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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0204202N / DDG-1000
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	2,023.203	110.789	180.374	231.778	-	231.778	121.582	51.384	20.230	8.857	Continuing	Continuing
2464: <i>DD(X) Sys Design, Dev & Integration</i>	2,023.203	110.789	180.374	231.778	-	231.778	121.582	51.384	20.230	8.857	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 197

A. Mission Description and Budget Item Justification

This Program Element (PE) provides funds for the integration of Conventional Prompt Strike (CPS) into the Zumwalt class surface combatants. CPS integration is a top CNO priority that enhances the Zumwalt class's mission to provide credible independent forward presence/deterrence and operate as an integral part of Naval, Joint or Combined Maritime Forces. DDG 1000 will establish and maintain surface superiority, provide local air defense, and incorporate signature reduction to operate in all threat environments. DDG 1000 will have seamless Joint Interoperability to integrate all source information for battlespace awareness and weapons direction.

Funding provided is for design activities necessary to integrate CPS into all three Zumwalt Class destroyers to perform the required systems engineering, analysis, modeling and simulation necessary to install the CPS capability on DDG 1000 during her first Build Yard Maintenance Period (BYMP) in FY24. The funding provides a flexible, surface combatant launched long-range strike capability through the ships' remaining service life. When combined with the low observable characteristics of the Zumwalt platform, the ships provide a compelling strike capability from a platform designed to complicate an adversaries' targeting problem. Funding enables ship modifications for installation of a CPS cold launch system common to the future Virginia Payload Module.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	112.576	197.436	98.223	-	98.223
Current President's Budget	110.789	180.374	231.778	-	231.778
Total Adjustments	-1.787	-17.062	133.555	-	133.555
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-17.062			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.787	0.000			
• Program Adjustments	0.000	0.000	131.953	-	131.953
• Rate/Misc Adjustments	0.000	0.000	1.602	-	1.602

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R-1 Program Element (Number/Name)
PE 0204202N / *DDG-1000*

Change Summary Explanation

The FY24 increase of \$51.404M is due to the additional funding for CPS wholeness and for planned Test and Evaluation Master Plan (TEMP) events.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy										Date: March 2023		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0204202N / DDG-1000				Project (Number/Name) 2464 / DD(X) Sys Design, Dev & Integration			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2464: DD(X) Sys Design, Dev & Integration	2,023.203	110.789	180.374	231.778	-	231.778	121.582	51.384	20.230	8.857	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 197												

A. Mission Description and Budget Item Justification

The Zumwalt class destroyer (DDG 1000) program is developing the naval surface hypersonic strike capability, able to conduct independent forward deployed operations and prosecute deep-inland, time-critical, soft and medium-hardened targets in a contested environment. With the addition of surface hypersonic strike to legacy capabilities, Zumwalt will provide means to conduct Joint Surface Strike, deliver local area defense against air, surface and undersea threats, and incorporate signature reduction to operate in all threat environments. The Zumwalt class will have seamless Joint Interoperability to integrate all source information for battlespace awareness and weapons direction. The surface hypersonic strike capability, combined with the low observable characteristics of the Zumwalt platform, creates a uniquely lethal and survivable naval surface platform. The Zumwalt class supports the National Defense Strategy by supporting modernization initiatives for fielding hypersonic technologies and enabling a more lethal force. Overall, the Zumwalt class will enhance U.S. conventional power projection by providing an independent forward deployed strike platform, with longer range, shorter time of flight, and higher survivability against enemy defenses compared to current capabilities.

The Acquisition Decision Memorandum signed by ASN(RDA) on Jan 19 2023 directed PEO Ships to integrate Conventional Prompt Strike (CPS) into USS Zumwalt (DDG 1000) and USS Michael Monsoor (DDG 1001) by conducting a Building Yard Modernization Period (BYMP) and into USS Lyndon B. Johnson (DDG 1002) during new construction, prior to the ship's arrival in homeport, in order to maximize its fleet availability time. Full operational capability is achieved when the Zumwalt CPS Weapon System modernizations are completed, and all the three ships are turned over to the Fleet.

