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Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev
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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	859.987	95.740	115.894	159.648	-	159.648	146.280	110.229	103.636	105.580	Continuing	Continuing
0604: Training Range & Instr Dev	165.516	2.929	4.300	4.232	-	4.232	4.058	4.125	4.200	4.287	Continuing	Continuing
1427: Surface Tactical Team Trainer (STTT)	309.041	13.532	33.057	71.805	-	71.805	44.782	25.577	23.830	24.292	Continuing	Continuing
1982: Adversary Mission Systems	0.000	0.000	5.140	5.258	-	5.258	17.959	15.703	16.722	17.115	Continuing	Continuing
2124: Air Warfare Training	56.853	1.753	1.734	12.319	-	12.319	12.553	12.794	13.051	13.315	Continuing	Continuing
3093: TACTS/LATR Replacement	291.625	45.834	68.632	65.989	-	65.989	66.876	51.984	45.784	46.521	Continuing	Continuing
3356: High Fidelity Surface Trainers	36.952	0.194	3.031	0.045	-	0.045	0.052	0.046	0.049	0.050	Continuing	Continuing
9999: Congressional Adds	0.000	31.498	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	31.498

A. Mission Description and Budget Item Justification

0604 - Training Range and Instrumentation Development (TRID) projects develop specialized instrumentations for fleet readiness training while minimizing life cycle costs. Projects are development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

1427 - Surface Tactical Team Trainer (STTT) develops modifications during sustainment of Battle Force Tactical Training (BFTT) system and modernization into the Advanced Training Domain (ATD). Both BFTT and ATD are the core systems that are used to integrate the weapon system elements, and combat system components to create the Total Ship Training Capability (TSTC). BFTT and ATD continue to integrate and update, as new tactical capabilities are being introduced, to enable crew operator proficiency training for basic and through sustainment level phase training events, through and distributed strike group certification Fleet Synthetic Training (FST) events and including COMPTUEX FST at Sea integration into Live, Virtual and Constructive (LVC) environment. Development of the next generation of ATD will align with combat systems virtualization efforts, and focus on increased fidelity to represent contested environments by leveraging the simulations used in the Combined Integrated Air and Missile Defense (IAMD) and Anti-Submarine Warfare (ASW) Trainer (CIAT), also known as CIAT to Sea. Continued Development is required to integrate new capabilities and interfaces to provide training for AEGIS and SSDS combat system capability upgrades, and to address the Fleet's Live, Virtual and Constructive (LVC) Fleet Training Wholeness (FTW) initiative. Additionally, modernization is needed to support the DoD Training Transformation Plan, the Chief of Naval Operations Fleet Response Plan (OFRP).

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<p>1982 - Airborne Adversary Mission Systems builds upon existing RedNet architecture to allow classified software development and classified hardware integration with Tactical Combat Training System (TCTS) Increment II. This project will enable the aircrew to accurately emulate peer threat capabilities and provides a standalone Adversary 'Operational Flight Program (OFP)', that can be deployed on any aircraft with RedNet Multi-Layered Obstructed Brokered Bus-Controller & Routing for Advanced Integrated Networks (MOB Brain) avionics architecture and TCTS Increment II pod. Primary platforms for development include the F-5, F-16 and F-18 within existing Naval Adversary Squadrons. These systems combined with a classified electronic kneeboard, allows for the development, integration and deployment of adversary mission hardware and software systems without modification of aircraft's existing OFP. This effort will provide for the future ability to participate fully in the LVC environment as well as provide physics and effects-based threat replications for the mission essential training of deploying Fleet aircrews.</p> <p>2124 - Air Warfare Training Development (AWTD) provides for advanced technology maturation, risk mitigation, study and demonstration in support of naval aviation manned and unmanned platforms, operational flight trainers, maintenance trainers, training networks, distributed mission training, and Live Virtual Constructive (LVC) training applications. Supports the Navy Aviation Simulation Master Plan (NASMP) upgrade efforts and Type/Model/Series programs with advanced visual system display configurations requirements. Provides for Open Architecture (OA), and common systems interface applications. Assesses trainee cognitive requirements and the development and incorporation of next generation LVC, UAS constructive and associated visualization component technologies. Additionally, AWTD provides for advanced virtual component fidelity improvements for LVC capability. LVC technologies will facilitate advanced, cost effective weapons and tactics training and emerging capability requirements in the Air-Sea Battle Space and Naval Integrated Fire Control-Counter Air capabilities development. AWTD investigates training applications of emerging technologies such as Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR) Head Mounted Displays (HMD), haptic feedback devices, and cross domain solutions/ cybersecurity solutions (e.g., Blockchain technology).</p> <p>3093 - The Tactical Combat Training System (TCTS) Increment II will provide an improved environment for air combat training utilizing a secure air-to-air and air-to-ground data link, and will provide rangeless operation capability to Forward Deployed Naval Forces (FDFN). TCTS Increment II will provide encryption and an enhanced threat environment, as well as airborne participant instrumentation for multiple fixed and rotary wing platforms. Engineering Development Model (EDM) units in multiple form factors are being developed in FY19 through FY26 and will support Engineering and Developmental Testing events through FY27. The EDMs will be specifically utilized for testing in the following areas: Environmental Qualification, Software, High Accelerated Lifecycle, Ground System Integration, Airborne Subsystem (AS) Air Worthiness and Performance, Shipboard Ground Station, Internal Mount (IM), and JSF Airworthiness and Performance. TCTS Increment II provides the foundational encrypted airborne network for implementation of Aviation Live Virtual Constructive capabilities.</p> <p>3093 (cont) Aviation LVC Live Aircraft Integration (ALLAI) Phase 1 funds the integration of live aircraft into the Live, Virtual, Constructive, blended training environment to close the Great Powers Competition training capability gap for mission rehearsal for the high end fight. Aviation LVC will establish an integrated System of Systems (SoS) training environment bringing already-developed capabilities together with new developmental efforts to form a cohesive architecture that accurately emulates the high end fight for warfighter training. LVC takes a hybrid approach to aviation and Fleet-wide training where the training audience in the form of Live personnel operating Live equipment (to include aircraft and surface vessels) on a Tactical Training Range (TTR) will be teamed with Live aircrew operating simulators to provide a Virtual complement in the "Blue Air" picture. The "Red" adversary for this training is made up of Live people operating Live aircraft complemented by computer generated "Red" Constructive Air and Surface threats that stimulate the "Blue" Air displays and sensors as if a "Red" Live adversary were present. Range Training Officers (RTO) operating at the TTR Operations Center monitor and oversee the overall mission picture while directing Live participants and controlling Constructive threats.</p>		

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3093 (cont) Aviation Performance/Proficiency Analytics (APPA) will deliver scalable, common data collection, storage, analysis, and reporting capability to provide quantitative, high-fidelity feedback and proficiency assessments to meet real-world threats. APPA addresses current Training Analysis Project (TAP) constraints to include scalability, site limitations, and tactical SME manpower requirements. APPA will develop government-owned standards and architecture for aviation performance data collection, deliver an AI-augmented debrief tool for data processing and analysis supported by tactical SMEs and data scientists; multilevel security databases; network capability; and intelligent, semi-automated assessments, reporting and visualization. An open systems architecture enables multi-domain integration. The system will enable rigorous and repeatable post-flight assessment of high-end Great Power Competition (GPC) warfighting scenarios to produce individual performance "baseball cards", squadron reports, detailed strengths and weaknesses and CVW reports measured against What-It-Takes-To-Win (WITTW) performance standards.

3356 - Funds high fidelity Aegis Integrated Air and Missile Defense (IAMD) individual, instructor, strike group and team trainers for all Advanced Capability Build (ACB) and below Aegis baselines. This line provides funds for development of a High Fidelity Aegis Combined Integrated Air and Missile Defense (IAMD) and Anti-Submarine Warfare (ASW) Trainer (CIAT). Additionally, this line funds the development of the Surface Training and Readiness Management System (STRMS). This line supports Surface Training Advanced Virtual Environment (STAVE) methodology by researching and developing trainers that will create an immersive and interactive learning environment and support both Chief of Naval Operations (CNO) High Velocity Learning and Ready Relevant Learning intent and developing advanced technology for collecting Sailor performance data to determine measured benefit of delivered training. NOTE: In FY18, Mine Warfare Synthetic Training requirements previously captured within PE 0204571N / Project 3356 [(High Fidelity Surface Trainer)] were realigned to PE 0603502N / Project 1235 [(Mine Warfare Planning and Analysis)].

JUSTIFICATON FOR BUDGET ACTIVITY:

This program is funded under Operational Systems Development because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	100.339	115.894	130.620	-	130.620
Current President's Budget	95.740	115.894	159.648	-	159.648
Total Adjustments	-4.599	0.000	29.028	-	29.028
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.896	0.000			
• SBIR/STTR Transfer	-2.703	0.000			
• Program Adjustments	0.000	0.000	29.068	-	29.068
• Rate/Misc Adjustments	0.000	0.000	-0.040	-	-0.040

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Appropriation/Budget Activity
 1319: *Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development*

R-1 Program Element (Number/Name)
 PE 0204571N / *Consolidated Trng Sys Dev*

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: *Congressional Adds*

Congressional Add: *Secure LVC advanced training environment*

Congressional Add: *Test capabilities acceleration - Barking Sands Undersea Range Extension*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

FY 2023	FY 2024
19.999	0.000
11.499	0.000
31.498	0.000
31.498	0.000

Change Summary Explanation

FY25 changes:

0604 - \$0.027K reduction for misc adjustments.

1427 - FY25 increase of \$15.605M due to:

Development onboard integrated training for LCS hulls to meet Sailor certification training requirements while forward deployed. Development of Surface LVC Position Reporting (SLPR) capability within the Battle Force Tactical Training (BFTT) system which enables Naval Forces to transmit Time Space Position Information (TSPI) data from Aegis and SSDS equipped surface platforms across the Navy Enterprise Tactical Training Network (NETTN).

2124 - FY25 increase \$10.555M to support design and development efforts of the Joint Simulation Environment (JSE) to support Advanced LVC Training in the Naval Aviation Enterprise.

3093 - \$2.841M net increase reflects realignment of funding from PE 0604378N for ongoing Aviation Performance/Proficiency Analytics (APPA) and misc adjustments.

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev			Project (Number/Name) 0604 / Training Range & Instr Dev				
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
0604: Training Range & Instr Dev	165.516	2.929	4.300	4.232	-	4.232	4.058	4.125	4.200	4.287	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Training Range and Instrumentation Development (TRID) projects develop specialized instrumentations for fleet readiness training while minimizing life cycle costs. Projects are development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Title: Range Equipment & Modernization (RE&M)</p> <p align="right">Articles:</p> <p>Description: Range Equipment & Modernization (RE&M) IPT. Consists of: Joint Advanced Weapons Scoring System (JAWSS) - comprised of: Weapons Impact Scoring Set (WISS) and Laser Training Systems (LTS).</p> <p>FY 2024 Plans: Continue to develop Range Equipment & Modernization (RE&M) specialized instrumentation and upgrade fielded systems of WISS and LTS including WIN 11 upgrades.</p> <p>FY 2025 Base Plans: Continue to develop RE&M specialized instrumentation and upgrade fielded systems of WISS and LTS.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase (\$0.383M) supports LVC Research Development, WIN11 and LTS upgrades.</p>	0.000	0.124	0.507	0.000	0.507
<p>Title: Air Combat Maneuvering Instrumentation (ACMI)</p> <p align="right">Articles:</p> <p>Description: Air Combat Maneuvering Instrumentation (ACMI) IPT. Consists of: Large Area Tracking Range (LATR), Tactical Air Range Integration Facility (TARIF), and Tactical Combat Training Systems (TCTS) I.</p> <p>FY 2024 Plans:</p>	2.458	3.213	3.178	0.000	3.178

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Develop ACMI specialized instrumentation and upgrade fielded systems of LATR RHEL 9 Updgrade and TCTS Inc I to include hardware upgrades and WIN 11 upgrades at TARIF (China Lake) to meet software demands.</p> <p>FY 2025 Base Plans: Develop ACMI specialized instrumentation and upgrade fielded systems of TCTS I, LATR, TARIF, to include hardware upgrades at TARIF to meet software demands.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: No significant change from FY24 to FY25.</p>					
<p>Title: Ocean Systems (OS)</p> <p align="right">Articles:</p> <p>Description: Ocean Systems (OS) IPT: research, develop, and test technology improvements for fixed and portable Anti-Submarine Warfare (ASW) training ranges.</p> <p>FY 2024 Plans: Develop OS specialized instrumentation and upgrade fielded systems of USWTR and PUTR including Portable Range of the Future, UTS Data Interface, UTS Shallow Water Tracking, and UTS Remote Spearfish Interface.</p> <p>FY 2025 Base Plans: Continue to develop OS specialized instrumentation and upgrade fielded systems of USWTR and PUTR.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 decrease (\$0.416M) due to completion of UTS development efforts.</p>	0.471 -	0.963 -	0.547 -	0.000 -	0.547 -
Accomplishments/Planned Programs Subtotals	2.929	4.300	4.232	0.000	4.232

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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u> <u>Base</u>	<u>FY 2025</u> <u>OCO</u>	<u>FY 2025</u> <u>Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN/4204: <i>Weapons Range Support Equipment (WRSE)/ LSRTU/Ocean Systems</i>	103.864	145.280	135.780	-	135.780	161.743	160.029	163.372	166.829	Continuing	Continuing

Remarks

Does not include funding for Moving Land Target (MLT) program.

