Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy											Date: March 2024	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603512N *I Carrier Systems Development*							
COST ($ in Millions)	**Prior Years**	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**	**FY 2026**	**FY 2027**	**FY 2028**	**FY 2029**	**Cost To Complete**	**Total Cost**
Total Program Element	103.153	11.380	6.095	5.659	-	5.659	9.188	10.175	9.211	9.400	Continuing	Continuing
3216: *Tactical Support Center-Integration*	71.926	8.354	4.954	4.575	-	4.575	4.783	4.850	4.930	5.032	Continuing	Continuing
4005: *In-Service Carrier Systems Development*	31.227	3.026	1.141	1.084	-	1.084	4.405	5.325	4.281	4.368	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element (PE) addresses technology areas associated with Command and Control (C2) of the MH-60R/S Seahawk Helicopter, as well as the development of other technologies and enhancements for Aircraft Carrier-based systems.

PROJECT 3216: The AN/SQQ-34 Aircraft Carrier Tactical Support Center (CV-TSC) program delivers Anti-Submarine Warfare (ASW) and Surface Warfare (SUW) combat capability to the Aircraft Carrier supporting Aircraft Carrier, Nuclear power (CVN) Tactical Action Office (TAO) and embarked Carrier Strike Group (CSG) Sea Combat Commander. This project provides incremental development to deliver frequent capability updates to the Fleet (via Fleet Capability Releases (FCR)), developing, testing, certifying, and fielding improved combat capability and critical cyber-security enhancements. The project maintains interoperability with current interfaces and develops interoperability with future interfaces; supports mission data exchange; improves ASW/SUW track/sensor processing and analysis techniques; improves mission planning; improves data recording, reconstruction, and distribution; improves embedded simulation and training capabilities; and implements cyber-security measures to effectively employ overall CVN self-defense capabilities. CV-TSC integrates sensor data from organic Aircraft (MH-60R), organic platform sensors and tracks via Ship Self Defense System (SSDS) Product Line Architecture (PLA) and non-PLA, Link-16 track data, Global Command and Control System (GCCS) Over-the-Horizon (OTH) track data, and environmental and threat databases to assess the threat and assist the TAO and CSG to effectively employ overall CVN self-defense capabilities. Current development efforts are focused on extending non-organic ASW/SUW data sources to provide situational awareness and targets beyond the CSG surveillance area. This includes Minotaur Family of Services (MFoS)/Joint Tactical Terminal - Maritime (JTT-M) and Maritime Targeting Cell - Afloat (MTC-A), Integrated Broadcast Service (IBS) and future Resilient Command & Control, Communication (RC3) data links. CV-TSC generates real-time ASW/SUW information and recommendations, tactical planning and employment of ASW/SUW assets, ASW/SUW sensor data processing and analysis, and distribution of tactically significant data. Aircraft supported include the MH-60R/S Seahawk, and P-8 Poseidon and MQ-4C Triton as future ASW/SUW non-organic supporting platforms. FY 2025 will focus on final testing and first article delivery of FCR-6, as well as FCR-7 development, to include software architecture upgrades and MTC-A integration, development, and testing.

PROJECT 4005: The In-Service Carrier Systems Development Demonstration and Validation Program develops new technology and enhancements to deliver an affordable, robust, operator-friendly automation control environment for Navy Aircraft Carrier shipboard equipment. The program provides the system architecture, requirements/specification development, technology selection, software development (including software baseline), manpower requirements, Total Ownership Costs (TOC), cyber-security engineering and integration, as well as land-based and shipboard testing of new technologies to improve shipboard operations.

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy					Date: March 2024
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*		R-1 Program Element (Number/Name) PE 0603512N *I Carrier Systems Development*			
B. Program Change Summary ($ in Millions)	**FY 2023**	**FY 2024**	**FY 2025 Base**	**FY 2025 OCO**	**FY 2025 Total**
Previous President's Budget	11.567	6.095	5.797	-	5.797
Current President's Budget	11.380	6.095	5.659	-	5.659
Total Adjustments	-0.187	0.000	-0.138	-	-0.138
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.187	0.000			
• Program Adjustments	0.000	0.000	-0.140	-	-0.140
• Rate/Misc Adjustments	0.000	0.000	0.002	-	0.002

Change Summary Explanation

FUNDING CHANGES SINCE THE PREVIOUS PRESIDENT'S BUDGET AT THE OVERALL PE LEVEL:
- FY 2023 decrease of $-0.187M reflects the Small Business Innovative Research (SBIR) transfer.
- FY 2025 decrease of $-0.138M reflects the incorporation of miscellaneous rate adjustments.

