Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy	Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603597N *I Automated Test & Analysis*

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	97.395	41.412	34.766	7.805	-	7.805	-	-	-	-	-	-
9999: *Congressional Adds*	45.348	33.787	30.000	0.000	-	0.000	-	-	-	-	-	-
9B88: *Automated Test and Analysis*	52.047	7.625	4.766	7.805	-	7.805	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

Starting in FY 2016 and continuing through FY 2022, the Navy implemented an enterprise approach to Automated Test and Analysis (ATA). ATA expands the automated test methods currently in use (Automated Test and Re-Test (ATRT)), adds new methods of testing and use of automated test technologies, and standardizes automated test practices, methods and tools. Examples include but are not limited to improvements to Link-16 Non-C2 data collection, essential Mission Planning, Service Oriented Architecture Framework, AEGIS Enterprise Solution Enhancements, Strike Force Interoperability testing and Control System Restoration and Validation.

Project funding supports the development of enterprise level strategies and activities to apply ATA technologies to software-intensive acquisition programs. Project objectives include support for the Chief of Naval Operations' (CNO) vision outlined in the CNO's Operational Plan (OPLAN) through continued development and commercialization / scaling of Automated Test and Re-Test (ATRT) Small Business Innovation Research (SBIR) technologies across the Navy enterprise. These SBIR derived technologies (leveraging small business innovation and entreprenurialship) enable the Navy enterprise to make rapid capability improvements through software updates while maintaining a continuous Authority to Operate (ATO) on a common digital warfighting platform.

ATRT technologies provide essential development and operational analysis capabilities to streamline testing and certification for software for both single systems/units and systems of systems capabilities to reduce development time for new capabilities from years to weeks. Leveraging cloud and virtualization technologies within a force-level system of systems interoperability test bed, ATRT enables agile software updates to afloat and airborne edge infrastructures with automated near real-time analysis of interoperability improvements and performance virtually.

ATRT technologies support rapid development and assessment of warfighting applications, analytics, Artificial Intelligence / Machine Learning (AI/ML) aids, and other applications to deliver warfighting capability with first pass success in an agile software development environment and business model. ATRT will also be leveraged to support refactoring and integration of legacy code and systems across the Naval warfighting portfolio to achieve an open integration and interoperability environment supported by related efforts that include Warfare (PE 0604027N), Advanced Combat Systems Tech (PE 0603382N), Intelligence Mission Data (PE 0307577N), and Modeling & Simulation Support (PE 0308601N) to support Project Overmatch and warfighting digital transformation efforts.

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy	Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603597N *I Automated Test & Analysis*

B. Program Change Summary ($ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	42.653	4.797	9.729	-	9.729
Current President's Budget	41.412	34.766	7.805	-	7.805
Total Adjustments	-1.241	29.969	-1.924	-	-1.924
• Congressional General Reductions	-	-0.031			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	30.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.241	0.000			
• Program Adjustments	0.000	0.000	-1.729	-	-1.729
• Rate/Misc Adjustments	0.000	0.000	-0.195	-	-0.195

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2020	FY 2021
Project: 9999: *Congressional Adds*		
Congressional Add: *Program Increase*	0.000	30.000
Congressional Add: *ONR CTE*	33.787	0.000
Congressional Add Subtotals for Project: 9999	33.787	30.000
Congressional Add Totals for all Projects	33.787	30.000

Change Summary Explanation

FINANCIAL: Navy has reduced the previously programmed FY 2022 increase of 4.963M to 3.039M, a 1.924M decrease, to account for support for Naval test and evaluation ship and air research and development priorities along with various cost rate adjustments. The overall program base funding request is increasing from FY 2021 to FY 2022 by $3.039M representing the Navy's ongoing commitment to further advancing these technologies and industry partnerships in support of Project Overmatch and digital warfighting engineering transformation objectives.

TECHNICAL: Mission Description, Budget Item Justifications and accomplishments/program plan descriptions updated to better show synchronization of Project 9B88 activities in support of Project Overmatch and digital warfighting transformation objectives.

SCHEDULE: Activities and milestones clarified to better show synchronization of Project 9B88 activities and deliverables in support of Project Overmatch and digital warfighting transformation objectives.