D. Acquisition Strategy

The Training Range and Instrumentation Development (TRID) program is a non-ACAT program. The integrated product teams that develop new TRID capabilities include government and contractor engineering personnel.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 0604 / Training Range & Instr Dev
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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware Development	C/CPFF	JACOBS ENG : RIDGECREST, CA	13.889	0.000		0.000		0.000		-		0.000	0.000	13.889	13.889
Hardware Development	WR	NSWC : CORONA, CA	0.717	0.256	Jan 2023	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Hardware Development	C/CPFF	ATI : Summerville, SC	0.150	0.000		0.000		0.000		-		0.000	0.000	0.150	0.150
Software Development	WR	NUWC : NEWPORT, RI	2.851	0.471	Nov 2022	0.963	Nov 2023	0.507	Nov 2024	-		0.507	Continuing	Continuing	Continuing
Software Development	C/CPFF	Various : RIDGECREST, CA	6.132	0.000		0.000		0.000		-		0.000	0.000	6.132	6.132
Software Development	WR	NAWC-AD : PAX RIVER, MD	12.196	0.000		0.820	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Software Development	WR	NSWC : CORONA, CA	0.458	0.493	Jan 2023	0.754	Nov 2023	0.500	Dec 2024	-		0.500	Continuing	Continuing	Continuing
Software Development	WR	NAWC-WD : POINT MUGU, CA	0.375	0.000		0.000		0.048	Dec 2024	-		0.048	Continuing	Continuing	Continuing
Prior Year Prod Dev No Longer Funded in the FYDP	Various	Various : Various	100.705	0.000		0.000		0.000		-		0.000	0.000	100.705	100.705
Subtotal			137.473	1.220		2.537		1.055		-		1.055	Continuing	Continuing	N/A

Remarks

Reduced support at NUWC and NSWC Corona based on projected requirements for FY25.

Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	NAWC-AD : PAX RIVER, MD	2.701	0.737	Nov 2022	0.750	Nov 2023	1.091	Nov 2024	-		1.091	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWC-WD : CHINA LAKE, CA	4.023	0.972	Nov 2022	1.013	Nov 2023	2.086	Nov 2024	-		2.086	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 0604 / Training Range & Instr Dev
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Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Systems Engineering	WR	NSWC : CORONA, CA	1.231	0.000	Jun 2023	0.000		0.000		-		0.000	0.000	1.231	-
Systems Engineering	WR	GSA : Washington, DC	0.124	0.000		0.000		0.000		-		0.000	0.000	0.124	-
Prior Year Support No Longer Funded in the FYDP	Various	Various : Various	10.926	0.000		0.000		0.000		-		0.000	0.000	10.926	-
Subtotal			19.005	1.709		1.763		3.177		-		3.177	Continuing	Continuing	N/A

Remarks
FY25 increased engineering support at NAWCAD PAX and NAWCAD CLK for Fleet emergent projects.

Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	5.299	0.000		0.000		0.000		-		0.000	0.000	5.299	-
Subtotal			5.299	0.000		0.000		0.000		-		0.000	0.000	5.299	N/A

Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prior Year Support No Longer Funded in the FYDP	Various	Various : Various	3.739	0.000		0.000		0.000		-		0.000	0.000	3.739	-
Subtotal			3.739	0.000		0.000		0.000		-		0.000	0.000	3.739	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

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Training Range & Instr Dev - RE&M	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones																												
System Development																												
	HSLESM Prototype FY23																											
	WISS V5 LVC Integration FY23																											
					WISS LVC Integration FY24																							
									LTS FY24																			
									TBD Based on Fleet Requirements FY25																			
													TBD Based on Fleet Requirements FY26															
																	TBD Based on Fleet Requirements FY27											
																					TBD Based on Fleet Requirements FY28							
																									TBD Based on Fleet Requirements FY29			
Test & Evaluation																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

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Training Range & Instr Dev - ACMI	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones																												
Develop Code	LATR NIS TENA Integration FY23																											
	LATR P-8A Tracking Investigation FY23																											
	LITL Range Integration FY23																											
					TCTS I WIN 11 Upgrade																							
					LATR REHL 9 Upgrade																							
									TBD Based on Fleet Requirements FY25																			
													TBD Based on Fleet Requirements FY26															
																	TBD Based on Fleet Requirements FY27											
																					TBD Based on Fleet Requirements FY28							
																									TBD Based on Fleet Requirements FY29			
Test & Evaluation																												
Production Milestones																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Training Range & Instr Dev - RE&M				
System Development: RE&M - HSLESM Prototype FY23	1	2023	1	2024
System Development: RE&M - WISS V5 LVC Integration FY23	1	2023	1	2024
System Development: RE&M - WISS LVC Integration FY24	1	2024	1	2025
System Development: RE&M - Laser Training Systems FY24	1	2025	1	2026
System Development: RE&M - TBD Based on Fleet Requirements FY25	1	2025	1	2026
System Development: RE&M - TBD Based on Fleet Requirements FY26	1	2026	1	2027
System Development: RE&M - TBD Based on Fleet Requirements FY27	1	2027	1	2028
System Development: RE&M - TBD Based on Fleet Requirements FY28	1	2028	1	2029
System Development: RE&M - TBD Based on Fleet Requirements FY29	1	2029	4	2029
Training Range & Instr Dev - ACMI				
Acquisition Milestones: Develop Code: ACMI - LATR NIS TENA Integration FY23	2	2023	1	2024
Acquisition Milestones: Develop Code: ACMI - LATR P-8A Tracking Investigation FY23	2	2023	1	2024
Acquisition Milestones: Develop Code: ACMI - LITL Range Integration FY23	2	2023	1	2024
Acquisition Milestones: Develop Code: ACMI - TCTS I WIN 11 Upgrade	1	2024	1	2025
Acquisition Milestones: Develop Code: ACMI - LATR REHL 9 Upgrade	1	2024	1	2025
Acquisition Milestones: Develop Code: ACMI - TBD Based on Fleet Requirements FY25	1	2025	1	2026
Acquisition Milestones: Develop Code: ACMI - TBD Based on Fleet Requirements FY26	1	2026	1	2027
Acquisition Milestones: Develop Code: ACMI - TBD Based on Fleet Requirements FY27	1	2027	1	2028
Acquisition Milestones: Develop Code: ACMI - TBD Based on Fleet Requirements FY28	1	2028	1	2029

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 0604 / Training Range & Instr Dev
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Acquisition Milestones: Develop Code: ACMI - TBD Based on Fleet Requirements FY29	1	2029	4	2029
Ocean Systems				
System Development: Single Ping Detection and Tracking Prototype FY23	1	2023	1	2024
System Development: Portable Range Range of Future FY23	1	2023	1	2024
System Development: Portable Range Range of Future FY24	1	2024	1	2025
System Development: UTS Data Interface FY24	1	2024	1	2025
System Development: UTS Shallow Water Tracking FY24	1	2024	1	2025
System Development: UTS Remote Spearfish FY24	1	2024	1	2025
System Development: OS - TBD Based on Fleet Requirements FY25	1	2025	1	2026
System Development: OS - TBD Based on Fleet Requirements FY26	1	2026	1	2027
System Development: OS - TBD Based on Fleet Requirements FY27	1	2027	1	2028
System Development: OS - TBD Based on Fleet Requirements FY28	1	2028	1	2029
System Development: OS - TBD Based on Fleet Requirements FY29	1	2029	4	2029

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev				Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)			
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
1427: Surface Tactical Team Trainer (STTT)	309.041	13.532	33.057	71.805	-	71.805	44.782	25.577	23.830	24.292	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Department's submission reflects the results of a deep dive into Fleet Training Wholeness (FTW) and how to provide a means for Strike Group Training in a contested environment, in accordance with Chief of Naval Operations guidance and Fleet Training Wholeness 2025 objectives. The analysis determined the most cost effective means to provide this training is via a combination of Live Virtual Constructive (LVC) capabilities. The department of the Navy has identified 21 LVC Capabilities that began in FY19 leveraging combat system product line architecture components, contract vehicles, warfare center subject matter experts, and engineering practices for iterative development. The deep dive identified that there is no other cost effective way to train in a contested environment. The foundation for LVC has already been established and will continue to execute the investment strategy to provide initial underway LVC capability to train Strike Group(s) in an environment that they expect to fight in. The development, integration and testing of LVC's, along with ensuring interoperability with surface and air communities, will be accomplished across Integrated Warfare Systems (IWS), Navy Continuous Training Environment (NCTE), and the Navy's Tactical Training Network.

Surface Tactical Team Trainer (STTT) develops modifications during sustainment of Battle Force Tactical Training (BFTT) system and modernization into the Advanced Training Domain (ATD). Both BFTT and ATD are the core system that is used to integrate the weapon system elements, and combat system components to create the Total Ship Training Capability (TSTC). BFTT and ATD continue to integrate and update, as new tactical capabilities are being introduced, to enable crew operator proficiency training for basic and sustainment level training events, through distributed strike group certification fleet synthetic training (FST) events and including Composite Training Unit Exercise (COMPTUEX) FST underway LVC events. Continued Development is required to integrate new capabilities and interfaces to provide training for AEGIS and Ships Self Defense System (SSDS) combat system capability upgrades, and to address the Fleet's LVC FTW initiative. Additionally, modernization is needed to support the Department of Defense (DoD) Training Transformation Plan, the Chief of Naval Operations Fleet Response Plan and Commander United States Fleet Forces Command Fleet Readiness Training Plan.

The Advanced Training Domain (ATD) is being developed to combine BFTT and the AEGIS Combat Training System (ACTS) into a common system that integrates with AEGIS Base Line (BL) 9.2.2 And Follow (AF), and Ships Self Defense System (SSDS) BL 12.xAF. ATD is being hosted along with the AEGIS and SSDS combat system on Technical Insertion TI-12H & TI-16 common processing and display hardware. ATD is being designed to be the core of the Total Ship Training Capability, and is projected to be more reliable, simpler to use, and architecturally extensible to meet interoperability and capability enhancement challenges in the future.

The ATD is undergoing transformation to align with various virtualization and modernization efforts being accomplished within the surface combat systems. ATD is being augmented through the development and adaptation of high fidelity simulations used in the Combined Integrated Air and Missile Defense (IAMD) Anti-Submarine Warfare (ASW) Trainer (CIAT), for the purposes of providing high fidelity, LVC training capability that represents the high end fight in a contested environment. These enhancements will align to the combat systems Infrastructure as a Service (IaaS) virtualization efforts to provide the required training capability to the ships. This effort has formerly been referred to as Internal Training Domain (ITD).

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy	Date: March 2024
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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)
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The BFTT and ATD are being updated to maintain integration and capability enhancements developed for the Cooperative Engagement Capability (CEC), Surface Electronic Warfare Improvement Program (SEWIP), Carrier Tactical Support Center (CV-TSC), and SSDS Fire Control Loop Improvement Program.

TSTC provides realistic joint warfare training across the spectrum of armed conflict, realistic unit level team training in all warfare areas (e.g. Naval Integrated Fire Control - Counter Air (NIFC-CA) and Ballistic Missile Defense (BMD) missions to support IAMD). TSTC provides ships' Commanding Officers and Battle Group/Battle Force Commanders with the ability to conduct coordinated realistic, high stress, combat system level team training as an integral part of the Afloat Training Organization, the Tactical Training Groups and C2F/C3F FST/LVC events.