PROJECT 3216 - FY 2024 TO FY 2025 BUDGET REQUEST DECREASE:
- FY 2024 ($4.954M) to FY 2025 ($4.575M) decrease ($-0.379M) is the result of FY 2024 including additional funding programmed that year to resolve hardware obsolescence/end-of-life issues as well as the application of miscellaneous rate adjustments in FY 2025.

PROJECT 3216 - SCHEDULE CHANGES SINCE THE PREVIOUS PRESIDENT'S BUDGET:
- Certification events: Previous schedules included individual milestones for four certification events: Integrated Shipboard Network System / Consolidated Afloat Network Enterprise System (ISNS/CANES) certification, Platform Information Technology / Authorization to Operate (PIT/ATO), Element Certification, and Combat System Certification (CST). These events have been represented in the past as occurring simultaneously in one quarter, however, internal and external dependencies often prevent that from occurring. The schedule has been updated to capture these four events in a singular event labeled 'Test & Cert' that spans two quarters.

PROJECT 4005 - FY 2024 TO FY 2025 BUDGET REQUEST DECREASE:
- The FY 2024 ($1.141M) to FY 2025 ($1.084M) program decrease ($-0.057M) reflects a miscellaneous rate adjustment.

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603512N / *Carrier Systems Development*	Project (Number/Name) 3216 / *Tactical Support Center-Integration*	

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
3216: *Tactical Support Center-Integration*	71.926	8.354	4.954	4.575	-	4.575	4.783	4.850	4.930	5.032	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The AN/SQQ-34 Aircraft Carrier Tactical Support Center (CV-TSC) project delivers ASW and SUW combat capability to the Aircraft Carrier. This project provides incremental development to deliver frequent capability updates to the Fleet, developing, testing, certifying, and fielding system upgrades and cyber-security patches. The project maintains interoperability with current and future interfaces; supports mission data exchange; improves track/sensor processing and analysis techniques; improves mission planning; improves data recording, reconstruction, and distribution; improves embedded simulation and training capabilities and implements cyber-security measures to effectively employ overall CVN self-defense capabilities. CV-TSC integrates sensor data from off-board aircraft, organic platform sensors, Minotaur multi-sensor fused track data, Link-16 track data, SSDS track data (PLA and non-PLA), GCCS OTH track data, and environmental and threat databases to assess the threat and assist the TAO and Composite Warfare Commander (CWC) to effectively employ overall CVN self-defense capabilities. CV-TSC generates real-time ASW/SUW information and recommendations, tactical planning and employment of ASW/SUW assets, ASW/SUW sensor data processing and analysis, and distribution of tactically significant data. Aircraft supported include MH-60R/S Seahawk, and P-8 Poseidon and MQ-4C Triton as future ASW/SUW systems.

System development is accomplished through the following initiatives:
1) Maintaining interoperability with the local CVN warfare systems through current and future interfaces;
2) Continuing to support mission data exchange and tactical control with current and future ASW/SUW assets and their mission systems;
3) Improving track and sensor processing and analysis techniques as new track and sensor data becomes available;
4) Improving mission planning support for the ASW/SUW missions conducted from the CVN;
5) Improving data recording, reconstruct, and distribution to meet the decreasing timelines associated with getting tactically significant data to other end users both on and off platform;
6) Improving embedded simulation and training capabilities to enable operator proficiencies; and
7) Implementing cyber security measures.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: CV-TSC Development / Integration / Test / Certification	8.354	4.954	4.575	0.000	4.575
Articles:	-	-	-	-	-
Description: CV-TSC's evolutionary acquisition approach to developing, testing, certifying, and fielding system upgrades and cyber-security patches is implemented through a series of phased Fleet Capability Releases (FCRs).					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 3216 / *Tactical Support Center-Integration*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
FY 2024 Plans: - Complete development of FCR-6 capabilities and interfaces. - Complete Independent Verification and Validation (IV&V) of FCR-6. - Initiate planning to acquire certifications required for fielding FCR-6, to include: Platform Information Technology (PIT) / Authorization to Operate (ATO), Integrated Shipboard Network System (ISNS) and Consolidated Afloat Network Enterprise Systems (CANES) Certifications, Program Executive Office (PEO) Integrated Warfare Systems (IWS) Element Certification, and Combat System Test (CST). - Initiate requirements generation and planning of enhancements for FCR-7. - Initiate development and integration of enhancements for FCR-7. - Continue cybersecurity risk assessment and mitigation, specifically with the aircraft carrier combat system. ***FY 2025 Base Plans:*** - Complete final system testing and certification of FCR-6, including PIT/ATO, ISNS/CANES and PEO IWS certifications, and CST. - Complete first article delivery of FCR-6. - Continue development of FCR-7 capabilities, to include software architecture upgrades and Maritime Targeting Cell - Afloat (MTC-A) integration, development, and testing. - Continue cybersecurity risk assessment and mitigation, specifically with the aircraft carrier combat system. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** - FY 2024 ($4.954M) to FY 2025 ($4.575M) decrease ($-0.379M) is the result of FY 2024 including additional funding programmed that year to resolve hardware obsolescence/end-of-life issues as well as the application of miscellaneous rate adjustments in FY 2025.					
Accomplishments/Planned Programs Subtotals	8.354	4.954	4.575	0.000	4.575

