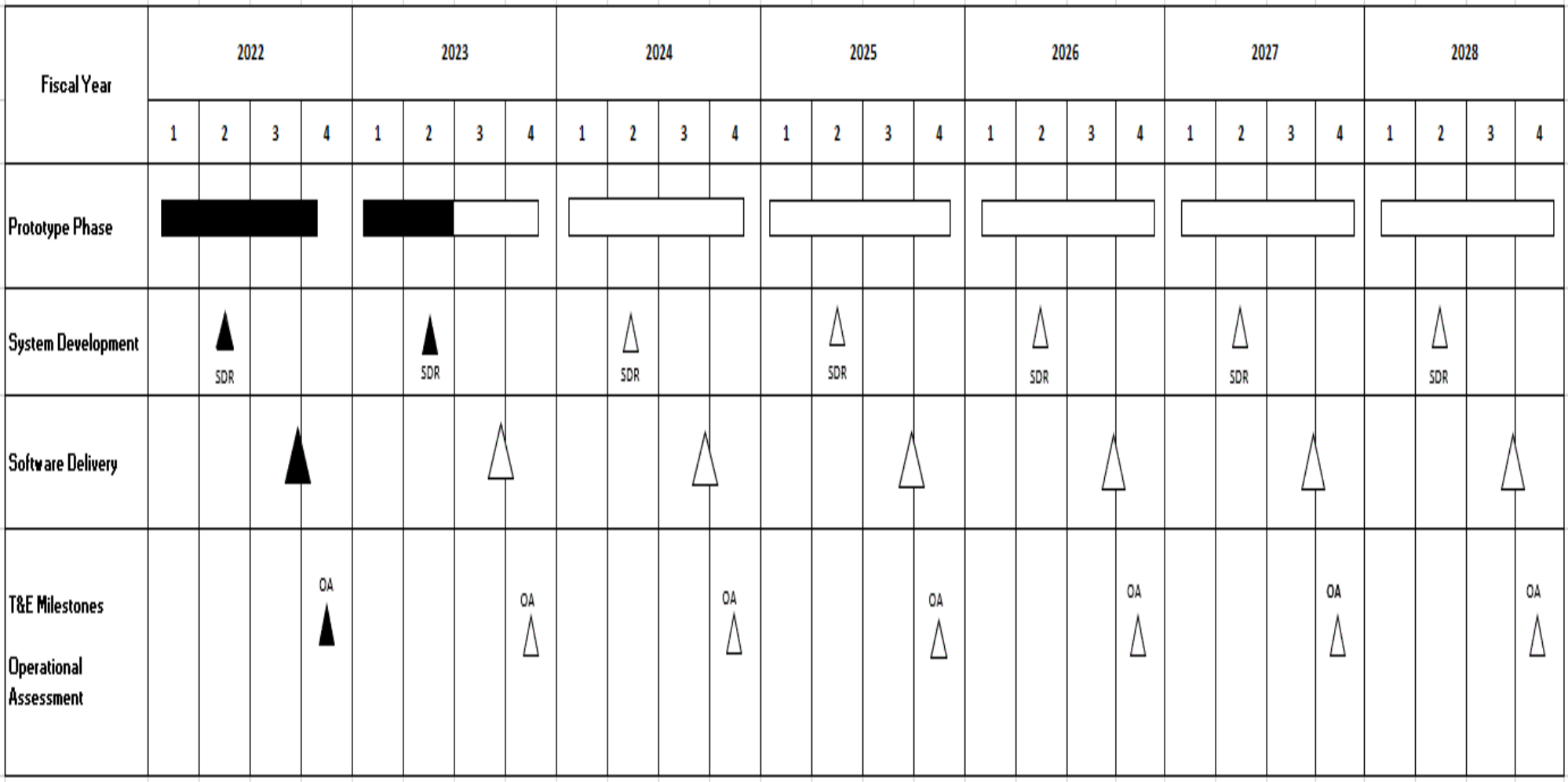


Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3091 / *Advanced Cryptological Sys Eng (CCOP)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3091				
Prototype Phase - 2022	1	2022	4	2022
Prototype Phase - 2023	1	2023	4	2023
Prototype Phase -2024	1	2024	4	2024
Prototype Phase -2025	1	2025	4	2025
Prototype Phase -2026	1	2026	4	2026
Prototype Phase -2027	1	2027	4	2027
Prototype Phase - 2028	1	2028	4	2028
System Design Review (SDR) - 2022	2	2022	2	2022
System Design Review (SDR) - 2023	2	2023	2	2023
System Design Review (SDR) - 2024	2	2024	2	2024
System Design Review (SDR) - 2025	2	2025	2	2025
System Design Review (SDR) - 2026	2	2026	2	2026
System Design Review (SDR) - 2027	2	2027	2	2027
System Design Review (SDR) - 2028	2	2028	2	2028
Software Delivery - 2022	3	2022	4	2022
Software Delivery - 2023	3	2023	4	2023
Software Delivery - 2024	3	2024	4	2024
Software Delivery - 2025	3	2025	4	2025
Software Delivery - 2026	3	2026	4	2026
Software Delivery - 2027	3	2027	4	2027
Software Delivery - 2028	3	2028	4	2028

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3091 / *Advanced Cryptological Sys Eng (CCOP)*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Operational Assessment (OA) - 2022	4	2022	4	2022
Operational Assessment (OA) - 2023	4	2023	4	2023
Operational Assessment (OA) - 2024	4	2024	4	2024
Operational Assessment (OA) - 2025	4	2025	4	2025
Operational Assessment (OA) - 2026	4	2026	4	2026
Operational Assessment (OA) - 2027	4	2027	4	2027
Operational Assessment (OA) - 2028	4	2028	4	2028

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy											Date: March 2023	
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*				Project (Number/Name) 3786 / *Tactical Edge Targeting*			
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**
3786: *Tactical Edge Targeting*	22.162	22.966	18.887	22.260	-	22.260	22.887	21.427	21.037	21.461	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Tactical Edge Targeting (TET)	22.966	18.887	22.260	0.000	22.260
Articles:	-	-	-	-	-
FY 2023 Plans: The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.					
FY 2024 Base Plans: The details of the TET 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: The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.					
Accomplishments/Planned Programs Subtotals	22.966	18.887	22.260	0.000	22.260

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0304785N / *ISR & INFO OPERATIONS*	Project (Number/Name) 3786 / *Tactical Edge Targeting*	

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	Various	Classified : Classified	22.162	22.966	Jan 2022	18.887	Jan 2023	22.260	Jan 2024	-		22.260	Continuing	Continuing	Continuing
		Subtotal	22.162	22.966		18.887		22.260		-		22.260	Continuing	Continuing	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	22.162	22.966		18.887		22.260		-		22.260	Continuing	Continuing	N/A

Remarks

The details of the TET project are classified SECRET and are submitted annually to Congress in the classified budget justification books.

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3786 / *Tactical Edge Targeting*

	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Proj 3786																												
Classified	[redacted]																											

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0304785N / *ISR & INFO OPERATIONS*	**Project (Number/Name)** 3786 / *Tactical Edge Targeting*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3786				
Classified	1	2022	4	2028