TSTC integrates ATD or BFTT with combat systems elements such as such as AWS/SSDS, SQQ-89, Vehicle Control Domain/CV-TSC via MH-60R Sim, Surface and Air Search Radars, Electronic Warfare Systems (BEWT/SEWTT), IFF, CEC & Data Link Systems, and Missile/Weapon Systems to provide a multi-warfare integrated training capability used for training and certification of crews and strike groups.

Maintain alignment and integration with Navy Continuous Training Environment (NCTE) networking and cyber security upgrades to maintain authorization to participate in distributed shipboard training events.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Title: Surface Tactical Team Trainer (STTT)</p> <p align="right">Articles:</p> <p>FY 2024 Plans: Complete Integration and Delivery of ATD with SSDS BL CP 3. Continue development, integration and testing ATD with AEGIS BL 10. Continue development and integration of ATD to incorporate training capabilities to support AEGIS and SSDS tactical capability updates. Continue developing and delivering threat data base updates to enable ships crews to train to relevant near-peer threats. Begin development of Surface LVC Position Reporting (SLPR) capability within the Battle Force Tactical Training (BFTT) system.</p> <p>FY 2025 Base Plans: Complete development, integration and testing ATD with AEGIS BL 10, SSDS BL 12 CP4. Continue development and integration of ATD to incorporate training capabilities to support AEGIS and SSDS tactical capability updates. Continue development and delivering threat data base updates to enable ships crews to train to relevant near-peer threats.</p>	8.930	9.600	11.350	0.000	11.350
	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Continue development of Surface LVC Position Reporting (SLPR) capability within the Battle Force Tactical Training (BFTT) system.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase (\$1.750M) supports the development of Surface LVC Position Reporting (SLPR) capability within the Battle Force Tactical Training (BFTT) system which enables Naval Forces to transmit Time Space Position Information (TSPI) data from Aegis and SSDS equipped surface platforms across the Navy Enterprise Tactical Training Network (NETTN).</p>					
<p>Title: Fleet Training Wholeness</p> <p align="right">Articles:</p> <p>FY 2024 Plans: Continue development of integrated combat system data collection and After-Action review/Debrief products that will provide an effective means for instructors to assess crew performance. Begin development of common ship/shore virtualized computing, networking and display infrastructure to allow shore operator training systems to be updated at the same time new combat system baselines are delivered. Begin updates to Cooperative Engagement Capability (CEC) Training capability updates to align with CEC Block II redesign. Begin updates to shipboard integrated training After-Action Review and Debrief capability.</p> <p>FY 2025 Base Plans: Continue development of updates to integrated combat system data collection and After-Action review/Debrief products that are aligned to tactical improvements that will provide an effective means for instructors to assess crew performance during LVC events. Continue development of common ship/shore virtualized computing, networking and display infrastructure to allow shore operator training systems to be updated at the same time new combat system baselines are delivered. Continue updates to Cooperative Engagement Capability (CEC) Training capability updates to align with CEC Block II redesign. Develop combat systems classroom architecture changes to enable combat system and integrated simulator software delivery. Begin development of a two-way data exchange training capability between surface ships and supporting aircraft.</p>	4.602	13.932	43.195	0.000	43.195
	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy	Date: March 2024
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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Begin development of integrated training for LCS Independence class legacy combat systems and the LCS lethality and survivability (L&S) upgrade.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase of (\$29.263M) is provided for the planned increase in development of common shipboard and shore-based training architecture to enable high fidelity tactical training updates.</p>					
<p>Title: Integrated Training Architecture/ATD 2.X</p> <p align="right">Articles:</p> <p>FY 2024 Plans: Conduct systems engineering and development activities to integrate Surface Training Advanced Virtual Environment (STAVE) high fidelity simulations and the Advanced Training Domain (ATD) (formerly Internal Training Domain (ITD)) Live, Virtual and Constructive (LVC) Training Capability within the Integrated Combat System (ICS) Infrastructure as a Service (IaaS) computing, networking and displays to enable realistic training within a contested environment, leveraging concepts and lessons learned from LVC integration efforts conducted in fleet training wholeness.</p> <p>FY 2025 Base Plans: Continue to conduct systems engineering and development activities to integrate Surface Training Advanced Virtual Environment (STAVE) high fidelity simulations and the Advanced Training Domain (ATD) (formerly Internal Training Domain (ITD)) Live, Virtual and Constructive (LVC) Training Capability within the Integrated Combat System (ICS) Infrastructure as a Service (IaaS) computing, networking and displays, high fidelity Combat System Simulator/Stimulators to enable realistic training within a contested environment, leveraging concepts and lessons learned from LVC integration efforts conducted in fleet training wholeness.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase of \$7.735M supports efforts to integrate Synthetic Training Advanced Virtual Environment (STAVE) high fidelity capabilities into the TSTC Advanced Training Domain (ATD)/LVC Training Capability as part of the shipboard IaaS computing, networking and displays to enhance realistic training within a contested</p>	0.000	9.525	17.260	0.000	17.260
	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
environment. Develop and integrate ATD 2.X, Combat System Simulator/Stimulators, and mission area LVC capabilities into ICS infrastructure.					
Accomplishments/Planned Programs Subtotals	13.532	33.057	71.805	0.000	71.805

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
• RDTE/0604307N/3357: <i>Aegis Training Improvement Program</i>	6.317	8.187	10.262	-	10.262	10.050	7.613	7.156	7.293	Continuing	Continuing
• RDTE/0604755N/3358: <i>SSDS Training Improvement Program</i>	9.386	8.147	12.765	-	12.765	12.083	9.759	9.243	9.423	Continuing	Continuing
• OPN/5664/MB040/MB51N: <i>Other Training Equipment (Surface BFTT/TSTC portion only)</i>	34.062	38.062	64.271	-	64.271	49.314	40.888	42.035	41.912	Continuing	Continuing

Remarks

D. Acquisition Strategy

The BFTT acquisition strategy for system development utilizes the Advanced Capability Build (ACB) development model, as mandated by the Office of the Chief of Naval Operations (OPNAV). Incremental acquisition and fielding, utilizing commercial off-the-shelf technology to the extent possible, is in accordance with OPNAV LTR Ser N86/9U179029 dtd 31 Jul 09.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)
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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Hardware Development	C/FFP	GTS : Virginia Beach, VA	18.438	0.620	Dec 2022	2.948	Dec 2023	8.922	Dec 2024	-		8.922	Continuing	Continuing	Continuing
Systems Engineering	WR	SEA02/NSWC Dam Neck/NSWC Dahlgren : NAVSEA/ Dam Neck/NSWC Dahlgren	111.051	6.416	Dec 2022	12.085	Dec 2023	24.684	Dec 2024	-		24.684	Continuing	Continuing	Continuing
Software Development	WR	NSWC Dam Neck/ SEA 02 : WR/REQN	125.903	4.496	Dec 2022	15.079	Dec 2023	32.796	Dec 2024	-		32.796	0.000	178.274	-
Subtotal			255.392	11.532		30.112		66.402		-		66.402	Continuing	Continuing	N/A

Remarks
Software development moved into Product Development section.

Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation (OT&E)	WR	NSWC Dam Neck/ SEA 02 : WR/REQN	34.162	1.000	Dec 2022	1.552	Dec 2023	3.981	Dec 2024	-		3.981	Continuing	Continuing	Continuing
Subtotal			34.162	1.000		1.552		3.981		-		3.981	Continuing	Continuing	N/A

Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering Support	WR	NSWC Dam Neck/ SEA02 : WR/REQN	19.487	1.000	Dec 2022	1.393	Dec 2023	1.422	Dec 2024	-		1.422	Continuing	Continuing	Continuing
Subtotal			19.487	1.000		1.393		1.422		-		1.422	Continuing	Continuing	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy

Date: March 2024

Appropriation/Budget Activity
1319 / 7

R-1 Program Element (Number/Name)
PE 0204571N / Consolidated Trng Sys Dev

Project (Number/Name)
1427 / Surface Tactical Team Trainer (STTT)

Certification Milestones <i>Date: 12/27/2023</i>	FY2023				FY2024				FY2025				FY2026				FY2027				FY2028				FY2029			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BFTT 5.1.C Regression testing/Certification (Integrating SSDS 6.06.04 EU1)							CSIT																					
BFTT 5.2.X (ECP 642) Development & Certification (Integrating with ACS BL 5.4.1 & SSDS 9.09.09 /10.11.02)																												
ATD 1.1.0 (ATD 1.0.0 Merged) Development & Certification (Integrating with ACS BL 9.2.2 & 9.2.3)																												
ATD 1.2.1 Development & Certification (Integrating with SSDS BL 12.13.XX CP 2)																												
ATD 1.2.0 & 1.3.0 Development & Certification (Integrating with AEGIS BL 10.0/10.1)																												
ATD 1.3.1 Development for Testing only for SSDS 12.14.01 Installation LPD 29 & LHA 8 (SSDS Build 12.14.01 merges with SSDS 12.15.01)																												
ATD 1.3.2 Development & Certification (Integrating with SSDS Build 12.15.01, CP 4)																												
ATD 1.3.3 / ATD 1.3.4 Development & Certification Aegis 9.2.4 (Integrating with CP 24-1 TI12H and CP 24-2 TI16)																												
ATD 1.4.0 Development & Certification (Integrating with FFG Combat System)																												
ATD 2.0 (IaaS/ITD) (Notional Schedule) Development & Certification for AWS / SSDS																												
BEWT / BEWT II																												

LEGEND

- = Key milestone
- = Element or CS Cert milestone
- = Proposed / Estimated Element or CS Cert milestones
- ACS = AEGIS Combat System
- AVMS = AEGIS Weapon System
- CP = Capability Package
- CSCP = Combat System Certification Panel
- IPR = In-Progress Review
- SRR = System Requirements Review
- SSDS = Ship Self-Defense System
- TRR = Test Readiness Review
- TSTC = Total Ship Training Capability

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 1427				
BFTT 5.1.C: BFTT 5.1C CSIT	1	2024	1	2024
BFTT 5.1.C: BFTT 5.1C Element Cert	3	2024	3	2024
BFTT 5.1.C: BFTT 5.1C CSCP SSDS 6.06.04 EU1 CVN 77	4	2024	4	2024
BFTT 5.2.X (ECP 642): BFTT 5.2.X Element Cert Ltr SSDS 9.08 & 10.11.02	2	2025	2	2025
BFTT 5.2.X (ECP 642): BFTT 5.2.X SSDS CSCP CVN 70/LHD 4	3	2025	3	2025
BFTT 5.2.X (ECP 642): BFTT 5.2.X ACS 5.4.1 Product Letter	2	2026	2	2026
BFTT 5.2.X (ECP 642): BFTT 5.2.X ACS 5.4.1 CSCP	3	2026	3	2026
ATD 1.1.0 (ATD 1.0.0 Merged): ATD 1.1.0 Product Release Letter #1	2	2023	2	2023
ATD 1.1.0 (ATD 1.0.0 Merged): ATD 1.1.0 CSCP (TI16 CP22-1) DDG 123	3	2023	3	2023
ATD 1.1.0 (ATD 1.0.0 Merged): ATD 1.1.0 Product Release Letter #2	2	2024	2	2024
ATD 1.1.0 (ATD 1.0.0 Merged): ATD 1.1.0 CSCP CG ACS 9.2.1	3	2024	3	2024
ATD 1.1.0 (ATD 1.0.0 Merged): ATD 1.1.0 CSCP ACS 9.2.3 CP24	3	2025	3	2025
ATD 1.2.1: ATD 1.2.1 Element Cert Panel	2	2023	2	2023
ATD 1.2.1: ATD 1.2.1 Element Cert Ltr	4	2023	4	2023
ATD 1.2.1: ATD 1.2.1 CSCP CVN 71	2	2024	2	2024
ATD 1.2.0 & 1.3.0: ATD 1.2.0 Product Release Letter	3	2024	3	2024
ATD 1.2.0 & 1.3.0: ATD 1.2.0 CSCP DDG 125	4	2024	4	2024
ATD 1.2.0 & 1.3.0: ATD 1.3.0 Product Release Letter	2	2025	2	2025
ATD 1.2.0 & 1.3.0: ATD 1.3.0 CSCP DDG 128	4	2025	4	2025
ATD 1.3.1: ATD 1.3.1 Product Release Letter	4	2023	4	2023
ATD 1.3.1: ATD 1.3.1 CSCP N/R	4	2024	4	2024
ATD 1.3.2: ATD 1.3.2 ATD Element Cert Letter	1	2025	1	2025