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• OPN/2176: *Undersea Warfare Support Equipment (N98/CV-TSC only)*	2.336	4.263	1.439	-	1.439	0.400	0.408	0.416	0.425	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 3216 / *Tactical Support Center-Integration*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

- CV-TSC utilizes an incremental development approach that aims to deliver capability updates via Fleet Capability Releases (FCRs). This approach allows required capability to be delivered to address emerging Fleet needs and provides frequent opportunities to ensure interoperability is synchronized with the SSDS and other critical ship-board systems. The acquisition strategy places heavy emphasis on the use of standardized combat system hardware and software hosting, minimizing the use of custom hardware thereby reducing life-cycle costs.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603512N / *Carrier Systems Development*	Project (Number/Name) 3216 / *Tactical Support Center-Integration*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CV-TSC Development / Integration	C/CPFF	Adaptive Methods : VA	5.808	0.310	Dec 2022	0.300	Nov 2023	0.300	Dec 2024	-		0.300	Continuing	Continuing	Continuing
CV-TSC Development / Integration	C/CPFF	JHU/APL : MD	0.910	0.770	Dec 2022	0.650	Mar 2024	0.600	Dec 2024	-		0.600	Continuing	Continuing	Continuing
CV-TSC Development / Integration	WR	NAWC/Pax River : MD	1.770	0.140	Nov 2022	0.215	Feb 2024	0.215	Nov 2024	-		0.215	Continuing	Continuing	Continuing
CV-TSC Development / Integration	WR	NRL : DC	0.325	0.000		0.000		0.000		-		0.000	0.000	0.325	-
CV-TSC Development / Integration	WR	NSWC/Carderock : MD	2.650	0.000		0.000		0.000		-		0.000	0.000	2.650	-
CV-TSC Development / Integration Text	WR	NSWC/Crane : IN	0.140	0.165	Nov 2022	0.000		0.000		-		0.000	0.000	0.305	-
CV-TSC Development / Integration	WR	NSWC/Dahlgren : VA	0.100	0.000		0.000		0.000		-		0.000	0.000	0.100	-
CV-TSC Development / Integration	WR	NUWC/Keyport : WA	38.586	4.974	Nov 2022	2.387	Oct 2023	2.192	Nov 2024	-		2.192	Continuing	Continuing	Continuing
CV-TSC Development / Integration	WR	SPAWAR : CA	4.160	0.000		0.000		0.000		-		0.000	0.000	4.160	-
CV-TSC Development / Integration	C/CPFF	VAR* : VAR*	3.225	0.970	Dec 2022	0.542	Dec 2023	0.408	Dec 2024	-		0.408	Continuing	Continuing	Continuing
Boundary Defense Capability Design/ Development	WR	NSWC/Philadelphia : PA	4.046	0.000		0.000		0.000		-		0.000	0.000	4.046	-
Boundary Defense Capability Design/ Development	C/CPFF	VAR* : VAR*	4.495	0.000		0.000		0.000		-		0.000	0.000	4.495	-
		Subtotal	66.215	7.329		4.094		3.715		-		3.715	Continuing	Continuing	N/A

