Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy* / BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*

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	10.969	15.563	11.198	10.555	-	10.555	10.472	10.636	11.021	11.597	Continuing	Continuing
3323: *Maritime Tactical Command & Control (MTC2)*	10.969	15.563	11.198	10.555	-	10.555	10.472	10.636	11.021	11.597	Continuing	Continuing

A. Mission Description and Budget Item Justification

Section 872 of the National Defense Authorization Act (NDAA) for FY 2018 (P.L. 115-91) directed the Secretary of Defense to task the Defense Innovation Board (DIB) to undertake a study on "streamlining [the Department's] software development and acquisition regulations." The Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) submitted the final report to Congress in May 2019. The DIB's report made recommendations aimed at transforming the way the Department acquires, develops, and deploys software and manages digital talent. The DIB encouraged the creation of a "new appropriation category for software capability delivery that allows (relevant types of) software to be funded as a single budget item, with no separation between Research, Development, Test & Evaluation (RDT&E), production and sustainment." The recommendation stemmed from the DIB's observation that current law, regulations, and policies (including those governing program funding and appropriations) treat software acquisition and development as a series of discrete, sequential steps; and that this approach is at odds with modern software, which is continuously updated to provide new functionality. This program has been designated as a Software and Digital Technology Pilot Program by the Secretary of Defense or the explanatory statement regarding this Act. The funding in this line is requested to be used for expenses necessary for agile procurement, production, modification and operation and maintenance of the pilot program requirements.

(Proj 3323) Maritime Tactical Command and Control (MTC2) is a next generation Command and Control (C2) software program that delivers Battle Management Aids (BMA) and Maritime Planning Tools (MPT) to dynamically plan, direct, monitor, and assess maritime operations in support of Joint, Multi-Service, and Coalition Force planning. MTC2 will leverage a System of Services to deliver capabilities improving decision speed and dynamic synchronization of forces. BMAs / MPTs are small, capability-focused deliveries that can be rapidly developed, tested, and fielded. MTC2 engages with the Office of the Chief of Naval Operations (OPNAV)-led and Fleet supported Requirements Governance Board (RGB) to define and prioritize the BMAs and MPTs that MTC2 will deliver and align to the Program Executive Office (PEO) Command, Control, Communications, and Intelligence (C4I) enterprise architecture Consolidated Afloat Network Enterprise Service (CANES), Agile Core Services (ACS)) for fielding to all echelons of command (Afloat and Ashore) within the Navy. The program's objective is to provide a suite of maritime applications (BMAs / MPTs) that enable planning, execution, monitoring, and assessment in support of operational and tactical level of war requirements. MTC2 fields BMAs / MPTs designed to provide automated and structured support for tactical and operational planning, decision-making, and execution. MTC2 incorporates distributed data transfer capability for enhanced operational data exchange between command and control systems, combat systems, logistics, and intelligence systems for timely threat identification, location, and status alongside blue force data. MTC2 is the Navy's only solution to fulfill a portion of the Joint Global Force Management - Data Initiative (GFM-DI) Allocation requirements. GFM-DI is the Department-wide enterprise solution that enables visibility/accessibility/sharing of data applicable to the entire Department of Defense (DoD) force structure. MTC2 supports alignment and provides interoperability of Navy C2 with the DoD joint C2 way-forward. The program will fully align with joint C2 data and service exposure and consumption goals, architectures, and Net-Centric Enterprise Service efforts. The sustainment activities include support for evolutionary acquisition, program management, training and training events, help desk, software licenses, and sustaining MTC2 Prototype instances until migration to MTC2 Program of Record.

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy* / BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	14.843	11.198	11.485	-	11.485
Current President's Budget	15.563	11.198	10.555	-	10.555
Total Adjustments	0.720	0.000	-0.930	-	-0.930
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.002	0.000			
• SBIR/STTR Transfer	-0.282	0.000			
• Program Adjustments	0.000	0.000	-1.213	-	-1.213
• Rate/Misc Adjustments	0.000	0.000	0.283	-	0.283

Change Summary Explanation

FUNDING:
Program decrease of -$1.213M reflects a reduction in software maintenance support for the MTC2 prototype.