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1427 / Surface Tactical Team Trainer (STTT)
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
ATD 1.3.2: ATD 1.3.2 CSCP LHD 3	2	2025	2	2025
ATD 1.3.3 / ATD 1.3.4: ATD 1.3.3 & 1.3.4 Product Release Letters	2	2025	2	2025
ATD 1.3.3 / ATD 1.3.4: ATD 1.3.3 & 1.3.4 CSCP CP24-1 & -2 DDGs 119 & 82	3	2025	3	2025
ATD 1.4.0: ATD 1.4.0 TRR	3	2024	3	2024
ATD 1.4.0: ATD 1.4.0 IPR	4	2024	4	2024
ATD 1.4.0: ATD 1.4.0 FFG 62 CSLO	4	2025	4	2025
ATD 1.4.0: ATD 1.4.0 Product Release Letter	4	2027	4	2027
ATD 1.4.0: ATD 1.4.0 CSCP FFG 62	1	2028	1	2028
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #1	2	2024	2	2024
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #2	4	2024	4	2024
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #3	2	2025	2	2025
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #4	3	2025	3	2025
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #5	1	2026	1	2026
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #6	3	2026	3	2026
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #7	2	2027	2	2027
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #8	4	2027	4	2027
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #9	1	2028	1	2028
ATD 2.0 (IaaS/ITD) (Notional Schedule): ATD 2.0 (IaaS/ITD) IPR #10	4	2028	4	2028
BEWT / BEWT II: Sustainment	1	2023	4	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1982 / Adversary Mission Systems
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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
1982: <i>Adversary Mission Systems</i>	0.000	0.000	5.140	5.258	-	5.258	17.959	15.703	16.722	17.115	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Airborne Adversary Mission Systems builds upon existing RedNet architecture to allow classified software development and classified hardware integration with Tactical Combat Training System (TCTS) Increment II. This project will enable the aircrew to accurately emulate peer threat capabilities and provides a standalone Adversary 'Operational Flight Program (OFP)', that can be deployed on any aircraft with RedNet Multi-Layered Obstructed Brokered Bus-controller & Routing for Advanced Integrated Networks (MOB Brain) avionics architecture and TCTS Increment II pod. Primary platforms for development include the F-5, F-16 and F-18 within existing Naval Adversary Squadrons. These systems combined with a classified electronic kneeboard, allows for the development, integration and deployment of adversary mission hardware and software systems without modification of aircraft's existing OFP. This effort will provide for the future ability to participate fully in the LVC environment as well as provide physics and effects-based threat replications for the mission essential training of deploying Fleet aircrews.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Airborne Adversary Mission Systems	0.000	5.140	5.258	0.000	5.258
Articles:	-	-	-	-	-
FY 2024 Plans: Commence program initiation activities and conduct Systems Requirements and Systems Functional Reviews (SRR/SFR) for Nonembedded Aircraft Processing Systems. Commence hardware and software development activities.					
FY 2025 Base Plans: Continue program activities and conduct Systems Requirements and Systems Functional Reviews (SRR/SFR) for Nonembedded Aircraft Processing Systems. Continue hardware and software development activities.					
FY 2025 OCO Plans: N/A					
FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase (\$0.118M) supports hardware and software development for Adversary Mission Systems.					
Accomplishments/Planned Programs Subtotals	0.000	5.140	5.258	0.000	5.258

C. Other Program Funding Summary (\$ in Millions)

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy Date: March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / <i>Consolidated Trng Sys Dev</i>	Project (Number/Name) 1982 / <i>Adversary Mission Systems</i>
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C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

The Airborne Adversary Mission Systems acquisition strategy for system development utilizes the Agile/Scrum development model. Incremental development, acquisition and fielding will build on existing RedNet architecture and government off-the-shelf technology to the maximum extent possible. In order to keep pace with the rapidly evolving threat and peer adversary airborne capabilities, these efforts will incorporate incremental software and/or hardware improvements to future Airborne Adversary Mission System sensor capabilities, communications systems, electronic warfare, and weapons emulation capabilities built on RedNet and TCTS II infrastructure. FY 2025 contracting utilizes existing classified Multi-Award Contract (MAC) vehicle to support establishment of Software Integration Lab (SIL).

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1982 / Adversary Mission Systems
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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	C/CPFF	TBD : TBD	0.000	0.000		1.254	Dec 2023	1.254	Dec 2024	-		1.254	Continuing	Continuing	Continuing
Software Development	WR	NAWCWD : China Lake, CA	0.000	0.000		0.375	Dec 2023	0.375	Dec 2024	-		0.375	Continuing	Continuing	Continuing
Software Development	WR	FRCE : Cherry Point, NC	0.000	0.000		1.250	Nov 2023	1.246	Nov 2024	-		1.246	Continuing	Continuing	Continuing
Hardware Development	WR	NAWCWD : China Lake, CA	0.000	0.000		0.105	Dec 2023	0.250	Dec 2024	-		0.250	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		2.984		3.125		-		3.125	Continuing	Continuing	N/A

Remarks
 FY 2025 Product Development funding for development of the components of the Airborne Adversary Mission Systems. \$1.25M software development cost element will be applied to an existing classified contract to support Software Integration Lab (SIL) establishment. Funding provided to NAWCWD will support the development and integration of classified hardware and software elements.

Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.000	0.000		1.406	Nov 2023	1.383	Nov 2024	-		1.383	Continuing	Continuing	Continuing
Program Management Support	WR	FRCE : Cherry Point, NC	0.000	0.000		0.750	Nov 2023	0.750	Nov 2024	-		0.750	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		2.156		2.133		-		2.133	Continuing	Continuing	N/A

Remarks
 FY 2025 Program Management Support provides required program establishment including personnel, facilities, development laboratories, cyber, and security environments. Funding also provides for technical design reviews and required efforts to establish and compete contracts to award in FY 2025 in support of Adversary Emulation system development efforts (e.g. Electronic Attack).

	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		0.000	0.000	5.140	5.258	-	5.258	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy	Date: March 2024
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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / <i>Consolidated Trng Sys Dev</i>	Project (Number/Name) 1982 / <i>Adversary Mission Systems</i>
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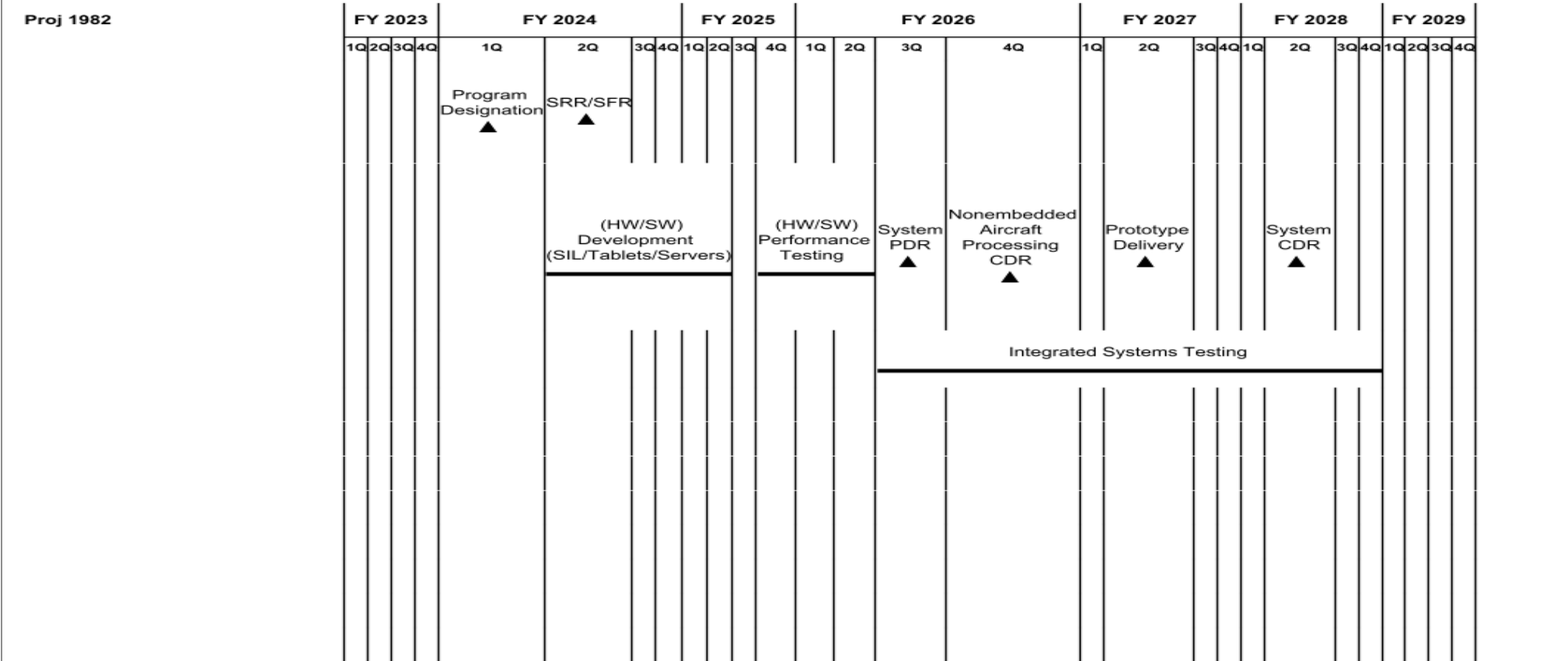
	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
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<u>Remarks</u>									
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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1982 / Adversary Mission Systems
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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 1982 / Adversary Mission Systems
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 1982				
System Requirements Review (SRR)/System Functional Review (SFR)	2	2024	2	2024
Program Designation	1	2024	1	2024
Nonembedded Aircraft Processing (HW/SW) Development (SIL/Tablets/Servers)	2	2024	2	2025
Nonembedded Aircraft Processing (HW/SW) Performance Testing	4	2025	2	2026
System Preliminary Design Review (PDR)	3	2026	3	2026
Nonembedded Aircraft Processing Critical Design Review (CDR)	4	2026	4	2026
Nonembedded Aircraft Processing Prototype Delivery	2	2027	2	2027
Systems Critical Design Review (CDR)	2	2028	2	2028
Integrated Systems Testing	3	2026	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev				Project (Number/Name) 2124 / Air Warfare Training			
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
2124: Air Warfare Training	56.853	1.753	1.734	12.319	-	12.319	12.553	12.794	13.051	13.315	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

MISSION: This project transitions new training and range system technologies for use in Naval Aviation training. Products from this effort are directly tied to the Navy Aviation Simulation Master Plan (NASMP), MH-60R/S master plan, Unmanned Aerial Systems (UAS) master plan, the PMA-205 Strategic Plan, the Live Virtual Constructive (LVC) program, component technologies, including the Multiplex Data Bus Controller Translator Transmitter, F/A-18C-F Requirements Procurement Plan (RPP), open architecture implementation, multiple technology refresh efforts and the Multi-Mission Maritime Aircraft/P-8 programs. These efforts will support training optimization of future naval aviation training/preview/mission rehearsal systems (fixed, deployed, and unmanned). Tasks include: specification development to provide for common, modular, High Level Architecture compliant, high fidelity Distributed Mission Training and mission rehearsal capabilities ashore and afloat. Technologies to be developed and integrated include: intelligent semi-automated forces (SAF) technologies, automated performance measurement technology, advanced net-ready weapons simulation, Air to Air/Air to Ground, visual/sensor enhancement, common post mission assessment technologies, tablet mission preview technology, advanced visual-sensor technology, high resolution helmet mounted, and/or flat panel displays, 20-20 visual acuity image generation, Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) technology, NAVAIR Portable Source Initiative improvements, common correlated data set technologies and heterogeneous data fusion, common link, common software/database reuse technologies, advanced environmental effects modeling, fused radar/infra-red/electro-optic and acoustic sensor simulations, aerodynamic modeling, physics-based infra-red simulations, spatial disorientation and simulator sickness research, communications degradation modeling, and final Test and Evaluation (T&E) within the Aviation Training Technology Integration Facility (ATTIF), Naval Air Warfare Center-Aircraft Division. This Manned-Flight Simulator (MFS) ATTIF capability provides a window to fleet aviators for critical comment, evaluation and fine tuning of new, interoperable, and innovative technologies such as LVC before final transition to the fleet. Naval Aviation Distributed Training Center, debrief/After Action Review (AAR), and intelligent training tools for the virtual environment are focused on human performance and trend analysis enhancements for fleet readiness and distributed mission training at all levels.