The Zumwalt program strategy is to leverage the development efforts for a CPS capability on Virginia submarines, using a minimal integration solution to rapidly provide a surface hypersonic strike capability to the Fleet. Funding provided is for design activities necessary to integrate CPS onto all three Zumwalt class destroyers and to perform the required systems engineering, analysis, modeling, and simulation, to modify the CPS Virginia design as necessary to install, field, and sustain CPS capability on Zumwalt class through the ships' remaining service life. Key activities to support CPS integration are:

1. Product and Software Development: Efforts required to modernize Zumwalt class destroyers to support the CPS Weapon System and delivery of a surface hypersonic strike capability to the Fleet.
2. Test and Evaluation: Platform level testing requirements resulting from the integration of CPS.
3. Management Services: Modifications to Zumwalt manpower, logistics, and sustainment requirements resulting from the integration of CPS.

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

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Product / Software Development	94.389	166.265	195.590	0.000	195.590
Articles:	-	-	-	-	-

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Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0204202N / DDG-1000	Project (Number/Name) 2464 / DD(X) Sys Design, Dev & Integration

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

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>Description: This funding applies to the design, systems engineering, prototype construction, and certification for the ZUMWALT Conventional Prompt Strike (CPS) Weapon System as needed to support the ZUMWALT CPS modernization schedule, flight testing, and delivery to the Fleet. This effort includes:</p> <ul style="list-style-type: none"> - Large Missile Vertical Launch System (LMVLS): Modifications to ZUMWALT Class ship systems enabling Hull, Mechanical and Electrical (HM&E) integration of the CPS Weapon System and other weapon systems designed for the Bik V VIRGINIA Class submarine VIRGINIA PAYLOAD MODULE (VPM). - Combat System: Modifications to the ZUMWALT Combat System required to support integration of the CPS Weapon System. - CPS Weapon System: CPS Weapon system integration and certification on ZUMWALT Class. Development of CPS Weapon System elements common to both ZUMWALT and VIRGINIA CPS Weapon Systems are separately funded by the CPS Program Office. <p>FY 2023 Plans: Specific planned design and prototyping efforts include:</p> <ul style="list-style-type: none"> - Complete development of Large Missile Vertical Launch System (LMVLS) and complete Ship Interface Drawings (SIDs) for the ZUMWALT CPS Weapon System. - Continue development of ZUMWALT CPS Weapon Control System (WCS) and launcher system. - Continue development of TSCE hardware and software modifications in support of CPS integration. - Continue development of the Electronic Control System (ECS) hardware and software for LMVLS. - Commence establishment of a ZUMWALT CPS land based development integration laboratory to conduct developmental integration between CPS WCS, TSCE & ECS - Complete virtual model of ECS to support land based developmental testing with both ZUMWALT Total Ship Computing Environment (TSCE) and CPS Weapons Control System (WCS). - Complete and deliver a ZUMWALT TSCE virtual twin for use by the Conventional Prompt Strike Program to support TSCE and WCS land based developmental integration testing. - Commence planning for execution of ZUMWALT CPS Weapon System shakedown, certification, initial fielding, and sustainment. - Conduct early technical demonstration of the ZUMWALT CPS WCS on DDG 1000, in conjunction with CPS Program Office's WCS development program. - Conduct systems engineering, model and simulation, and analysis efforts of ZUMWALT CPS WCS design performance using data from CPS / U.S. Army Joint Flight Campaign 3, an End-to-End solder executed U.S. Army hypersonic strike capability demonstration. 					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>- Conduct systems engineering, model and simulation, and analysis efforts of surface launcher design performance using data from CPS's developmental In-Air Launcher (IAL) Test program.</p> <p>- Develop technical and procurement specifications for environmental barrier and launch module shock isolation</p> <p>FY 2024 Base Plans: Specific planned design and prototyping efforts include:</p> <ul style="list-style-type: none"> - Complete development of the ZUMWALT CPS WCS. - Continue development of ZUMWALT CPS launcher system. - Continue TSCE hardware and software modifications in support of CPS integration. - Continue establishment of a ZUMWALT CPS land based development integration laboratory and commence developmental integration between CPS WCS, TSCE & ECS. - Complete and deliver TSCE hardware modifications kit to support CPS integration on DDG 1000. - Complete and deliver ZUMWALT CPS WCS kit for installation on DDG 1000. - Commence ZUMWALT CPS Build Yard Modernization Period (BYMP) integration and testing. - Complete a ZUMWALT TSCE virtual twin for use by the Conventional Prompt Strike Program to support CPS Weapon System end-to-end land based developmental