SCHEDULE:
No schedule changes.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy												Date: March 2023
Appropriation/Budget Activity 1319 / 8					R-1 Program Element (Number/Name) PE 0608231N / *MARITIME TACT CMD & C ONTROL - SOFT PLT PRGM*				Project (Number/Name) 3323 / *Maritime Tactical Command & Control (MTC2)*			
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**
3323: *Maritime Tactical Command & Control (MTC2)*	10.969	15.563	11.198	10.555	-	10.555	10.472	10.636	11.021	11.597	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Maritime Tactical Command and Control (MTC2) is a next generation Command and Control (C2) software program that will deliver Battle Management Aids (BMA) and Maritime Planning Tools (MPT) to dynamically plan, direct, monitor, and assess maritime operations in support of Joint, Multi-Service, and Coalition Force planning. MTC2 leverages a System of Services to deliver capabilities improving decision speed and dynamic synchronization of forces. BMAs / MPTs are small, capability-focused deliveries that can be rapidly developed, tested, and fielded. MTC2 leverages Science and Technology (S&T) investments and engages with the Navy Requirements Governance Board (RGB) to define and prioritize the BMAs and MPTs that MTC2 will deliver and align to the Program Executive Office (PEO) Command, Control, Communications, and Intelligence (C4I) enterprise architecture (Consolidated Afloat Network Enterprise Service (CANES), Agile Core Services (ACS)) for fielding to all echelons of command (Afloat and Ashore) within the Navy. The program's objective is to provide a suite of maritime applications (BMAs / MPTs) that enable planning, execution, monitoring, and assessment in support of operational and tactical level of war requirements. MTC2 fields BMAs / MPTs designed to provide automated and structured support for tactical and operational planning, decision-making, and execution. As a software-only program that leverages enterprise infrastructure, MTC2 provides new and improved capabilities to include an Operational Planning Tool (OPT), an improved browser enabled map visualization that enables the warfighter to associate tracks to relevant data, past and predicted movements, ingest Meteorology and Oceanography information, and operational overlays. MTC2's updated architecture will enable future composable C2 capabilities to respond with a more rapid pace in changes in threats and technology. MTC2 is the Navy's solution to Global Force Management - Data Initiative (GFM-DI) which is Department of Defense (DoD) -wide enterprise solution that enables visibility/accessibility/ sharing of data applicable to the entire DoD force structure. MTC2 incorporates distributed data transfer capability for enhanced operational data exchange between command and control systems, combat systems, logistics, and intelligence systems for timely threat identification, location, and status alongside blue force data. MTC2 supports alignment and provides interoperability of Navy C2 with the DoD Joint C2 way-forward. The program will fully align with Joint C2 data and service exposure and consumption goals, architectures, and Net-Centric Enterprise Service efforts. The sustainment activities include support for evolutionary acquisition, program management, training and training events, help desk, procuring software licenses, and sustainment of MTC2 Program of Record instances.

FY 2024 funding will provide iterative development and delivery to targeted platforms necessary for the completion of the Navy special project. The delivery will include extended Maritime Planning Tools to support resilient Line of Sight (LoS) and Beyond Line of Sight (BLoS) communications networks, as well as Joint All-Domain Command and Control (JADC2) interfaces. MTC2 will continue executing under the Software Acquisition Pathway (SWP) and continue iterative development of MTC2 software based on the SWP Capability Needs Statement (CNS). MTC2 will continue to field Ashore/Afloat of the PoR capability to the fleet and Maritime Operations Centers (MOCs). MTC2 will continue to receive feedback from fleet users for development, integration, and testing of additional capabilities/enhancements (Battle Management Aids (BMAs) / Maritime Planning Tools (MPT)).