Funds the continued development and maturation of the Joint Simulation Environment (JSE) physics-based environment and core services. Funds the Global Reusable Interface Domain (GRID), which serves up the electromagnetic spectrum and interactions between all entities, and other common services (weather, cyber, endgame, etc.). Funds the integration of new threats into the common JSE baseline. This includes incorporating new threats in Next Generation Threat System (NGTS), as well as integrating high fidelity threat models provided by Intelligence Community partners. Funds the engineering support for new capability requirements analysis and design. This includes Model-Based Systems Engineering initiatives, providing a foundation for a common DoD solution and enabling rapid impact analysis when assessing new requirements, capability insertion, and regression testing needs.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: AIR WARFARE TRAINING DEVELOPMENT	1.753	1.734	12.319	0.000	12.319
Articles:	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy	Date: March 2024
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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 2124 / Air Warfare Training
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Description: Provide risk mitigation, test and evaluation, and prototype development for stand-alone, manned, un-manned, distributed, open systems and deployed training systems focused on addressing highest priority PMA-205 and Director, Air Warfare, Office of the Chief of Naval Operations (OPNAV N98) needs in the area of operational systems development. Develop advanced training and emerging technology prototypes for Navy and Marine Corps Training Systems that address the four key PMA-205 focus areas: Fidelity and scalability, Readiness, Analytics, and Live, Virtual, Constructive (LVC), to transition advanced component technologies to the Fleet. Develop and integrate emerging technologies, such as Extended Reality (XR) to improve training fidelity, reduce training costs, or increase access to training at the point of need. Develop and integrate emerging technologies and methods to enhance warfighter readiness and performance to reduce time to train, lower training costs, and reduce the number of human factors related hazreps and mishaps. Develop data analytic improvements to the way the Navy captures data, measures performance, performs after action review, and conducts assessment. Develop LVC technologies to support integrated mission training to support the high-end fight.</p> <p>Funds the continued development and maturation of the Joint Simulation Environment (JSE) physics-based environment and core services. Funds the Global Reusable Interface Domain (GRID), which serves up the electromagnetic spectrum and interactions between all entities, and other common services (weather, cyber, endgame, etc.). Funds the integration of new threats into the common JSE baseline. This includes incorporating new threats in Next Generation Threat System (NGTS), as well as integrating high fidelity threat models provided by Intelligence Community partners. Funds the engineering support for new capability requirements analysis and design. This includes Model-Based Systems Engineering initiatives, providing a foundation for a common DoD solution and enabling rapid impact analysis when assessing new requirements, capability insertion, and regression testing needs.</p> <p>FY 2024 Plans: Continue development of data collection and fusion capability to support intelligent, semi-automated performance measurement and debrief capability in support of Live, Virtual, Constructive (LVC) training environments. Continue to conduct evaluation of T-6/TH-57/T-45 Virtual / Augmented /Mixed Reality display technologies. Continue analytical and developmental support for emergent programs of record in LVC, cross domain solution, integrated warfare, acoustic simulation environments, warfighter performance assessment and training analytics, threat system enhancements, and sensor/ visualization modeling.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 2124 / Air Warfare Training
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Continue development of artificial intelligence training systems to augment aviation training pipelines and accelerate training pipeline throughput. Transition expandable flight deck crew trainer.</p> <p>FY 2025 Base Plans: Continue development of data collection and fusion capability to support intelligent, semi-automated performance measurement and debrief capability in support of Live, Virtual, Constructive (LVC) training environments. Transition of T-6/TH-57/T-45 Virtual / Augmented /Mixed Reality display technologies. Continue analytical and developmental support for emergent programs of record in LVC, cross domain solution, integrated warfare, acoustic simulation environments, warfighter performance assessment and training analytics, threat system enhancements, aviator selection testing, and sensor/ visualization modeling. Continue development of artificial intelligence training systems to augment aviation training pipelines and accelerate training pipeline throughput. Design, development, integration, and testing of the Joint Simulation Environment (JSE) to support Advanced LVC Training in the Naval Aviation Enterprise</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase (\$10.585M) supports design, development, integration, and testing of the Joint Simulation Environment (JSE) to support Advanced LVC Training in the Naval Aviation Enterprise</p>					
Accomplishments/Planned Programs Subtotals	1.753	1.734	12.319	0.000	12.319

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
• APN/0705: COMMON GROUND EQUIPMENT - TRAINING	286.430	304.571	314.132	-	314.132	337.003	340.676	342.327	349.601	Continuing Continuing

Remarks
Funding reflects a portion of APN BLI 0705 efforts (General Skills Training and Other Flight Training).

D. Acquisition Strategy
Air Warfare Training Development (AWTD) is a BA 07 RDT&E joint technology transition program tied to the PMA-205 Strategic Plan, Navy Aviation Simulation Master Plan (NASMP), United States Marine Corps upgrades and the various platform simulation master plans with the purpose of transitioning advanced training and mission

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 7	PE 0204571N / <i>Consolidated Trng Sys Dev</i>	2124 / <i>Air Warfare Training</i>

preview/rehearsal technologies. AWTD provides risk mitigation, test and evaluation, and prototype development for stand-alone, manned, un-manned, distributed, open systems and deployed training systems for the warfighter utilizing an Integrated Product Team approach and a combination of reimbursable and direct cite/cost-plus time and material (T&M) contracts.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy											Date: March 2024				
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev					Project (Number/Name) 2124 / Air Warfare Training				

Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	C/CPFF	Bohemia Interactive : ORLANDO, FL	0.832	0.000		0.000		0.000		-		0.000	0.000	0.832	0.832
Software Development	C/CPFF	Aptima : WOBURN, MA	0.424	0.000		0.000		0.000		-		0.000	0.000	0.424	0.424
Software Development	C/CPFF	SOAR Tech : ORLANDO, FL	0.245	0.101	Mar 2023	0.103	Mar 2024	0.103	Mar 2025	-		0.103	0.000	0.552	0.552
Software Development	WR	NAWCTSD : ORLANDO, FL	27.533	0.408	Nov 2022	0.488	Nov 2023	0.488	Nov 2024	-		0.488	Continuing	Continuing	Continuing
Software Development	WR	NAMRU : Dayton, OH	0.045	0.000		0.030	Nov 2023	0.030	Nov 2024	-		0.030	Continuing	Continuing	Continuing
Software Development	WR	NAMI : Pensacola, FL	0.000	0.000		0.000		0.105	Nov 2024	-		0.105	Continuing	Continuing	Continuing
Software Development	C/CPFF	ACC : ROCK ISLAND, IL	0.388	0.000		0.000		0.000		-		0.000	0.000	0.388	0.388
Prior Year Prod Dev No Longer Funded in the Budget or Out Years	Various	Various : Various	10.692	0.000		0.000		0.000		-		0.000	0.000	10.692	-
Software Development	WR	NAWC AD : PAX RIVER, MD	0.000	0.000		0.000		10.556	Nov 2024	-		10.556	Continuing	Continuing	Continuing
Subtotal			40.159	0.509		0.621		11.282		-		11.282	Continuing	Continuing	N/A

Remarks
FY25 increase funding of \$10.661M supports design, develop, integrate and test efforts for the Joint Simulation Environment (JSE) to support Advanced Live Virtual Constructive (LVC) Training in the Naval Aviation Enterprise.

Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	NAWCTSD : ORLANDO, FL	0.962	0.798	Nov 2022	0.798	Nov 2023	0.798	Nov 2024	-		0.798	Continuing	Continuing	Continuing
Prior Year Support No Longer Funded in the Budget or Out Years	Various	Various : Various	4.145	0.000		0.000		0.000		-		0.000	0.000	4.145	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy												Date: March 2024			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
1319 / 7				PE 0204571N / Consolidated Trng Sys Dev				2124 / Air Warfare Training							
Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			5.107	0.798		0.798		0.798		-		0.798	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	NAWC AD : PAX RIVER, MD	7.772	0.145	Nov 2022	0.060	Nov 2023	0.060	Nov 2024	-		0.060	Continuing	Continuing	Continuing
Subtotal			7.772	0.145		0.060		0.060		-		0.060	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/CPFF	Precise : LEXINGTON PARK, MD	1.203	0.151	Mar 2023	0.075	Mar 2024	0.000		-		0.000	Continuing	Continuing	Continuing
Program Management Support	WR	NAWCTSD : ORLANDO, FL	0.481	0.136	Nov 2022	0.172	Nov 2023	0.171	Nov 2024	-		0.171	Continuing	Continuing	Continuing
Travel	Allot	NAVAIR : PAX RIVER, MD	0.587	0.014	Nov 2022	0.008	Nov 2023	0.008	Nov 2024	-		0.008	Continuing	Continuing	Continuing
Prior year Mgmt Sup no longer funded in the FYDP	Various	Various : Various	1.544	0.000		0.000		0.000		-		0.000	0.000	1.544	-
Subtotal			3.815	0.301		0.255		0.179		-		0.179	Continuing	Continuing	N/A
			Prior Years	FY 2023	FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			56.853	1.753	1.734	12.319	-	12.319	Continuing	Continuing	N/A				
Remarks															

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 2124 / Air Warfare Training

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Air Warfare Training Development				
Systems Development: NGTS Analysis and Reporting	1	2023	4	2026
Systems Development: LVC	1	2023	4	2029
Systems Development: Fleet Adaptive Multi-Level Measurement for LVC	1	2023	4	2026
Systems Development: Extended Reality Device Development and Evaluation	1	2023	4	2029
Systems Development: Training Analytics	1	2023	4	2029
Systems Development: Helicopter Operations Team Trainer	1	2023	1	2024
Production Milestones: NGTS Analysis and Reporting - Phase 5	4	2023	4	2023
Production Milestones: NGTS Analysis and Reporting - Phase 6	4	2024	4	2024
Production Milestones: NGTS Analysis and Reporting - Phase 7	4	2025	4	2025
Production Milestones: NGTS Analysis and Reporting - Phase 8	4	2026	4	2026
Production Milestones: NGTS Analysis and Reporting - Phase 9	4	2027	4	2027
Production Milestones: NGTS Analysis and Reporting - Phase 10	4	2028	4	2028
Production Milestones: NGTS Analysis and Reporting - Phase 11	4	2029	4	2029
Production Milestones: LVC Year 2 Review	4	2023	4	2023
Production Milestones: LVC Year 3 Review	4	2024	4	2024
Production Milestones: LVC Year 4 Review	4	2025	4	2025
Production Milestones: LVC Year 5 Review	4	2026	4	2026
Production Milestones: LVC Year 6 Review	4	2027	4	2027
Production Milestones: LVC Year 7 Review	4	2028	4	2028
Production Milestones: LVC Year 8 Review	4	2029	4	2029
Production Milestones: Fleet Adaptive Multi-Level Measurement for LVC 5	4	2023	4	2023
Production Milestones: Fleet Adaptive Multi-Level Measurement for LVC 6	4	2024	4	2024

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 2124 / Air Warfare Training
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: TH-57 VR Evaluation Complete	2	2023	2	2023
Production Milestones: T-45 MR Evaluation Complete	4	2023	4	2023
Production Milestones: Project Avenger Eval Complete	2	2023	2	2023
Production Milestones: Project Corsair Eval Complete	2	2023	2	2023
Production Milestones: XR Evaluation 4 Complete	4	2025	4	2025
Production Milestones: XR Evaluation 5 Complete	4	2026	4	2026
Production Milestones: XR Evaluation 6 Complete	4	2027	4	2027
Production Milestones: XR Evaluation 7 Complete	4	2028	4	2028
Production Milestones: XR Evaluation 8 Complete	4	2029	4	2029
Production Milestones: Training Analytics Prototype Demo 2	4	2023	4	2023
Production Milestones: Training Analytics Tech Demo 1	4	2024	4	2024
Production Milestones: Training Analytics Tech Demo 2	4	2025	4	2025
Production Milestones: Training Analytics Tech Demo 3	4	2026	4	2026
Production Milestones: Training Analytics Tech Demo 4	4	2027	4	2027
Production Milestones: Training Analytics Tech Demo 5	4	2028	4	2028
Production Milestones: Training Analytics Tech Demo 6	4	2029	4	2029
Production Milestones: Training Analytics Eval 1	4	2024	4	2024
Production Milestones: Training Analytics Eval 2	4	2025	4	2025
Production Milestones: Training Analytics Eval 3	4	2026	4	2026
Production Milestones: Training Analytics Eval 4	4	2027	4	2027
Production Milestones: Training Analytics Eval 5	4	2028	4	2028
Production Milestones: Training Analytics Eval 6	4	2029	4	2029
Production Milestones: Flight Deck Training Expansion Pack - Phase 5	4	2023	4	2023
Production Milestones: Flight Deck Training Expansion Pack - Phase 6	4	2024	4	2024
Production Milestones: Speech Enabled Role Player Phase 3	4	2023	4	2023