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy	Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603597N *I Automated Test & Analysis*

Major Milestones - Project 9B88:
The overall schedule for project 9B88 is linked to the Project Overmatch schedule which is held at a higher classification. The project anticipates a major milestone as a Live, Virtual, Constructive (LVC) Test in Q1 FY 2022 for the Increment 1 Minimum Viable Product.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603597N / *Automated Test & Analysis*	Project (Number/Name) 9999 / *Congressional Adds*	

COST ($ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
9999: *Congressional Adds*	45.348	33.787	30.000	0.000	-	0.000	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Starting in FY 2016 and continuing through FY 2022, the Navy implemented an enterprise approach to Automated Test and Analysis (ATA). ATA expands the automated test methods currently in use (Automated Test and Re-Test (ATRT)), adds new methods of testing and use of automated test technologies, and standardizes automated test practices, methods and tools. Examples include but are not limited to improvements to Link-16 Non-C2 data collection, essential Mission Planning, Service Oriented Architecture Framework, AEGIS Enterprise Solution Enhancements, Strike Force Interoperability testing and Control System Restoration and Validation.

Project funding supports the development of enterprise level strategies and activities to apply ATA technologies to software-intensive acquisition programs. Project objectives include support for the Chief of Naval Operations' (CNO) vision outlined in the CNO's Operational Plan (OPLAN) through continued development and commercialization / scaling of Automated Test and Re-Test (ATRT) Small Business Innovation Research (SBIR) technologies across the Navy enterprise. These SBIR derived technologies (leveraging small business innovation and entreprenurialship) enable the Navy enterprise to make rapid capability improvements through software updates while maintaining a continuous Authority to Operate (ATO) on a common digital warfighting platform.

ATRT technologies provide essential development and operational analysis capabilities to streamline testing and certification for software for both single systems/units and systems of systems capabilities to reduce development time for new capabilities from years to weeks. Leveraging cloud and virtualization technologies within a force-level system of systems interoperability test bed, ATRT enables agile software updates to afloat and airborne edge infrastructures with automated near real-time analysis of interoperability improvements and performance virtually.

ATRT technologies support rapid development and assessment of warfighting applications, analytics, Artificial Intelligence / Machine Learning (AI/ML) aids, and other applications to deliver warfighting capability with first pass success in an agile software development environment and business model. ATRT will also be leveraged to support refactoring and integration of legacy code and systems across the Naval warfighting portfolio to achieve an open integration and interoperability environment supported by related efforts that include Warfare (PE 0604027N), Advanced Combat Systems Tech (PE 0603382N), Intelligence Mission Data (PE 0307577N), and Modeling & Simulation Support (PE 0308601N) to support Project Overmatch and warfighting digital transformation efforts.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021
Congressional Add: Program Increase	0.000	30.000
FY 2020 Accomplishments: N/A		
FY 2021 Plans: - Continue to develop and utilize ATRT scaling to connect, bring visibility, learn and accelerate capability deliveries.		

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9999 / *Congressional Adds*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2020	FY 2021
- Continue to scale the ATRT enterprise capabilities that support Cloud Development Environments (DevSecOps software factories, environments, and tools) - Continue the enhancement of ATRT tools supporting DevSecOps CD/CI in support of priority all domain mission thread(s). - Continue the scaling and expansion of ATRT to support cross-domain mission area test and analysis. - Continue to develop ATRT technologies to support Battle Management Aids (BMAs) and Tactical Decision Aids (TDA), including AI/ML tools, leveraging scaling on the Navy's data pipeline for AI/ML and digital warfighting platform, and inclusion of open cloud environments for third party applications."		
Congressional Add: ONR CTE ***FY 2020 Accomplishments:*** N/A ***FY 2021 Plans:*** Continue to scale and mature Cloud to Edge capability with an expanded Automated Test and Re-Test (ATRT) Infrastructure.	33.787	0.000
Congressional Adds Subtotals	33.787	30.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• RDTEN/0307577N: *Intelligence Mission Data (IMD)*	0.000	0.000	0.907	-	0.907	-	-	-	-	-	-
• RDTEN/0604027N: *Digital Warfare*	35.551	35.480	46.769	-	46.769	-	-	-	-	-	-
• RDTEN/0603382N/0324: *Adv Combat System Technology*	1.728	1.299	1.566	-	1.566	-	-	-	-	-	-
• RDTEN/0308601N: *Modeling & Simulation Support*	11.672	8.683	9.772	-	9.772	-	-	-	-	-	-
• OMN/4B3N: *Acquisition, Logistics, and Oversight*	1.512	5.316	6.342	-	6.342	-	-	-	-	-	-