The funding in this line also supports sustainment activities which include evolutionary acquisition and program management support, training and training events, help desk, software licenses, and sustainment of the MTC2 Program of Record.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: Maritime Tactical Command and Control (MTC2) Development	12.757	8.267	8.673	0.000	8.673
Articles:	-	-	-	-	-

FY 2023 Plans:
MTC2 continues execution under the Software Acquisition Pathway (SWP) and iterative development of MTC2 v2.0 based on the SWP Capability Needs Statement (CNS). MTC2 continues to field Ashore/Afloat of the PoR capability to the fleet and Maritime Operations Centers (MOCs). MTC2 continues to receive feedback from fleet users for development, integration, and testing of additional capabilities/enhancements (Battle Management Aids (BMAs) / Maritime Planning Tools (MPT)). FY 2023 funding provides iterative development and delivery to targeted platforms necessary for the completion of the Navy special project, the delivery includes extended Maritime Planning Tools to support resilient Line of Sight (LoS) and Beyond Line of Sight (BLoS) communications networks, as well as Joint All-Domain Command and Control (JADC2) interfaces. MTC2 v2.0 iterative delivery also includes additional BMA integration, with data and service interfaces. These additional capabilities in MTC2 are necessary to meet the timeline of targeted strike group deployments.

FY 2024 Base Plans:
MTC2 will continue executing under the Software Acquisition Pathway (SWP) and continue iterative development of MTC2 software based on the SWP Capability Needs Statement (CNS). MTC2 will continue to field Ashore/Afloat of the PoR capability to the fleet and MOCs. MTC2 will continue to receive feedback from fleet users for development, integration, and testing of additional capabilities/enhancements (Battle Management Aids (BMAs) / Maritime Planning Tools (MPT)). FY 2024 funding will provide iterative development and delivery to targeted platforms necessary for the completion of the Navy special project, The delivery will include extended Maritime Planning Tools to support resilient Line of Sight (LoS) and Beyond Line of Sight (BLoS) communications networks Navy Tactical Grid (NTG) interfaces and capabilities, as well as Joint All-Domain Command and Control (JADC2) interfaces. MTC2 v2.0 iterative delivery will also include additional BMA integration, with data and service interfaces. These additional capabilities in MTC2 are necessary to meet the timeline of targeted strike group deployments.

FY 2024 OCO Plans:
N/A

FY 2023 to FY 2024 Increase/Decrease Statement:

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Increase from FY2023 to FY2024 in the amount of $0.406M for MTC2 development reflects additional software development efforts for Distributed Maritime Operations (DMO) and Navy Tactical Grid (NTG) interfaces and capabilities.					
Title: Maritime Tactical Command and Control (MTC2) Sustainment	2.806	2.931	1.882	0.000	1.882
Articles:	-	-	-	-	-
FY 2023 Plans: FY23 sustainment activities include evolutionary acquisition and program management support, training and training events, help desk, installation, planning & design activities, procuring software licenses, and sustainment of MTC2 PoR releases. ***FY 2024 Base Plans:*** FY24 sustainment activities will include evolutionary acquisition and program management support, training and training events, help desk, installation, planning & design activities, software licenses, and sustainment of MTC2 PoR releases. ***FY 2024 OCO Plans:*** N/A ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Decrease from FY2023 to FY2024 in the amount of $1.049M reflects reduced software maintenance support for the MTC2 prototype.					
Accomplishments/Planned Programs Subtotals	15.563	11.198	10.555	0.000	10.555