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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
3093: <i>TACTS/LATR Replacement</i>	291.625	45.834	68.632	65.989	-	65.989	66.876	51.984	45.784	46.521	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Tactical Combat Training System Increment II (TCTS II) will provide an improved environment for air combat training utilizing a secure air-to-air and air-to-ground data link, and will provide rangeless operation capability to Forward Deployed Naval Forces (FDNF). TCTS Increment II will provide encryption and an enhanced threat environment, as well as airborne participant instrumentation for multiple fixed and rotary wing platforms. In 2024, TCTS II started development of Synthetic Inject to Live (SITL) capability, which enables blue and red constructive (e.g. aircraft, air and surface threats) injects into aircraft displays and sensors to train aircrews for near-peer threats. The program is integrating into the Navy Continuous Training Environment (NCTE), allowing mission data from "Live" participants to be monitored at a control facility and disseminated across the LVC ecosystem. TCTS Increment II provides the foundational encrypted airborne network for implementation of Aviation Live Virtual Constructive (LVC) capabilities. TCTS II will continue software updates to address fleet requirements. Engineering Development Model (EDM) units in multiple form factors are being developed in FY19 through FY26 and will support Engineering and Developmental Testing events through FY27. The EDMs will be specifically utilized for testing in the following areas: Environmental Qualification, Software, High Accelerated Lifecycle, Ground System Integration, Airborne Subsystem Air Worthiness and Performance, Shipboard Ground Station, and Internal Mount (IM).

Aviation LVC Live Aircraft Integration (ALLAI) Phase 1 funds the integration of live aircraft into the LVC, blended training environment to close the Great Powers Competition training capability gap for mission rehearsal. Aviation LVC will establish an integrated System of Systems (SoS) training environment bringing already-developed capabilities together with new developmental efforts to form a cohesive architecture that accurately emulates the high end fight for warfighter training. LVC takes a hybrid approach to aviation and Fleet-wide training where the training audience in the form of Live personnel operating Live equipment (to include aircraft and surface vessels) will be teamed with Live aircrew operating simulators to provide a Virtual complement in the "Blue Air" picture. The "Red" adversary for this training is made up of Live personnel operating Live aircraft complemented by computer generated "Red" Constructive Air and Surface threats that stimulate the "Blue" Air displays and sensors as if a "Red" Live adversary were present.

Aviation Performance/Proficiency Analytics (APPA) will deliver scalable, common data collection, storage, analysis, and reporting capability to provide quantitative, high-fidelity feedback and proficiency assessments to meet real-world threats. APPA addresses current Training Analysis Project (TAP) constraints to include scalability, site limitations, and tactical SME manpower requirements. APPA will develop government-owned standards and architecture for aviation performance data collection, deliver an AI-augmented debrief tool for data processing and analysis supported by tactical SMEs and data scientists; multilevel security databases; network capability; and intelligent, semi-automated assessments, reporting and visualization. An open systems architecture enables multi-domain integration. The system will enable rigorous and repeatable post-flight assessment of high-end Great Power Competition (GPC) warfighting scenarios to produce individual performance "baseball cards", squadron reports, detailed strengths and weaknesses and CVW reports measured against What-It-Takes-To-Win (WITTW) performance standards.

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>Title: TACTS/LATR Replacement</p> <p align="right">Articles:</p> <p>Description: Qualify and complete the On-Range and Rangeless Pod system fielding for all USN Tactical Training Ranges and Carrier Air Wing Five (CVW-5) CVN installation, including the complete Integrated Logistics products and training. Define Test & Training Enabling Architecture (TENA) compliant interface between TCTS and an Advanced Display System (ADS). Develop system form factor variations for use on different fixed wing and rotary wing aircraft as well as surface vessels. Continue development of the encrypted data link. Develop related training range integration.</p> <p>FY 2024 Plans: TCTS II will continue development, testing and delivery of software capabilities to enable aircraft sensor / weapon simulation by integrating NGTS threat library and weapon models employed in simulators and through the Live ground station. In support of the LVC, the TCTS II program will integrate with Navy Continuous Training Environment (NCTE) and continuing software development for advanced capabilities.</p> <p>FY 2025 Base Plans: N/A</p> <p>FY 2025 OCO Plans: N/A</p>	26.372	0.000	0.000	0.000	0.000
Articles:	7	-	-	-	-
<p>Title: Aviation LVC Live Aircraft Integration - Phase I</p> <p align="right">Articles:</p> <p>Description: Develop a System of Systems (SoS) architecture to simultaneously host developed and developing capabilities in Live aircraft, simulators, and semi-automated forces (SAF) into a blended training environment focusing on Carrier Air Wing F/A-18, EA-18G, and E-2D platforms with flexibility to incorporate additional platforms. Integrate capability enhancements into the TCTS II, NGTS, NCTE and host platform systems to expand high end training capability and integrate system architectures. Mature and expand advanced SAF generation capabilities and integrate host systems to process SAF information to emulate actual threats. Implement system security for SoS environment.</p> <p>FY 2024 Plans: N/A</p> <p>FY 2025 Base Plans:</p>	19.462	28.632	34.140	0.000	34.140
Articles:	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>ALLAI will continue integration and start Developmental Test (DT) of LVC software capabilities (Synthetic Inject to Live) on the F/A-18, to include updated Next Generation Threat Simulator (NGTS) simulation capabilities and waveform optimization. Cross Domain Solutions (CDS) design updates are validation are required for the additional NGTS simulation capabilities. ALLAI will perform integration of platforms into the Navy Continuous Training Environment (NCTE) in FY25. Continue development of the TCTS Internal Mount (IM) capabilities and SoS Platform/Simulator Integration for identified platforms.</p> <p>NCTE/Next Generation Threat System LVC will be tested in FY25. LVC integration with F-18 and E-2D continues in FY25.</p> <p>Aviation Performance / Proficiency Analytics (APPA) will deliver scalable, common data collection, storage, analysis, and reporting capability to provide quantitative, high-fidelity feedback and proficiency assessments to meet real-world threats. APPA addresses current Training Analysis Project (TAP) constraints to include scalability, site limitations, and tactical SME manpower requirements. Develop government-owned standards and architecture for aviation performance data collection, delivers an AI-augmented debrief tool for data processing and analysis supported by tactical SMEs and data scientists; multilevel security databases; network capability; and intelligent, semi-automated assessments, reporting and visualization. An open systems architecture enables multi-domain integration. The system will enable rigorous and repeatable post-flight assessment of high-end Great Power Competition (GPC) warfighting scenarios to produce individual performance "baseball cards", squadron reports, detailed strengths and weaknesses and CVW reports measured against What-It-Takes-To-Win (WITTW) performance standards.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 increase (\$5.508M) supports specific LVC requirements for Aviation LVC Live Aircraft Integration (ALLAI).</p>					
<p>Title: Tactical Combat Training Systems (TCTS) Increment II</p> <p align="right">Articles:</p> <p>Description: Qualify and complete the On-Range and Rangeless Pod system fielding for all USN Tactical Training Ranges and Carrier Air Wing Five (CVW-5) CVN installation, including the complete Integrated Logistics products and training. Define Test & Training Enabling Architecture (TENA) compliant interface between TCTS and an Advanced Display System (ADS). Develop system form factor variations for use on different fixed wing</p>	0.000	40.000	18.410	0.000	18.410
	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p>and rotary wing aircraft as well as surface vessels. Continue development of the encrypted data link. Develop related training range integration.</p> <p>FY 2024 Plans: TCTS II will develop, test and deliver software capabilities to enable aircraft sensor / weapon simulation by integrating NGTS threat library and weapon models employed in simulators and through the Live ground station. In support of the LVC, the TCTS II program will integrate with Navy Continuous Training Environment (NCTE) and continuing software development for advanced capabilities.</p> <p>FY 2025 Base Plans: TCTS II will develop, test and deliver software to include full NGTS incorporation with complete threat replication, NCTE compatibility. With the number of TCTS II systems being field, waveform modifications will occur for spectral efficiency and increasing event size and complexity.</p> <p>TCTS II will perform integration of TCTS II into the Navy Continuous Training Environment (NCTE) beginning in FY24 and continuing into FY25. TCTS II will develop LVC Internal Mount (IM) capabilities as well as SoS Platform/Simulator Integration.</p> <p>FY 2025 OCO Plans: N/A</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: FY25 decrease (\$21.590M) due to reduction of ongoing development and integration efforts.</p>					
<p>Title: Aviation Performance / Proficiency Analytics (APPA)</p> <p align="right">Articles:</p> <p>Description: The APPA initiative delivers scalable, common data collection, storage, analysis, and reporting capability to provide quantitative, high-fidelity feedback and proficiency assessments to meet real-world threats. APPA addresses current Training Analysis Project (TAP) constraints to include scalability, site limitations, and tactical SME manpower requirements.</p> <p>FY 2024 Plans: N/A</p> <p>FY 2025 Base Plans: Develop government-owned standards and architecture for aviation performance data collection, delivers an AI-augmented debrief tool for data processing and analysis supported by tactical SMEs and data scientists;</p>	0.000 -	0.000 -	13.439 -	0.000 -	13.439 -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
multilevel security databases; network capability; and intelligent, semi-automated assessments, reporting and visualization. An open systems architecture enables multi-domain integration. The system will enable rigorous and repeatable post-flight assessment of high-end Great Power Competition (GPC) warfighting scenarios to produce individual performance "baseball cards", squadron reports, detailed strengths and weaknesses and CVW reports measured against What-It-Takes-To-Win (WITTW) performance standards.					
<i>FY 2025 OCO Plans:</i> N/A					
<i>FY 2024 to FY 2025 Increase/Decrease Statement:</i> FY25 increase (\$13.439M) provided for LVC requirements for Aviation Performance / Proficiency Analytics (APPA).					
Accomplishments/Planned Programs Subtotals	45.834	68.632	65.989	0.000	65.989

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• OPN/4204: <i>Weapons Range Support Equipment (WRSE)</i>	103.864	145.280	135.780	-	135.780	161.743	160.029	163.372	166.829	Continuing	Continuing
• APN/0725: <i>Other Production Charges/Tactical Combat Training System (TCTS)</i>	46.403	49.907	73.307	-	73.307	73.367	66.009	67.509	68.944	Continuing	Continuing

Remarks

Does not include funding for Moving Land Target (MLT) program.

D. Acquisition Strategy

Tactical Combat Training System will employ an evolutionary incremental acquisition strategy. This strategy will provide for the development of a system that meets the Operational Requirements Document. Government purchase and validation of the TCTS tech data package in 2023 (APN BLI 0725) will allow for competition of production contracts in 2025 and beyond.

ALLAI will employ a phased evolutionary acquisition strategy. This strategy will integrate existing systems while enhancing the capabilities of those systems before incorporating new developmental items into the blended architecture to satisfy the LVC Capabilities Requirements Document.