Remarks

This effort synergizes with and leverages / supports other funded efforts including Intelligence Mission Data (IMD) (RDTEN/PE 0307577N), Digital Warfare (RDTEN/PE 0604027N), Advanced Combat Systems Tech (RDTEN/ PE 0603382N/Proj 0324), and Modeling & Simulation Support (RDTEN/PE 0308601N, OMN/4B3N) to support Project Overmatch and warfighting digital transformation efforts.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9999 / *Congressional Adds*

D. Acquisition Strategy

This is a non ACAT program. The ATA project enables automated test tool projects from all qualified sources that enable significantly reduced time to complete critical testing, increase productivity, system robustness, improve and speed test analysis, and identify commonalities for reuse in transformational automated testing for Naval acquisition programs. This project leverages small business entreprenurialship and innovation, and subsequent scaling of those capabilities to the Navy enterprise in partnership with the Defense Industrial Base, government laboratories / capabilities, and academia. Automated Test/Re-Test (ATRT) technologies enable significant reductions in the time to complete critical testing, and produce objective quality evidence in support of validation, verification and certification of engineering artifacts, and will provide a test apparatus within Naval DevSecOps software factories that ensure applications support development of warfighting capabilities that meet test driven development and standards before deployment leveraging Continuous Integration / Continuous Development software pipelines and scaling. These efforts leveraging ATRT technologies, and ATRT-powered analytics on the edge will enable priority mission threads and Warfare models in order to deliver capability across force level kill chains.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603597N / *Automated Test & Analysis*	Project (Number/Name) 9999 / *Congressional Adds*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Automated Test & Analysis	C/CPFF	Innovative Defense Technologies (IDT) : Ballston, VA	16.082	29.791	May 2020	14.500	Jul 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	WR	NIWC Pacific : San Diego, CA	4.383	0.000		0.180	May 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	WR	Marine Corp : Not Specified	0.450	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	WR	NAVAIR : Lakehurst NJ	2.362	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	Various	Various NSWCs : Various	3.328	1.164	Jun 2020	3.200	May 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	C/FFP	AFLCMC/AZS : Hanscomb AFB	0.478	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	C/FFP	AFIT : Wright- : AFB, OH	0.203	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	C/CPFF	NAVSEA HQ : Washington, DC	4.265	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	TBD	ONR : Arlignton, VA	13.642	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	WR	ASN/RDA/ONR : Arlington, VA	0.000	0.000		5.000	Jul 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	C/FFP	NUWC Newport : Newport, RI	0.000	0.765	May 2020	0.293	May 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	C/FFP	Solute : San Diego, CA	0.000	0.200	Aug 2020	1.000	Jul 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	C/CPFF	JHU APL : Washington, DC	0.000	0.500	Aug 2020	0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	C/BA	NAWC AD : Patuxent River, MD	0.000	0.850	Jun 2020	0.713	May 2021	0.000		-		0.000	-	-	-
		Subtotal	45.193	33.270		24.886		0.000		-		0.000	-	-	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603597N / *Automated Test & Analysis*	Project (Number/Name) 9999 / *Congressional Adds*	