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

MTC2 acquisition strategy realigned to DoDI 5000.87 Operation of the Software Acquisition Pathway in FY21. MTC2 executes an agile software development that is responsive to Fleet needs. Instead of operating under Joint Capabilities Integration and Development System (JCIDS) procedures, OPNAV N2N6 directs MTC2's capability requirements through a Capability Needs Statement (CNS). Capability areas identified in the CNS direct the Minimum Viable Capability Releases (MVCRs) delivered by the program. MTC2's primary contracting method for software development utilizes a Multiple Award Contract (MAC) which features Task Orders for MVCR development efforts. Naval Information Warfare Center - Pacific (NIWC-PAC), San Diego, CA is the designated Software Support Activity (SSA).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	NIWC PAC : San Diego, CA	1.025	0.104	Dec 2021	0.000	Dec 2022	0.000		-		0.000	0.000	1.129	1.129
Training Development	WR	NIWC PAC : San Diego, CA	0.059	0.233	Dec 2021	0.229	Dec 2022	0.000		-		0.000	0.000	0.521	0.521
Integration, Assembly & Test	WR	NIWC PAC : San Diego, CA	0.668	3.184	Dec 2021	2.839	Dec 2022	2.674	Dec 2023	-		2.674	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	Various : San Diego, CA	1.337	4.438	Dec 2021	1.280	Dec 2022	0.962	Dec 2023	-		0.962	Continuing	Continuing	Continuing
Software Development	WR	NIWC PAC : San Diego, CA	2.195	2.046	Dec 2021	1.026	Dec 2022	0.997	Dec 2023	-		0.997	Continuing	Continuing	Continuing
Software Development	C/CPFF	Various : San Diego, CA	1.423	1.111	Jul 2022	1.583	Jul 2023	2.423	Jul 2024	-		2.423	Continuing	Continuing	Continuing
		Subtotal	6.707	11.116		6.957		7.056		-		7.056	Continuing	Continuing	N/A

Remarks

FY2024 increase reflects additional software development efforts for Distributed Maritime Operations (DMO) and Navy Tactical Grid (NTG) interfaces and capabilities.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	WR	NIWC LANT : Norfolk, VA/San Diego, CA	0.049	0.000		0.000	Dec 2022	0.000		-		0.000	0.000	0.049	0.049
Integrated Logistics Support	C/CPFF	SeaPort : San Diego, CA	0.123	0.156	Dec 2021	0.153	Dec 2022	0.199	Dec 2023	-		0.199	Continuing	Continuing	Continuing
Software Maintenance	WR	NIWC PAC : San Diego, CA	2.620	2.622	Dec 2021	2.750	Dec 2022	1.052	Dec 2023	-		1.052	Continuing	Continuing	Continuing
Software Maintenance	C/CPFF	Various : San Diego, CA	0.000	0.184	Dec 2021	0.181	Dec 2022	0.830	Dec 2023	-		0.830	Continuing	Continuing	Continuing
		Subtotal	2.792	2.962		3.084		2.081		-		2.081	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

FY2024 decrease reflects reduced software maintenance support for the MTC2 prototype.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation (OT&E)	WR	NIWC PAC : San Diego, CA	0.710	0.068	Dec 2021	0.067	Dec 2022	0.574	Dec 2023	-		0.574	Continuing	Continuing	Continuing
Operational Test & Evaluation (OT&E)	C/CPFF	Various : San Diego, CA	0.000	0.633	Dec 2021	0.622	Dec 2022	0.126	Dec 2023	-		0.126	Continuing	Continuing	Continuing
		Subtotal	0.710	0.701		0.689		0.700		-		0.700	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/CPFF	SeaPort : San Diego, CA	0.760	0.784	Dec 2021	0.468	Dec 2022	0.718	Dec 2023	-		0.718	Continuing	Continuing	Continuing
		Subtotal	0.760	0.784		0.468		0.718		-		0.718	Continuing	Continuing	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	10.969	15.563		11.198		10.555		-		10.555	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		**Date:** March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