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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Hardware Development	C/CPIF	COLLINS AEROSPACE : CEDAR RAPIDS, IA	185.122	9.965	Oct 2022	19.934	Oct 2023	0.000		-		0.000	0.000	215.021	215.021
Hardware Development - TCTS II	C/CPIF	COLLINS AEROSPACE : CEDAR RAPIDS, IA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Software Development	C/CPIF	COLLINS AEROSPACE : CEDAR RAPIDS, IA	0.000	17.900	Aug 2023	25.349	Jan 2024	0.000		-		0.000	0.000	43.249	43.249
Software Development - TCTS II	C/CPIF	COLLINS AEROSPACE : CEDAR RAPIDS, IA	0.000	0.000		0.000		5.000	Jan 2025	-		5.000	0.000	5.000	5.000
Software Development	WR	NSWC Corona : Corona, CA	0.000	1.650	Nov 2022	2.000	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Software Development - TCTS II	WR	NSWC Corona : Corona, CA	0.000	0.000		0.000		1.000	Nov 2024	-		1.000	Continuing	Continuing	Continuing
Software Development - ALLAI	WR	NSWC Corona : Corona, CA	0.000	0.000		0.000		1.000	Nov 2024	-		1.000	Continuing	Continuing	Continuing
Software Development	WR	NAWCAD : Patuxent River, MD	0.000	3.500	Nov 2022	5.000	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Software Development - ALLAI	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		6.000	Nov 2024	-		6.000	Continuing	Continuing	Continuing
Software Development	TBD	TBD : TBD	0.000	1.482	Oct 2023	0.000		0.000		-		0.000	0.000	1.482	1.482
Software Development - ALLAI	C/BA	FebLabs : Beale AFB	0.000	0.000		0.000		17.198	Jan 2025	-		17.198	0.000	17.198	17.198
Prior Year Prod Dev No Longer Funded in the Budget or Out Years	Various	Various : Various	10.901	0.000		0.000		0.000		-		0.000	0.000	10.901	-
Software Development - APPA	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		13.439	Sep 2025	-		13.439	0.000	13.439	-
Subtotal			196.023	34.497		52.283		43.637		-		43.637	Continuing	Continuing	N/A

Remarks
1-Hardware Development is zeroing out funding to move to Hardware Development - TCTS II.

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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
2-Hardware Development - TCTS II to Collins in FY25 for continued support of IM development. 3-Software Development is zeroing out to move to Software Development - TCTS II. 4-Software Development - TCTS II to Collins in FY25 is for core LVC software development to the TCTS II System. 5-Software Development NSWC Corona is zeroing out to move to Software Development - TCTS II NSWC and Software to move to Software Development - ALLAI NSWC. 6 & 7-Software Development - TCTS II NSWC and Software and Software Development - ALLAI NSWC in FY25 to support Navy Continuous Training Environment (NCTE) efforts. 8-Software Development NAWCAD is zeroing out to move to Software Development - ALLAI. 9-Software Development - ALLAI in FY25 support NAWCAD support for Next Generation Threat Systems (NGTS) and (WSCE). 10-Hardware Development HILL AFB is zeroing out. 11-Software Development TBD is zeroing out. 12-Software Development - ALLAI is FY25 will provide funding to FedLabs for to develop internal mount prototype and F-35 Open Architecture Radio for LVC. 13-Software Development - APPA in FY25 will provide funding to deliver scalable, common data collection, storage, analysis, and reporting capability to provide quantitative, high-fidelity feedback and proficiency assessments to meet real-world threats. Funding was realigned from PE 0604378N to fund ongoing APPA efforts.															

Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Systems Engineering	WR	NAWCAD : PAX RIVER, MD	19.368	4.000	Nov 2022	4.163	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering - TCTS II	WR	NAWCAD : PAX RIVER, MD	0.000	0.000		0.000		2.000	Nov 2024	-		2.000	Continuing	Continuing	Continuing
Systems Engineering - ALLAI	WR	NAWCAD : PAX RIVER, MD	0.000	0.000		0.000		2.500	Nov 2024	-		2.500	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	Precise : LEXINGTON PARK, MD	0.615	0.000		0.000		0.000		-		0.000	0.000	0.615	0.615
Systems Engineering - TCTS II	C/CPFF	Precise : LEXINGTON PARK, MD	0.000	0.000		0.000		0.600	Feb 2025	-		0.600	Continuing	Continuing	Continuing
Systems Engineering - ALLAI	C/CPFF	Precise : LEXINGTON PARK, MD	0.000	0.000		0.000		0.900	Feb 2025	-		0.900	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCWD : China Lake, CA	0.891	0.000		1.347	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing

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Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering - TCTS II	C/BA	NAWCWD : China Lake, CA	0.000	0.000		0.000		1.000	Nov 2024	-		1.000	Continuing	Continuing	Continuing
Systems Engineering	WR	Various : Various	0.755	0.000		0.000		0.000		-		0.000	0.000	0.755	-
Logistics	WR	NAWC-AD : PAX RIVER, MD	4.073	0.000		0.000		0.000		-		0.000	0.000	4.073	-
Logistics	WR	FRC SW : San Diego, CA	0.444	0.000		0.000		0.000		-		0.000	0.000	0.444	-
Logistics	C/CPFF	Synectic Solutions, Inc. : LEXINGTON PARK, MD	0.683	0.000		0.000		0.000		-		0.000	0.000	0.683	0.683
Systems Engineering	FFRDC	Mitre : Various	0.000	2.114	Oct 2022	2.156	Oct 2023	0.000		-		0.000	0.000	4.270	4.270
Systems Engineering	SS/CPFF	ASEC : Patuxent River, MD	0.000	0.600	Apr 2023	0.612	Apr 2024	0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering - TCTS II	SS/CPFF	ASEC : Patuxent River, MD	0.000	0.000		0.000		1.100	Feb 2025	-		1.100	Continuing	Continuing	Continuing
Systems Engineering - ALLAI	SS/CPAF	ASEC : Patuxent River, MD	0.000	0.000		0.000		2.400	Feb 2025	-		2.400	Continuing	Continuing	Continuing
Systems Engineering - ALLAI	C/CPFF	SAIC : Lexington Park, MD	0.000	0.000		0.000		0.800	Nov 2024	-		0.800	Continuing	Continuing	Continuing
Prior Year Support No Longer Funded in the Budget or Out Years	Various	Various : Various	29.989	0.000		0.000		0.000		-		0.000	0.000	29.989	-
Subtotal			56.818	6.714		8.278		11.300		-		11.300	Continuing	Continuing	N/A

Remarks

Starting in FY25 Systems Engineering efforts will be split between TCTS II and ALLAI. Increase of \$3.022M will be for ALLAI team growth.

Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : PAX RIVER, MD	5.772	2.000	Nov 2022	4.640	Nov 2023	6.000	Nov 2024	-		6.000	Continuing	Continuing	Continuing

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Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : China Lake, CA	0.351	0.000		0.000		0.000		-		0.000	0.000	0.351	-
Developmental Test & Evaluation (DT&E)	C/CPFF	BAH : McLean, VA	0.381	0.000		0.000		0.000		-		0.000	0.000	0.381	0.381
Developmental Test & Evaluation (DT&E)	WR	Various : Various	1.776	0.000		0.000		0.000		-		0.000	0.000	1.776	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	Various : Various	3.425	0.000		0.000		0.000		-		0.000	0.000	3.425	-
Subtotal			11.705	2.000		4.640		6.000		-		6.000	Continuing	Continuing	N/A

Remarks
TCTS II T&E NAWCAD PAX for \$3.5M to support Advanced Weapons Lab (AWL), fuel, and SITL integration.
ALLAI T&E NAWCAD PAX for \$2.5M to support Open Air Battle Shaping test requirements and Large Scale Exercise (LSE) to support LVC capabilities.

Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prog Mgmt Sup	WR	NAWCAD : PAX RIVER, MD	9.629	1.500	Nov 2022	2.659	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Prog Mgmt Sup - TCTS II	WR	NAWCAD : PAX RIVER, MD	0.000	0.000		0.000		2.400	Nov 2024	-		2.400	Continuing	Continuing	Continuing
Prog Mgmt Sup	WR	NAWCTSD : Orlando, FL	0.000	0.500	Nov 2022	0.522	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Prog Mgmt Sup - ALLAI	WR	NAWCTSD : Orlando, FL	0.000	0.000		0.000		1.492	Nov 2024	-		1.492	Continuing	Continuing	Continuing
Travel	Allot	NAVAIR : PAX RIVER, MD	0.186	0.200	Oct 2022	0.250	Oct 2023	0.000		-		0.000	Continuing	Continuing	Continuing
Travel - TCTS II	Allot	NAVAIR : PAX RIVER, MD	0.000	0.000		0.000		0.160	Oct 2024	-		0.160	Continuing	Continuing	Continuing
Prog Mgmt Sup	C/CPFF	Precise : LEXINGTON PARK, MD	0.955	0.423	Nov 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3093 / TACTS/LATR Replacement
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Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prog Mgmt Sup	WR	Various : Various	0.250	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Facilities - ALLAI	Various	Various : PAX River, MD	0.000	0.000		0.000		1.000	Jan 2025	-		1.000	0.000	1.000	1.000
Prior Year Mgmt No Longer Funded in the Budget or Out Years	Various	Various : Various	16.059	0.000		0.000		0.000		-		0.000	0.000	16.059	-
Subtotal			27.079	2.623		3.431		5.052		-		5.052	Continuing	Continuing	N/A

Remarks
Starting in FY25 Program Management efforts will be split between TCTS II and ALLAI. Prog Mgmt Sup increase \$2.174M for anticipated team growth to support oversight of development and testing of ALLAI program to include \$1M for facilities upgrades.

	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	291.625	45.834	68.632	65.989	-	65.989	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy Date: March 2024

Appropriation/Budget Activity: 1319 / 7 R-1 Program Element (Number/Name): PE 0204571N / Consolidated Trng Sys Dev Project (Number/Name): 3093 / TACTS/LATR Replacement

	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
TCTS Inc II	AS IOC ◆	AS FRP ◆																														
	SITL Kickoff ◆	Common Form Factor Start ◆																														
	SITL Continuous Development																															
Program Management/Cyber Security																																
Contracts																																
Engineering																																
Logistics																																
Test & Evaluation																																
NSA Certification																																
Systems Development																																

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

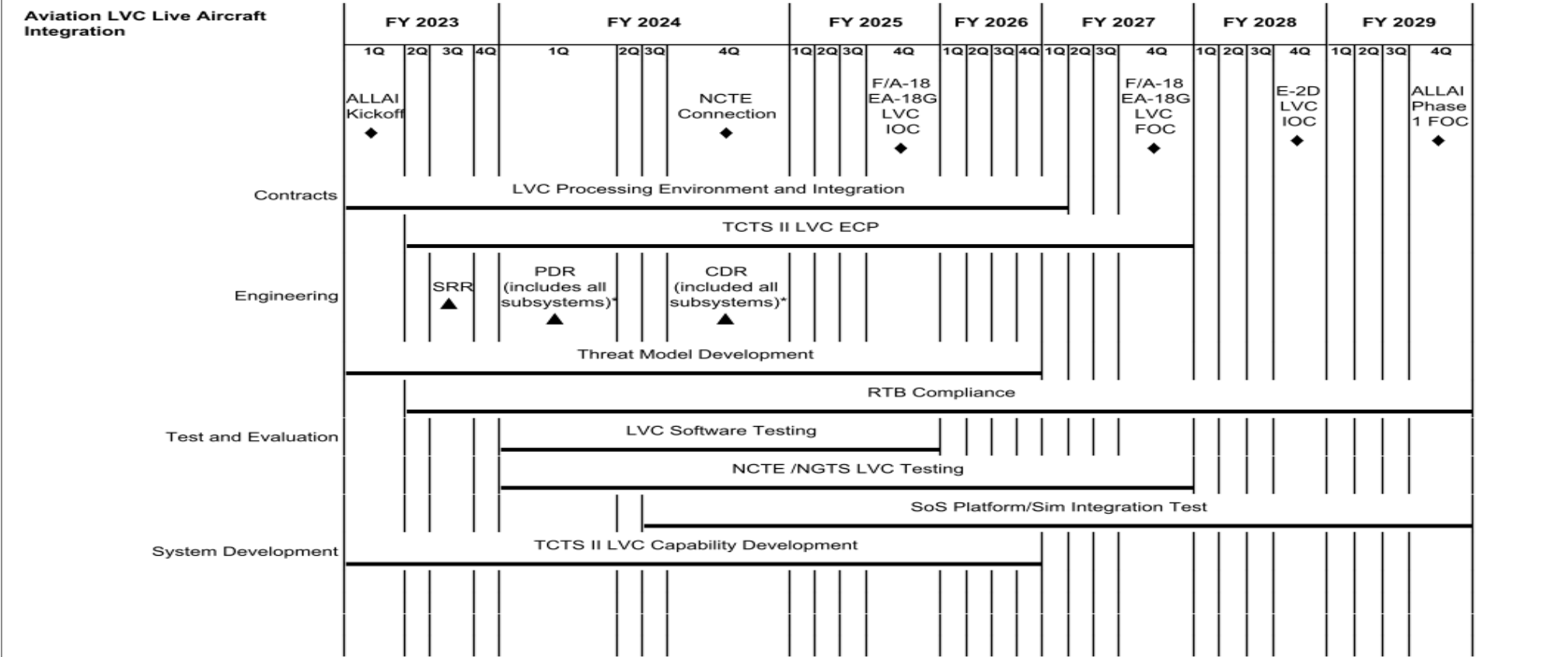
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / <i>Consolidated Trng Sys Dev</i>	Project (Number/Name) 3093 / <i>TACTS/LATR Replacement</i>
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2025PB - 0204571N - 3093