integration testing. - Continue planning for execution of ZUMWALT CPS Weapon System shakedown, certification, flight test, initial fielding, and sustainment. - Conduct delta developmental In-Air-Launcher testing to assess ZUMWALT CPS launcher design change to meet Surface unique platform requirements. - Conduct systems engineering, model and simulation, and analysis efforts of the ZUMWALT CPS WCS and Launcher System design performance using data from CPS Joint Flight Campaign 4, a prototype Navy cold launched All-Up-Round hypersonic strike flight test. - Plan to complete CPS weapon system ship installation drawings <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase is due to transition from early development in FY22-23 to the completion of development efforts, delivery of initial hardware, and commencement of ZUMWALT CPS Integration and Test efforts on DDG 1000 in FY24.</p>					
<p>Title: Test and Evaluation</p> <p align="right">Articles:</p>	9.800	12.259	33.888	0.000	33.888
	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>Description: This funding covers the ZUMWALT CPS Surface Unique platform level testing requirements. This testing is being performed concurrently with Conventional Prompt Strike led tests for the common elements of the ZUMWALT and VIRGINIA Conventional Prompt Strike Weapon Systems. This funding also covers execution of the DDG 1000 Test and Evaluation Master Plan (TEMP).</p> <p>FY 2023 Plans: Specific CPS T&E efforts include: - Procure ZUMWALT specific testing material, conduct data analysis, and perform modeling and simulation updates to - understand rocket motor ignition impacts on DDG 1000 hull, in conjunction with Conventional Prompt Strike (CPS) First Stage (FS) Solid Rocket Motor (SRM) testing. - Continue to develop plans to conduct ZUMWALT unique CPS weapons system testing and procure associated test equipment and weapon system simulators. - Start developing plans for land-based Zumwalt test facility for integration testing of CPS Weapon System with ZUMWALT Combat System and ZUMWALT ship control system. - Start developing plans to support the execution of first CPS flight test off DDG 1000 class, Joint Flight Campaign (JFC-6). Begin generating ZUMWALT specific test objectives and data collection plans and start conducting System of System (SoS) Technical Interchange Meetings (TIMs) to de-risk onboard DDG 1000 CPS testing and JFC-6.</p> <p>Specific DDG 1000 TEMP efforts include: - Continue planning for DDG 1000 TEMP events, to include Anti Air Warfare tests and Tomahawk Live Fire test - Execution, analysis and reporting of Cyber Vulnerability tests and Live Fire Test and Evaluation (LFT&E) tests - Continue Modeling and Simulation (M&S) analysis to assess Probability of Raid Annihilation (PRA) of Anti-Ship Cruise Missiles (ASCM) and Aircrafts Key Performance Parameters (KPPs)</p> <p>FY 2024 Base Plans: Specific CPS T&E efforts include: - Continue to develop plans and start execution of ZUMWALT unique CPS weapons system testing. - Continue developing plans and establish a land-based Zumwalt test facility for integration testing of CPS Weapon System with ZUMWALT Combat System and ZUMWALT ship control system. - Continue developing plans to support the execution of first CPS flight test off DDG 1000 class, Joint Flight Campaign (JFC-6). Finalize ZUMWALT specific test objectives and data collection plans in support of JFC-6.</p> <p>Specific DDG 1000 TEMP efforts include:</p>					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- Execution of DDG 1000 TEMP events, to include Anti Air Warfare and Tomahawk Live Fire tests in support of IOC for the DDG 1000 class. - Conduct subsequent data analysis and reporting of completed test events. Finish M&S assessment of the PRA ASCM and PRA Aircraft KPPs. FY 2024 OCO Plans: N/A FY 2023 to FY 2024 Increase/Decrease Statement: Increase from FY23 to FY24 is a result of conducting TEMP events in FY24.					
Title: Management Services <div style="text-align: right;">Articles:</div>	6.600	1.850	2.300	0.000	2.300
Description: This funding covers the ZUMWALT CPS Surface Unique platform level logistics and sustainment requirements. This effort focuses on requirements from ZUMWALT CPS Weapon System impacting manpower requirements for ZUMWALT Class. Data to support this analysis is being developed under DDG 1000 Surface Unique Weapon System Design and Prototyping and from related efforts by funded by Conventional Prompt Strike for ZUMWALT VIRGIA common weapon system elements. FY 2023 Plans: Specific planned design and prototyping efforts include: - Complete manpower Analysis study to determine manning requirements for new weapon system. - Complete Front End Analysis (FEA) to determine training requirements for the crew to operate weapon system and develop a model simulator to train Crew members. - Continue support requirements associated with Conventional Prompt Strike (CPS) on DDG 1000 Class ships. FY 2024 Base Plans: Complete support requirements associated with Conventional Prompt Strike (CPS) on DDG 1000 Class ships. FY 2024 OCO Plans: N/A FY 2023 to FY 2024 Increase/Decrease Statement: Increase from FY23 to FY24 is to continue logisitics and sustainment support	-	-	-	-	-
Accomplishments/Planned Programs Subtotals	110.789	180.374	231.778	0.000	231.778