Remarks

* Consists of multiple performing activities with funding for each not greater than $1M per year.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 3216 / *Tactical Support Center-Integration*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	NUWC//Keyport : WA	3.898	0.610	Nov 2022	0.600	Oct 2023	0.600	Nov 2024	-		0.600	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NUWC/Newport : RI	0.225	0.100	Nov 2022	0.100	Oct 2023	0.100	Nov 2024	-		0.100	Continuing	Continuing	Continuing
		Subtotal	4.123	0.710		0.700		0.700		-		0.700	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support - Acquisition, Business & Finance	C/CPAF	BAE Systems : MD	0.411	0.000		0.000		0.000		-		0.000	0.000	0.411	-
Program Management Support - Acquisition, Business & Finance	C/CPFF	CACI : VA	0.134	0.000		0.000		0.000		-		0.000	0.000	0.134	-
Program Management Support - Acquisition, Business & Finance	C/CPFF	Booz Allen Hamilton : VA	0.081	0.130	Dec 2022	0.065	Feb 2024	0.065	Dec 2024	-		0.065	Continuing	Continuing	Continuing
Program Management Support - Systems Engineering and Technical Assistance (SETA)	C/CPFF	CGI Federal : VA	0.558	0.000		0.000		0.000		-		0.000	0.000	0.558	-
Program Management Support - Systems Engineering and Technical Assistance (SETA)	C/CPFF	KMS Solutions : VA	0.300	0.165	Dec 2022	0.075	Feb 2024	0.075	Dec 2024	-		0.075	Continuing	Continuing	Continuing
Program Office Travel	Allot	NAVSEA PEO IWS5 : DC	0.104	0.020	Oct 2022	0.020	Oct 2023	0.020	Oct 2024	-		0.020	Continuing	Continuing	Continuing
		Subtotal	1.588	0.315		0.160		0.160		-		0.160	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603512N / *Carrier Systems Development*	Project (Number/Name) 3216 / *Tactical Support Center-Integration*	

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	71.926	8.354		4.954		4.575		-		4.575	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 3216 / *Tactical Support Center-Integration*	