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3093 / TACTS/LATR Replacement
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2025PB - 0204571N - 3093 Subsystems: NCTE, F/A-18, EA-18G, E-2D, TCTS II, Threat Models, ITL

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3093 / TACTS/LATR Replacement
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Aviation Performance / Proficiency Analytics (APPA)	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
	APPA Development																															
System Development																																

2025PB - 0204571N - 3093

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3093 / TACTS/LATR Replacement
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
TCTS Inc II				
Airborne Subsystem (AS) IOC	1	2023	1	2023
Airborne Subsystem FRP	2	2023	2	2023
Common Form Factor Start	2	2023	2	2023
SITL Kickoff	1	2023	1	2023
SITL Continuous Development	1	2023	4	2029
SITL Incremental Capability FY25	2	2025	2	2025
SITL Incremental Capability FY27	2	2027	2	2027
Program Management/Cyber Security: Cyber Continuous Monitoring	1	2023	4	2029
Contracts: Phase 1 Full Rate Production 1	2	2023	2	2023
Contracts: Phase 1 Full Rate Production 2	1	2024	1	2024
Contracts: Phase 1 Full Rate Production 3	1	2025	1	2025
Contracts: Phase 1 Full Rate Production 4	1	2026	1	2026
Contracts: Phase 1 Full Rate Production 5	1	2027	1	2027
Contracts: Phase 1 Full Rate Production 6	1	2028	1	2028
Engineering: Test Readiness Review / Flight Readiness Review / Functional Configuration Audit / System Verification Review	1	2023	4	2029
Logistics: Physical Configuration Audit	2	2027	2	2027
Test & Evaluation: Developmental Test - Multiple Events for Advanced Capabilities	1	2023	4	2029
Test & Evaluation: Developmental Test C for Airborne Systems	1	2023	1	2023
NSA Certification: KOV 74A NSA Cert	2	2023	2	2023
NSA Certification: KOV/CDS Certs	2	2025	4	2026
Systems Development: Common Form Factor Development	1	2023	4	2027

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / <i>Consolidated Trng Sys Dev</i>	Project (Number/Name) 3093 / <i>TACTS/LATR Replacement</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Systems Development: Next Generation Technology Upgrades	1	2023	4	2029
<i>Aviation LVC Live Aircraft Integration</i>				
Aviation LVC Live Aircraft Integration Kickoff	1	2023	1	2023
NCTE Connection	4	2024	4	2024
F/A-18 EA-18G LVC IOC	4	2025	4	2025
F/A-18 EA-18G LVC FOC	4	2027	4	2027
E-2D LVC IOC	4	2028	4	2028
ALLAI Phase 1 FOC	4	2029	4	2029
Contracts: LVC Processing Environment and Integration	1	2023	1	2027
Contracts: TCTS II LVC ECP	2	2023	4	2027
Engineering: System of Systems SRR	3	2023	3	2023
Engineering: LVC Environment PDR	1	2024	1	2024
Engineering: LVC Environment CDR	4	2024	4	2024
Engineering: Threat Model Development	1	2023	4	2026
Engineering: Raise the Bar (RTB) Compliance for CDS	2	2023	4	2029
Test and Evaluation: LVC Software Testing	1	2024	4	2025
Test and Evaluation: NCTE/NGTS LVC Testing	1	2024	4	2027
Test and Evaluation: System of Systems Platform and Simulator Integration Testing	3	2024	4	2029
System Development: TCTS II LVC Capability Development	1	2023	4	2026
<i>Aviation Performance / Proficiency Analytics (APPA)</i>				
System Development: APPA Development	1	2025	4	2029

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy										Date: March 2024		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev				Project (Number/Name) 3356 / High Fidelity Surface Trainers			
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
3356: High Fidelity Surface Trainers	36.952	0.194	3.031	0.045	-	0.045	0.052	0.046	0.049	0.050	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This line funds high fidelity Aegis Integrated Air and Missile Defense (IAMD) individual, instructor, strike group and team trainers to support all Advanced Capability Build (ACB) and below Aegis baselines. This line provides funds for development of a High Fidelity Aegis Combined Integrated Air and Missile Defense (IAMD) and Anti-Submarine Warfare (ASW)

Trainer (CIAT) to enable tactics, techniques, and procedure development and allow advanced warfare training (AWT) Phase II and Surface Warfare Advanced Tactical training objectives to be accomplished ashore and to support Active and Passive Sonar Operations, Target Motion Analysis, Sonobuoy Localization, Command and Control, and execution of ASW Kill chain. Funds are provided for advanced component technology development, prototype evaluation, and technology readiness level assessment. Development of these trainers is in response to CNO Wholeness Review and Department of the Navy requirements. This line supports Surface Training Advanced Virtual Environment (STAVE) methodology by researching and developing trainers that will create an immersive and interactive learning environment and support both CNO High Velocity Learning and Ready Relevant Learning intent. It includes development of the Surface Training and Readiness Management System (STRMS) required for the identification of quantifiable operator and maintainer competencies for each mission area and associated tracking system development and testing. Funds provide for alignment with DON Chief Information Officer (CIO) Cyber requirements.

NOTE: In FY18, Mine Warfare Synthetic Training requirements previously captured within PE 0204571N / Proj 3356 (High Fidelity Surface Trainer) were realigned to PE 0603502N Surface & Shallow Water MCM / Proj 1235 (Mine Warfare Planning and Analysis).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Title: Combined IAMD ASW Trainer (CIAT)	0.194	0.000	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2024 Plans: N/A					
FY 2025 Base Plans: N/A					
FY 2025 OCO Plans: N/A					
Title: Surface Training Readiness Management System (STRMS)	0.000	3.031	0.045	0.000	0.045
Articles:	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy	Date: March 2024
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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3356 / High Fidelity Surface Trainers
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
<p><i>FY 2024 Plans:</i> Research and develop advanced technologies that will enable development of capability to identify quantifiable operator and maintainer competencies for each mission area and an associated shipboard training management and tracking system for the purpose of determining training effectiveness ashore and at sea. Refine Phase II design and continue Phase II capability development. Communicate and collaborate in development of IT architecture and data integration supportive of Surface Training Advanced Virtual Environment (STAVE), STRMS and My Navy Learning (MNL) requirements.</p> <p><i>FY 2025 Base Plans:</i> Fund NAVSEA cloud services in support of shore implementation of STRMS NAVSEA cloud environment testing.</p> <p><i>FY 2025 OCO Plans:</i> N/A</p> <p><i>FY 2024 to FY 2025 Increase/Decrease Statement:</i> FY25 decrease (\$2.986M) due to the completion of Phase II capability development of STRMS. Program efforts remaining supports the implementation of STRMS NAVSEA cloud environment.</p>					
Accomplishments/Planned Programs Subtotals	0.194	3.031	0.045	0.000	0.045

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

The software development and advanced technology upgrades for High Fidelity Surface Trainers are accounted for in this RDT&E line. These upgrades will provide an enabling technology to an existing training system.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3356 / High Fidelity Surface Trainers
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Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SYSTEMS ENG	WR	NSWC DAHLGREN : DAHLGREN,VA	22.195	0.000		0.300	Nov 2023	0.000		-		0.000	Continuing	Continuing	Continuing
SYSTEMS ENG	WR	NSWC CARDEROCK : CARDEROCK, MD	6.320	0.000		0.000		0.000		-		0.000	0.000	6.320	-
SYSTEMS ENG	WR	NUWC NEWPORT : NEWPORT, RI	2.076	0.000		0.000		0.000		-		0.000	0.000	2.076	-
SYSTEMS ENG	MIPR	U.S. ARMY SMDC : HUNTSVILLE, AL	0.147	0.000		0.000		0.000		-		0.000	0.000	0.147	-
SYSTEMS ENG	WR	NAWCTSD : ORLANDO, FL	1.698	0.000		2.481	Nov 2023	0.000		-		0.000	0.000	4.179	-
SYSTEMS ENG	TBD	LOCKHEED MARTIN : TBD	3.416	0.000		0.000		0.000		-		0.000	0.000	3.416	-
SYSTEMS ENG	WR	NSWC, Corona : CORONA, CA	0.940	0.000		0.250	Nov 2023	0.045	Nov 2024	-		0.045	0.000	1.235	-
SYSTEMS ENG	TBD	Innovative Defense Technologies : ARLINGTON, VA	0.110	0.173	Nov 2022	0.000		0.000		-		0.000	0.000	0.283	-
SYSTEMS ENG	TBD	Applied Physics Laboratory / Johns Hopkins Unvers : BALTIMORE, MD	0.050	0.021	Nov 2022	0.000		0.000		-		0.000	0.000	0.071	-
Subtotal			36.952	0.194		3.031		0.045		-		0.045	Continuing	Continuing	N/A

Remarks
 FY25 Program changes associated with the following:
 1) FY25 decrease is due to the completion of Phase II capability development of STRMS. Program efforts remaining supports the implementation of STRMS NAVSEA cloud environment

	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	36.952	0.194	3.031	0.045	-	0.045	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 3356 / High Fidelity Surface Trainers
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FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
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 3356	
Software Development - Combined IAMD & ASW Trainer (CIAT)	██████████
Surface Training Readiness Management System (STRMS)	██

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy		Date: March 2024
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / <i>Consolidated Trng Sys Dev</i>	Project (Number/Name) 3356 / <i>High Fidelity Surface Trainers</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3356</i>				
Software Development - Combined IAMD & ASW Trainer (CIAT)	1	2023	4	2023
Surface Training Readiness Management System (STRMS)	1	2024	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev			Project (Number/Name) 9999 / Congressional Adds				
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
9999: Congressional Adds	0.000	31.498	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	31.498
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

C913: Advance the development of Live Virtual Constructive (LVC) capabilities to the Fallon Training Range Complex to provide aircrews the capability to train combined Carrier Air Wing (CVW) tactics against near-peer advisories. Implement Synthetic Inject to Live (SITL) capability to enable training with realistic threat presentations. Continue development of 5th generation aircraft capability to conduct fighter integration training between F-35 and Department of Defense (DoD) 4th generation platforms.

C917: Procurement of cable and associated support for Barking Sands Undersea Range Extension cable for accelerated test and evaluation capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2023	FY 2024
Congressional Add: Secure LVC advanced training environment	19.999	0.000
FY 2023 Accomplishments: Continue development of 5th generation capability to conduct fighter integration training between F-22, F-35 and Department of Defense (DoD) 4th generation platforms.		
FY 2024 Plans: N/A		
Congressional Add: Test capabilities acceleration - Barking Sands Undersea Range Extension	11.499	0.000
FY 2023 Accomplishments: Purchase Barking Sands Undersea Range Extension cables and installation at the range.		
FY 2024 Plans: N/A		
Congressional Adds Subtotals	31.498	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 9999 / Congressional Adds
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Proj 9999	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
C913: Secure LVC Advanced Training Environment			Software Development - ACC FEDLAB																									
			Hardware/Software Development																									
C917: Test Capabilities Acceleration BSURE			Hardware Development - BSURE																									

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Exhibit R-4A, RDT&E Schedule Details: PB 2025 Navy **Date:** March 2024

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204571N / Consolidated Trng Sys Dev	Project (Number/Name) 9999 / Congressional Adds
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 9999				
C913: Secure LVC Advanced Training Environment: Software Development - ACC FEDLAB	3	2023	4	2024
C913: Secure LVC Advanced Training Environment: Hardware/Software Development	4	2023	4	2024
C917: Test Capabilities Acceleration BSURE: Hardware Development - BSURE	3	2023	1	2024