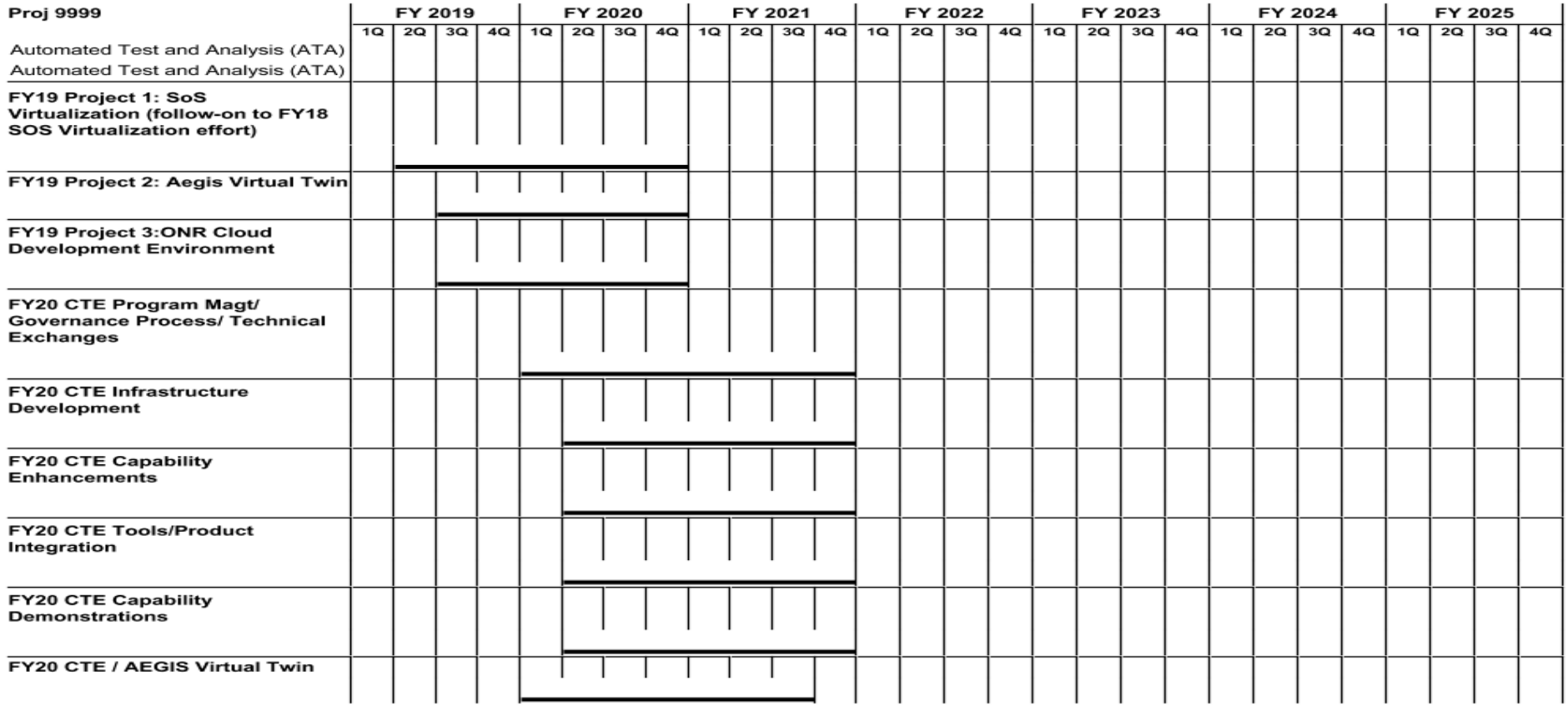
Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Automated Test & Analysis	C/CPFF	DELTA Resources, Inc. : Washington, DC	0.155	0.000		5.114	Aug 2021	0.000		-		0.000	-	-	-
Automated Test & Analysis	C/CPFF	WFC - various : Various	0.000	0.300	Aug 2020	0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	C/CPFF	Strategic Insight : Washington, DC	0.000	0.217	Aug 2020	0.000		0.000		-		0.000	-	-	-
		Subtotal	0.155	0.517		5.114		0.000		-		0.000	-	-	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	45.348	33.787		30.000		0.000		-		0.000	-	-	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9999 / *Congressional Adds*



2021PB - 0603597N - 9999

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9999 / *Congressional Adds*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9999				
FY19 Project 1: SoS Virtualization (follow-on to FY18 SOS Virtualization effort):	1	2020	4	2020
FY19 Project 2: Aegis Virtual Twin:	1	2020	4	2020
FY19 Project 3:ONR Cloud Development Environment:	1	2020	4	2020
FY20 CTE Program Magt/ Governance Process/ Technical Exchanges:	1	2020	4	2021
FY20 CTE Infrastructure Development:	2	2020	4	2021
FY20 CTE Capability Enhancements:	2	2020	4	2021
FY20 CTE Tools/Product Integration:	2	2020	4	2021
FY20 CTE Capability Demonstrations:	2	2020	4	2021
FY20 CTE / AEGIS Virtual Twin:	1	2020	3	2021
FY21 SoS Demonstrations:	3	2021	1	2022
FY21 ATRT Software Build 1.3:	3	2021	1	2022