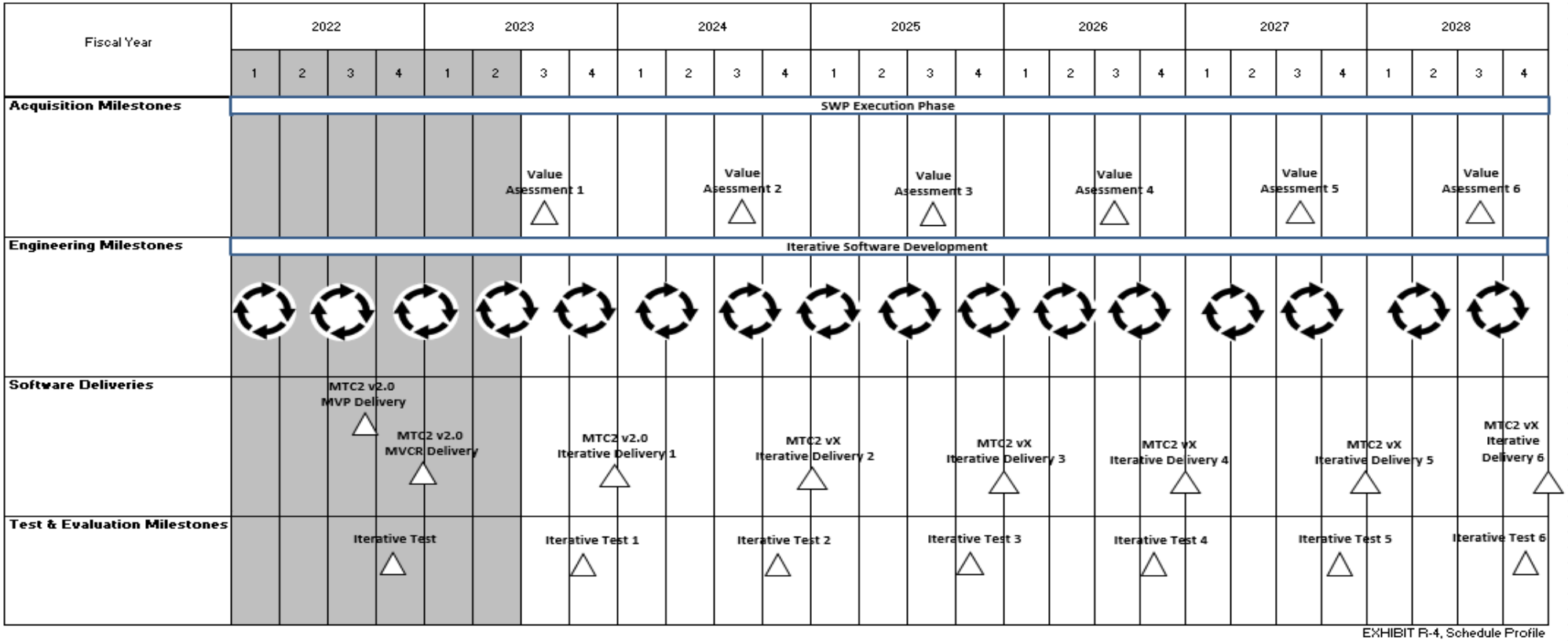

EXHIBIT R-4, Schedule Profile

Legend:
FD - Field Decision
IOC - Initial Operational Capability
R- Release
SWP - Software Acquisition Pathway
CNS - Capability Needs Statement
MVP - Minimum Viable Product
MVCR - Minimum Viable Capability Release

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3323				
SWP Execution Phase	1	2022	4	2028
SWP Iterative Software Development	1	2022	4	2028
MTC2 v2.0 MVP Delivery	3	2022	3	2022
Iterative Test	4	2022	4	2022
MTC2 v2.0 MVCR delivery	4	2022	4	2022
Value Assessment 1	3	2023	3	2023
Iterative Test 1	4	2023	4	2023
MTC2 v.2.0 Iterative Delivery 1	4	2023	4	2023
Value Assessment 2	3	2024	3	2024
Iterative Test 2	4	2024	4	2024
MTC2 Software Iterative Delivery 2	4	2024	4	2024
Value Assessment 3	3	2025	3	2025
Iterative Test 3	4	2025	4	2025
MTC2 Software Iterative Delivery 3	4	2025	4	2025
Value Assessment 4	3	2026	3	2026
Iterative Test 4	4	2026	4	2026
MTC2 Software Iterative Delivery 4	4	2026	4	2026
Value Assessment 5	3	2027	3	2027
Iterative Test 5	4	2027	4	2027
MTC2 Software Iterative Delivery 5	4	2027	4	2027
Value Assessment 6	3	2028	3	2028

Exhibit R-4A, **RDT&E Schedule Details:** PB 2024 Navy		**Date:** March 2023
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608231N / *MARITIME TACT CMD & CONTROL - SOFT PLT PRGM*	**Project (Number/Name)** 3323 / *Maritime Tactical Command & Control (MTC2)*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Iterative Test 6	4	2028	4	2028
MTC2 Software Iterative Delivery 6	4	2028	4	2028