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

Line Item	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cost To	
			Base	OCO	Total					Complete	Total Cost
• OMN / 3B1K: <i>Specialized Skill Training</i>	3.175	3.258	3.347	-	3.347	3.431	3.487	3.538	3.608	0.000	751.488
• OPN / 0947: DDG 1000 <i>Class Support Equipment</i>	71.561	314.333	232.124	-	232.124	414.423	101.175	10.144	11.662	0.000	1,292.915
• OMN/15BUO: Life <i>Cycle Engineering (IWS))</i>	89.658	107.840	99.904	-	99.904	106.017	123.990	122.946	123.924	0.000	1,017.892
• OMN/15BR1: DDG 1000 Life <i>Cycle Engineering and Sustainment</i>	36.223	68.774	88.990	-	88.990	100.256	82.037	82.547	83.614	0.000	656.884
• SCN/2119: DDG 1000	56.597	72.976	410.400	-	410.400	32.300	0.000	0.000	0.000	0.000	13,793.234

Remarks

D. Acquisition Strategy

The DDG 1000 program strategy is to install CPS onto ZUMWALT Class in a Build Yard Modernization Period (BYMP) at Huntington Ingalls Industries (HII) in Pascagoula, MI. DDG 1000 will be the first ship modernized and arrive at HII in FY2023. Following DDG 1000, first DDG 1002 and then DDG 1001 will be modernized sequentially. DDG 1002 arrived at HII in January 2022 to begin its Combat System Availability (CSA) and will commence CPS modernization after CSA is complete. DDG 1001 is ordered last to maximize her operations by the fleet prior to commencing modernization.

The modernization development strategy is to leverage the development efforts for a CPS capability on Virginia Submarines, using a minimal integration solution to rapidly provide a surface hypersonic strike capability to the Fleet. PEO Integrated Warfare System will be leveraged to modify the Zumwalt Combat System to support CPS Integration.

Bath Iron Works has been awarded a contract as the planning yard to develop plans to remove Zumwalt forward gun mounts. Naval Surface Warfare Center (NSWC) Philadelphia is funding to develop the Large Missile Vertical Launch System (LMVLS), which include modifications to Zumwalt ship systems enabling support for weapon systems designed for the Blk V Virginia Class submarine Virginia Payload Module (VPM), allowing the installation of CPS Advanced Payload Module (APM) and All-Up-Rounds (AUR).

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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Ship Integration Development Software	SS/CPAF	Raytheon : Tewksbury MA	1,002.078	2.300	Dec 2021	0.000		0.000		-		0.000	0.000	1,004.378	-
Ship Integration Development (Prod Dev), TTWCS /ASIST	SS/CPFF	Various : Various	108.324	0.000		0.000		0.000		-		0.000	0.000	108.324	-
Surface Strike	Various	Various : Various	86.777	2.500	Oct 2021	0.000		0.000		-		0.000	0.000	89.277	-
Maritime Targeting Cell - Afloat	Various	Various : Various	96.444	18.366	Jan 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Alternative Weapon System Analysis	Various	Various : Various	1.312	0.000		0.000		0.000		-		0.000	0.000	1.312	-
Cybersecurity	SS/CPAF	Raytheon : Tewksbury MA	6.500	3.200	Dec 2021	0.000		0.000		-		0.000	0.000	9.700	-
Product Development for Technical Issues	Various	Various : Various	16.116	5.510	Dec 2021	0.000		0.000		-		0.000	0.000	21.626	-
Conventional Prompt Strike Design and Integration	C/CPAF	BIW : BATH, ME	8.200	28.000	Nov 2021	6.629	Dec 2022	6.697	Dec 2023	-		6.697	48.300	97.826	-
Conventional Prompt Strike Support	C/CPIF	Lockheed Martin : Denver, CO	1.000	29.513	Nov 2021	138.175	Nov 2022	171.501	Nov 2023	-		171.501	66.300	406.489	-
Conventional Prompt Strike Support	SS/CPAF	Raytheon : Tewksbury MA	0.000	0.000		9.550	Dec 2022	5.710	Dec 2023	-		5.710	0.000	15.260	-
Conventional Prompt Strike Support	SS/CPFF	PSS : Various	0.000	0.000		5.650	Dec 2022	6.467	Dec 2023	-		6.467	0.000	12.117	-
Conventional Prompt Strike Design and Integration	WR	NSWC : Dahlgren, VA	2.046	2.100	Nov 2021	1.796	Nov 2022	0.750	Nov 2023	-		0.750	9.408	16.100	-
Conventional Prompt Strike Design and Integration	WR	NSWC : Philadelphia, PA	1.851	1.900	Nov 2021	0.850	Nov 2022	0.850	Nov 2023	-		0.850	8.512	13.963	-
Conventional Prompt Strike Design and Integration	WR	NSWC : Indian Head, MD	0.000	0.000		0.959	Nov 2022	0.959	Nov 2023	-		0.959	0.000	1.918	-