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy									Date: May 2021			
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603597N / *Automated Test & Analysis*				Project (Number/Name) 9B88 / *Automated Test and Analysis*			
COST ($ in Millions)	**Prior Years**	**FY 2020**	**FY 2021**	**FY 2022 Base**	**FY 2022 OCO**	**FY 2022 Total**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Cost To Complete**	**Total Cost**
9B88: *Automated Test and Analysis*	52.047	7.625	4.766	7.805	-	7.805	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Starting in FY 2016 and continuing through FY 2022, the Navy implemented an enterprise approach to Automated Test and Analysis (ATA). ATA expands the automated test methods currently in use (Automated Test and Re-Test (ATRT)), adds new methods of testing and use of automated test technologies, and standardizes automated test practices, methods and tools. Examples include but are not limited to improvements to Link-16 Non-C2 data collection, essential Mission Planning, Service Oriented Architecture Framework, AEGIS Enterprise Solution Enhancements, Strike Force Interoperability testing and Control System Restoration and Validation.

Project funding supports the development of enterprise level strategies and activities to apply ATA technologies to software-intensive acquisition programs. Project objectives include support for the Chief of Naval Operations' (CNO) vision outlined in the CNO's Operational Plan (OPLAN) through continued development and commercialization / scaling of Automated Test and Re-Test (ATRT) Small Business Innovation Research (SBIR) technologies across the Navy enterprise. These SBIR derived technologies (leveraging small business innovation and entreprenurialship) enable the Navy enterprise to make rapid capability improvements through software updates while maintaining a continuous Authority to Operate (ATO) on a common digital warfighting platform.

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2020**	**FY 2021**	**FY 2022 Base**	**FY 2022 OCO**	**FY 2022 Total**
Title: Automated Test and Analysis	7.625	4.766	7.805	0.000	7.805
Articles:	-	-	-	-	-
FY 2021 Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9B88 / *Automated Test and Analysis*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
- Expand and incorporate ATRT into DWP Software to support Fleet demonstrations. The capabilities supported include initial passive electronic warfare tools, MFoS integration with enhanced Command and Control (C2)/ Battle Management Aid (BMA) capabilities in support of priority mission thread(s). - Support migration and update of applications into the cloud and demonstrate real time delivery to the edge including Communications as a Service (CaaS) - Develop the Cloud Development Environment (DevSecOps/Software Factory) to support incremental and rapid DWP software development with a continuous ATO. - Develop ATRT Analytics on the Edge test and certification feedback loop to gather engineering test data to build out SoS test models and validation libraries - Develop DWP test sets to be delivered to land and sea-based sites to record live test data in support of DWP development and deployment models tied to test/certification products - Begin the scaling and expansion of ATRT to support Submarine Combat System improvements, Unmanned and autonomy, Ship Future Integrated Combat System, the future Information Warfare Platform (IWP), and development of future MOC tools in support of various mission areas.					
FY 2022 Base Plans: - Continue to develop and utilize ATRT scaling to connect, bring visibility, learn and accelerate capability deliveries. - Continue to scale the ATRT enterprise capabilities that support Cloud Development Environments (DevSecOps software factories, environments, and tools) - Continue the enhancement of ATRT tools supporting DevSecOps CD/CI in support of priority all domain mission thread(s). - Continue the scaling and expansion of ATRT to support cross-domain mission area test and analysis. - Continue to develop ATRT technologies to support Battle Management Aids (BMAs) and Tactical Decision Aids (TDA), including AI/ML tools, leveraging scaling on the Navy's data pipeline for AI/ML and digital warfighting platform, and inclusion of open cloud environments for third party applications.					
FY 2022 OCO Plans: N/A					
FY 2021 to FY 2022 Increase/Decrease Statement: The increase of $3.039M in program resources from FY 2021 to FY 2022 is required to further enable continued maturing, scaling, and application of Automated Test and Re-Test (ATRT) technologies. FY 2021 resources efficiently build on FY 2020 efforts to affordably scale and expand operational capability and infrastructure in FY 2021 and include the following areas:					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9B88 / *Automated Test and Analysis*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
- Continue to scale the ATRT enterprise in support of Cloud Development Environment (DevSecOps) software factories - Continue development of ATRT to support Battle Management Aids (BMAs), Mission Planning Aids, Tactical Decision Aids (TDA), and AI/ML applications/tools - Continue scaling of ATRT support for the Navy's data pipeline for AI/ML development, including an open releasable instantiation cloud environment for development of third-party applications					
Accomplishments/Planned Programs Subtotals	7.625	4.766	7.805	0.000	7.805