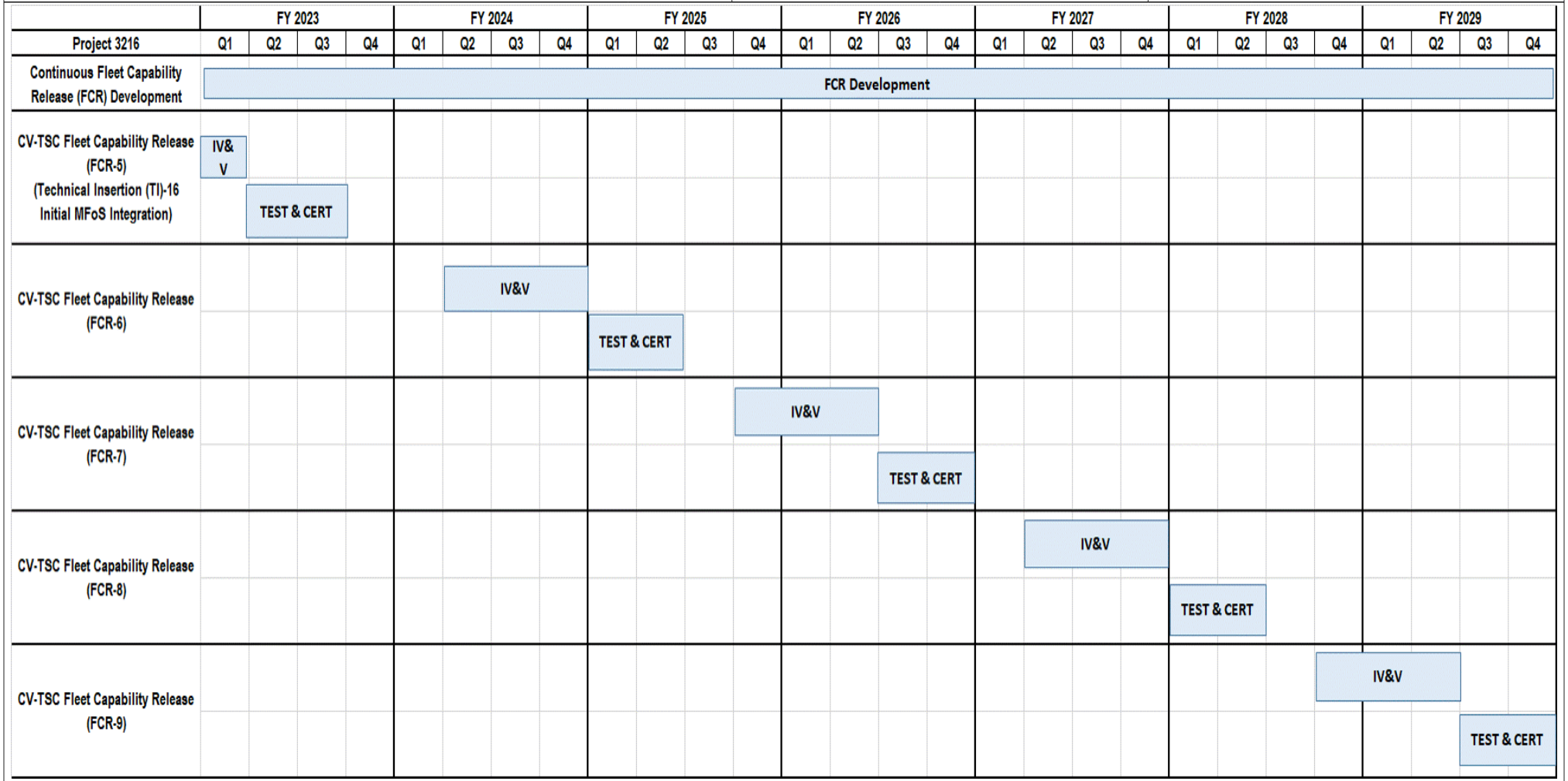

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 3216 / *Tactical Support Center-Integration*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
CV-TSC Fleet Capability Release (FCR) Development Pipeline				
CV-TSC Fleet Capability Release (FCR) Development Pipeline	1	2023	4	2029
CV-TSC FCR-5 (Initial Minotaur Integration)				
CV-TSC FCR-5 IV&V	1	2023	1	2023
CV-TSC FCR-5 Test and Certification Events	2	2023	3	2023
CV-TSC FCR-6				
CV-TSC FCR-6 IV&V	2	2024	4	2024
CV-TSC FCR-6 Test and Certification Events	1	2025	2	2025
CV-TSC FCR-7				
CV-TSC FCR-7 IV&V	4	2025	2	2026
CV-TSC FCR-7 Test and Certification Events	3	2026	4	2026
CV-TSC FCR-8				
CV-TSC FCR-8 IV&V	2	2027	4	2027
CV-TSC FCR-8 Test and Certification Events	1	2028	2	2028
CV-TSC FCR-9				
CV-TSC FCR-9 IV&V	4	2028	2	2029
CV-TSC FCR-9 Test and Certification Events	3	2029	4	2029

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603512N / *Carrier Systems Development*	Project (Number/Name) 4005 / *In-Service Carrier Systems Development*	

COST ($ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
4005: *In-Service Carrier Systems Development*	31.227	3.026	1.141	1.084	-	1.084	4.405	5.325	4.281	4.368	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The In-Service Carrier Systems Demonstration and Validation Program develops new technology and enhancements for 11 nuclear powered Aircraft Carriers with nearly 300 systems onboard each vessel. These systems are a combination of historical and new initiatives that deliver an affordable, robust, operator-friendly automated control environment. In order to deter threats and properly integrate all of the systems, the Demonstration and Validation Program segments the testing and upgrades into four areas: system architecture, requirements/specification development, technology selection, cyber-security engineering and integration, and software development. The Demonstration and Validation Program also focuses on the Total Ownership Costs of each system and any equipment obsolescence issues. Initial technologies include the Uninterruptible Power Supply (UPS) Replacements, the Integrated Condition Assessment System (ICAS), the On-Machine I/O development for Low Pressure Air Plants (LPAP) and LPAP Air End Re-design. Demonstration technologies include Advanced Damage Control System (ADCS) software improvements, Input / Output Controller (IOC) Replacement, Fleet wireless Personal Digital Assistant (PDA), Weapons Elevator Laser Positioning System (WELPS), Legacy Steering Interface (LSI) upgrades, Passive Countermeasures System (PCMS) alternate measurement capability, additive manufacturing efforts, and Weapons Elevators Programmable Logic Controller (PLC) redesign.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: In-Service Carrier Systems Development	3.026	1.141	1.084	0.000	1.084
Articles:	-	-	-	-	-
FY 2024 Plans: Fiscal Year 2024 plans include continued support to Aircraft Carrier technologies, with emphasis on Additive Manufacturing and the Weapon Elevator Programmable Logic Controller (PLC) Re-design. Modifications, upgrades, and development of systems and software will be ongoing in support of In-Service Aircraft Carrier Modernization and Total Ownership Cost reduction initiatives to address equipment obsolescence.					
FY 2025 Base Plans: Fiscal Year 2025 plans include continued support to Aircraft Carrier technologies, with emphasis on Additive Manufacturing and the Weapon Elevator Programmable Logic Controller (PLC) Re-design. Modifications, upgrades, and					

Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 4005 / *In-Service Carrier Systems Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
development of systems and software will be ongoing in support of In-Service Aircraft Carrier Modernization and Total Ownership Cost reduction initiatives to address equipment obsolescence. ***FY 2025 OCO Plans:*** N/A ***FY 2024 to FY 2025 Increase/Decrease Statement:*** The FY 2024 ($1.141M) to FY 2025 ($1.084M) program decrease ($-0.057M) reflects a miscellaneous rate adjustment.					
Accomplishments/Planned Programs Subtotals	3.026	1.141	1.084	0.000	1.084

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Investigate, demonstrate, and implement available technologies to deliver a robust, operator-friendly automation control environment for Navy Aircraft Carrier shipboard equipment to reduce workload, manpower requirements, and Total Ownership Costs (TOC). Deliver affordable operational upgrades onboard each platform through comparative initiatives and analysis without sacrificing schedule, performance, or requirements.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603512N / *Carrier Systems Development*	Project (Number/Name) 4005 / *In-Service Carrier Systems Development*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Ship Integration	WR	NSWC : Philadelphia	5.247	0.608	Nov 2022	0.300	Nov 2023	0.228	Nov 2024	-		0.228	0.000	6.383	-
Ship Integration	WR	NSWC : Dahlgren	0.197	0.000		0.000		0.000		-		0.000	0.000	0.197	-
Ship Integration	WR	NSWC : Carderock	0.475	0.000		0.000		0.000		-		0.000	0.000	0.475	-
Ship Integration	WR	DOE : KCNSC	0.000	0.600	Nov 2022	0.000		0.000		-		0.000	0.000	0.600	-
		Subtotal	5.919	1.208		0.300		0.228		-		0.228	0.000	7.655	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	WR	NSWC : Philadelphia	8.686	0.725	Nov 2022	0.375	Nov 2023	0.000		-		0.000	0.000	9.786	-
Program Management Support	WR	NSWC : Philadelphia	3.777	0.200	Nov 2022	0.000		0.000		-		0.000	0.000	3.977	-
Training Development	WR	NSWC : Philadelphia	1.715	0.200	Nov 2022	0.000		0.000		-		0.000	0.000	1.915	-
Integrated Logistics Support	WR	NSWC : Philadelphia	2.089	0.300	Nov 2022	0.000	Nov 2023	0.068	Nov 2024	-		0.068	0.000	2.457	-
Software Development	WR	NSWC : Dahlgren	0.308	0.000		0.000		0.000		-		0.000	0.000	0.308	-
Program Management Support	WR	NSWC : Dahlgren	0.317	0.000		0.000		0.000		-		0.000	0.000	0.317	-
Program Management Support	WR	NSWC : Carderock	0.283	0.065	Nov 2022	0.310	Nov 2023	0.000		-		0.000	0.000	0.658	-
		Subtotal	17.175	1.490		0.685		0.068		-		0.068	0.000	19.418	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation (OT&E)	WR	NIWC : Atlantic	0.214	0.000		0.000		0.000		-		0.000	0.000	0.214	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy			Date: March 2024
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603512N / *Carrier Systems Development*	Project (Number/Name) 4005 / *In-Service Carrier Systems Development*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation (OT&E)	WR	NSWC : Carderock	0.225	0.000		0.000		0.000		-		0.000	0.000	0.225	-
Operational Test & Evaluation (OT&E)	WR	NSWC : Philadelphia	7.425	0.000		0.156	Nov 2023	0.377	Nov 2024	-		0.377	Continuing	Continuing	Continuing
Operational Test & Evaluation (OT&E)	WR	NSWC : Dahlgren	0.261	0.328	Nov 2022	0.000		0.343	Nov 2024	-		0.343	0.000	0.932	-
		Subtotal	8.125	0.328		0.156		0.720		-		0.720	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2023 Cost	FY 2023 Award Date	FY 2024 Cost	FY 2024 Award Date	FY 2025 Base Cost	FY 2025 Base Award Date	FY 2025 OCO Cost	FY 2025 OCO Award Date	FY 2025 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DAWF	Various	Various : Various	0.008	0.000		0.000		0.068	Nov 2024	-		0.068	0.000	0.076	-
		Subtotal	0.008	0.000		0.000		0.068		-		0.068	0.000	0.076	N/A

	Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	31.227	3.026		1.141		1.084		-		1.084	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 4005 / *In-Service Carrier Systems Development*

In-Service Carrier Systems Development

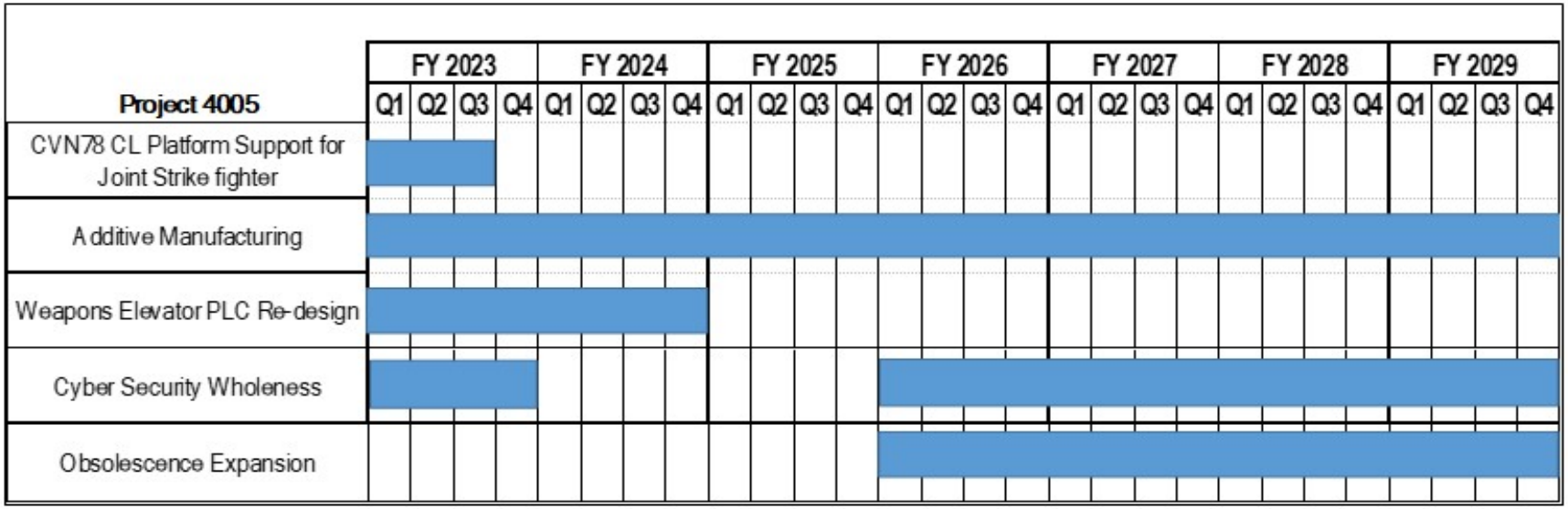

Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603512N / *Carrier Systems Development*	**Project (Number/Name)** 4005 / *In-Service Carrier Systems Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 4005				
CVN 78 CL Platform: CVN 78 CL Platform Support for Joint Strike Fighter	1	2023	3	2023
Weapons Elevator PLC Redesign: Weapons Elevator PLC Redesign	1	2023	4	2024
Additive Manufacturing: Additive Manufacturing	1	2023	4	2029
CYBER Security Wholeness: Cyber Security Wholeness Part I	1	2023	4	2023
CYBER Security Wholeness: Cyber Security Wholeness Part II	1	2026	4	2029
Obsolescence: Obsolescence Expansion	1	2026	4	2029