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Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Conventional Prompt Strike Design and Integration	WR	NSWC : Bethesda, MD	0.000	0.000		1.497	Nov 2022	1.497	Nov 2023	-		1.497	0.000	2.994	-
Conventional Prompt Strike Design and Integration	Various	Various : Various	0.974	1.000	Nov 2021	1.159	Nov 2022	1.159	Nov 2023	-		1.159	4.480	8.772	-
Subtotal			1,331.622	94.389		166.265		195.590		-		195.590	Continuing	Continuing	N/A

Remarks
CPS Support: Lockheed Martin will work with the ZUMWALT-Class Combat System Integrator, ZUMWALT Shipbuilder, NAVSEA organizations, and other stakeholders to ensure the CPS Weapon System (WS) is compatible with ZUMWALT-Class DDGs and it meets threshold requirements defined in the derived requirements from the CPS Technical Objectives and Guidelines (TOG).

Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Operational Test & Evaluation (OT&E)	SS/CPFF	Raytheon : Portsmouth, RI	154.657	0.300	Dec 2021	0.000		4.170	Dec 2023	-		4.170	4.800	163.927	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	C/CPIF	CSC : Washington, DC	4.000	0.000		0.000		0.000		-		0.000	0.200	4.200	-
Operational Test & Evaluation (OT&E)	Various	Various : Various	138.399	6.500	Nov 2021	0.000		14.000	Nov 2023	-		14.000	5.411	164.310	-
Operational Test & Evaluation (OT&E)	C/CPIF	NSMA : Arlington, VA	23.008	0.000		0.000		0.000		-		0.000	2.400	25.408	-
Developmental Test & Evaluation (DT&E)	WR	NSWC : Dahlgren, VA	10.439	0.000		0.000		0.000		-		0.000	0.200	10.639	-
Developmental Test & Evaluation (DT&E)	WR	NSWC : Bethesda, MD	21.566	1.000	Nov 2021	0.000		0.000		-		0.000	1.825	24.391	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	WR	NSWC : Philadelphia, PA	0.850	0.000		0.000		0.000		-		0.000	0.125	0.975	-

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Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Operational Test & Evaluation (OT&E)	C/CPIF	NRL : Washington, DC	3.795	0.000		0.000		0.000		-		0.000	1.800	5.595	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	WR	SCSC : Wallops, Is, VA	5.903	0.000		0.000		0.000		-		0.000	0.000	5.903	-
Prior Year Live Fire Test & Evaluation Not Funded FYDP (PYLFT&E)	C/CPIF	ROI : Mullica Hills, NJ	44.602	0.000		0.000		0.000		-		0.000	0.000	44.602	-
Operational Test & Evaluation (OT&E)	WR	COTF : Norfolk, VA.	17.961	1.000	Dec 2021	0.000		0.500	Dec 2023	-		0.500	2.634	22.095	-
Prior Year Operational Test & Evaluation Not Funded FYDP (PYOT&E)	WR	Various : Various	0.747	0.000		0.000		0.000		-		0.000	0.000	0.747	-
Developmental Test & Evaluation (DT&E)	C/CPIF	NAVAIR : Not Specified	8.307	0.000		0.000		3.130	Dec 2023	-		3.130	3.600	15.037	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	TBD	NAVAIR : Not Specified	0.300	0.000		0.000		0.000		-		0.000	0.650	0.950	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	C/CPIF	BAE : Minneapolis, MN	54.064	0.000		0.000		0.000		-		0.000	0.000	54.064	-
Developmental Test & Evaluation (DT&E)	C/CPIF	Raytheon : Tucson, AZ	39.538	0.000		0.000		0.000		-		0.000	0.000	39.538	-
Developmental Test & Evaluation (DT&E)	WR	NUWC : Various	23.801	1.000	Oct 2021	0.000		0.000		-		0.000	1.657	26.458	-
Prior Year Live Fire Test & Evaluation Not Funded FYDP (PYLFT&E)	WR	Various : Various	44.000	0.000		0.000		0.000		-		0.000	21.000	65.000	-
Prior Year Operational Test & Evaluation Not Funded FYDP (PYOT&E)	Various	PEO IWS : Washington, DC	81.704	0.000		0.000		0.000		-		0.000	9.298	91.002	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	WR	NSWC : Panama City, FL	7.485	0.000		0.000		0.000		-		0.000	9.200	16.685	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0204202N / DDG-1000	Project (Number/Name) 2464 / DD(X) Sys Design, Dev & Integration
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Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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)	C/CPIF	Lockheed Martin : Denver, CO	0.000	0.000		10.000	Nov 2022	10.688	Nov 2023	-		10.688	31.100	51.788	-
Developmental Test & Evaluation (DT&E)	WR	Various : Various	0.000	0.000		0.216	Nov 2022	0.350	Nov 2023	-		0.350	0.000	0.566	-
Developmental Test & Evaluation (DT&E)	WR	NSWC (CPS) : Dahlgren, VA	0.000	0.000		0.328	Nov 2022	1.050	Nov 2023	-		1.050	0.000	1.378	-
Developmental Test & Evaluation (DT&E)	SS/CPFF	APL/JHU : Baltimore, MD	0.000	0.000		1.715	Jan 2023	0.000	Jan 2024	-		0.000	0.000	1.715	-
Prior Year Developmental Test & Evaluation Not Funded FYDP (PYDT&E)	Various	NAVSEA : Washington, DC	6.455	0.000		0.000		0.000		-		0.000	0.000	6.455	-
Subtotal			691.581	9.800		12.259		33.888		-		33.888	95.900	843.428	N/A

Remarks
This funding covers the ZUMWALT CPS Surface Unique platform level testing requirements. This testing is being performed concurrently with Conventional Prompt Strike led tests for the common elements of the ZUMWALT and VIRGINIA Conventional Prompt Strike Weapon Systems. This funding also covers execution of the DDG 1000 Test and Evaluation Master Plan (TEMP).

Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Conventional Prompt Strike Training and Curriculum Development	Various	Various : Various	0.000	6.600	Nov 2021	1.850	Nov 2022	2.300	Nov 2023	-		2.300	0.000	10.750	-
Subtotal			0.000	6.600		1.850		2.300		-		2.300	0.000	10.750	N/A

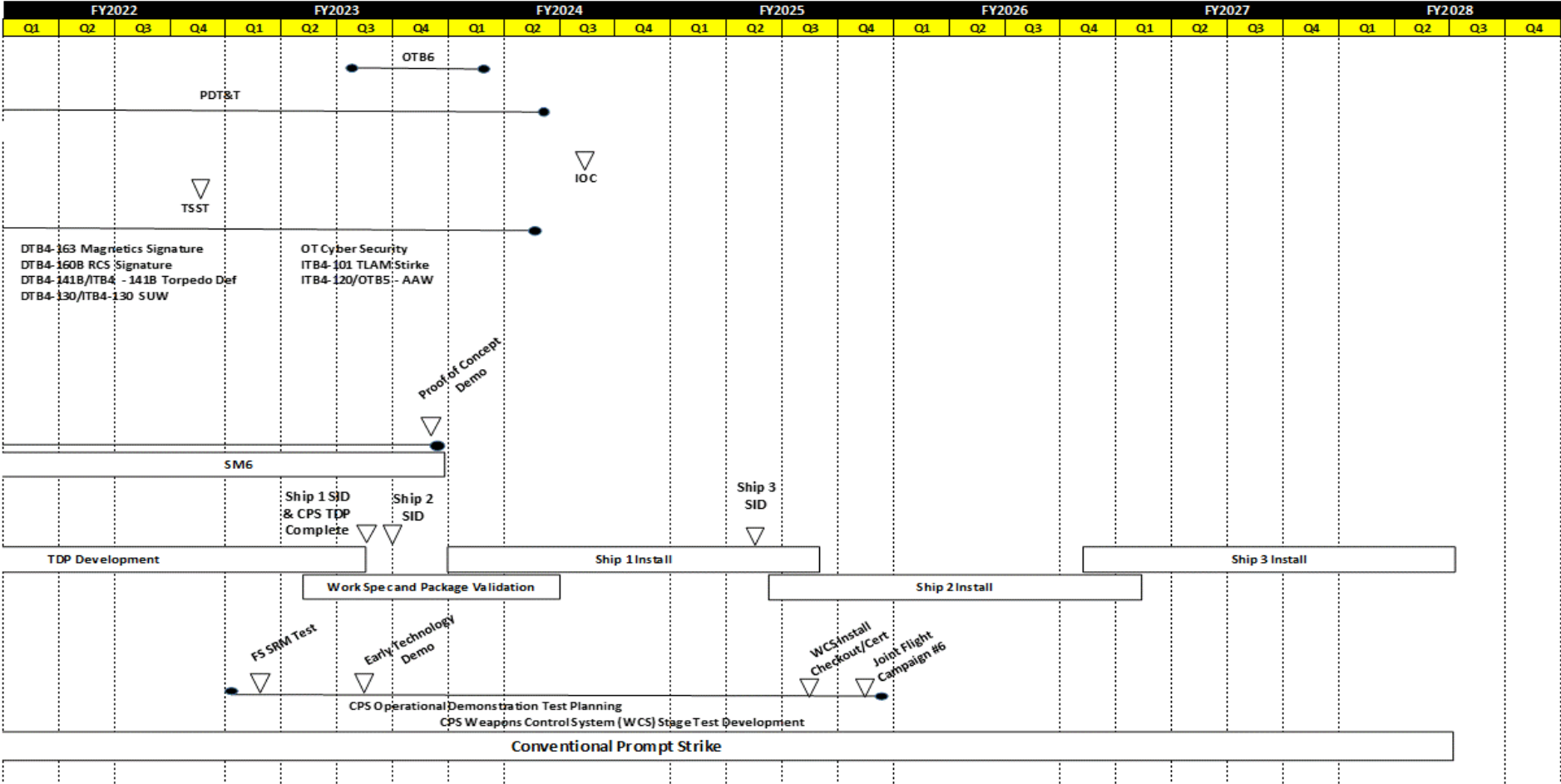
	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2,023.203	110.789	180.374	231.778	-	231.778	Continuing	Continuing	N/A

Remarks

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

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0204202N / DDG-1000	Project (Number/Name) 2464 / DD(X) Sys Design, Dev & Integration
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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0204202N / DDG-1000	Project (Number/Name) 2464 / DD(X) Sys Design, Dev & Integration

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2464				
Post Delivery Test & Trials	3	2022	2	2024
Initial Operational Capability (IOC)	3	2024	3	2024
Operational Test (OTB6)	3	2023	1	2024
Total Ship Survivability Test (TSST)	4	2022	4	2022
DTB4-141 A/B Torpedo Def, DTB4-130 SUW	2	2022	2	2022
Test Events (DTB4-130/ITB4-130 SUW, DTB4-141B/ITB4-141B Torp Def, DTB4-163 Magnetics, DTB4-160B RCS, ITB4-120/OTB5 AAW, OT Cyber Security, ITB4-101 Strike)	1	2022	2	2024
Standard Missile (SM6) Operational Demonstration	1	2022	4	2023
Conventional Prompt Strike	1	2022	2	2028
CPS Operational Demonstration Test Planning	1	2023	4	2025
First Stage Solid Rocket Motor Test Plume Analysis	1	2023	1	2023
USS ZUMWALT Early Technology Demonstration	3	2023	3	2023
CPS Weapons Control System (WCS) Stage Test Development	3	2024	4	2025
WCS Installation Checkout/Certification	3	2025	3	2025
Joint Flight Campaign #6	4	2025	4	2025