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• RDTEN/0307577N: *Intelligence Mission Data (IMD)*	0.000	0.000	0.907	-	0.907	-	-	-	-	-	-
• RDTEN/0604027N: *Digital Warfare*	35.551	35.480	46.769	-	46.769	-	-	-	-	-	-
• RDTEN/0603382N/0324: *Adv Combat System Technology*	1.728	1.299	1.566	-	1.566	-	-	-	-	-	-
• RDTEN/0308601N: *Modeling & Simulation Support*	11.672	8.683	9.772	-	9.772	-	-	-	-	-	-
• OMN/4B3N: *Acquisition, Logistics, and Oversight*	1.512	5.316	6.342	-	6.342	-	-	-	-	-	-

Remarks

This effort synergizes with and leverages / supports other funded efforts including Intelligence Mission Data (IMD) (RDTEN/PE 0307577N), Digital Warfare (RDTEN/PE 0604027N), Advanced Combat Systems Tech (RDTEN/ PE 0603382N/Proj 0324), and Modeling & Simulation Support (RDTEN/PE 0308601N, OMN/4B3N) to support Project Overmatch and warfighting digital transformation efforts.

D. Acquisition Strategy

This is a non-ACAT program. Usage of SBIR Phase III contracts is a cornerstone of the Automated Test & Analysis, Project 9B88 acquisition strategy. The ATA program solicits automated test tool projects from all qualified sources that show the potential to significantly reduce the time to complete critical testing, increase productivity or system robustness, improve and speed test analysis, and identify commonalities for reuse in testing of Naval acquisition programs. All valid submitted projects will be evaluated for potential funding. Projects selected will typically be funded for one year, in which time they must demonstrate their ability to significantly reduce the time to

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9B88 / *Automated Test and Analysis*

complete critical testing, improve and speed test analysis, or find and correct critical design flaws in testing of Naval acquisition programs. Successful funded projects and artifacts will be advertised and made available across the Naval enterprise for acquisition program consideration, funding, and use. These include engagements throughout the Defense Industrial Base, government laboratories, and academia, to develop and deliver Automated Test and Re-Test suite of technologies.

This effort synergizes with and leverages / supports other funded efforts including Digital Warfare (PE 0604027N), Automated Combat Systems Tech (PE 0603382N), Modeling & Simulation Support (PE 0308601N), and Intelligence Mission Data (IMD) (PE 0307577N) to support Project Overmatch and warfighting digital transformation efforts.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603597N / *Automated Test & Analysis*	Project (Number/Name) 9B88 / *Automated Test and Analysis*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Automated Test & Analysis	C/CPFF	Innovative Defense Technologies (IDT) : Ballston, VA	36.069	0.000		2.253	Dec 2020	3.035	Dec 2021	-		3.035	-	-	-
Automated Test & Analysis	WR	NIWC Pacific : San Diego, CA	8.927	1.340	Feb 2020	1.400	Nov 2020	1.770	Nov 2021	-		1.770	-	-	-
Automated Test & Analysis	WR	Marine Corp : Not Specified	0.833	0.000		0.000		0.000		-		0.000	-	-	-
Automated Test & Analysis	WR	NAVAIR : Lakehurst NJ	2.669	0.940	Feb 2020	0.350	Nov 2020	0.500	Nov 2021	-		0.500	-	-	-
Automated Test & Analysis	Various	Various NSWCs : Various NSWCs	1.091	2.808	Jan 2020	0.230	Nov 2020	0.750	Nov 2021	-		0.750	-	-	-
Automated Test & Analysis	C/CPFF	AFIT : Wright-Patterson AFB, OH	0.543	0.000		0.040	Nov 2020	0.000		-		0.000	-	-	-
Automated Test & Analysis	Various	Various Non-NSWCs : Various Non-NSWCs	0.000	2.260	Jun 2020	0.000		1.200	Apr 2022	-		1.200	-	-	-
		Subtotal	50.132	7.348		4.273		7.255		-		7.255	-	-	N/A

Remarks

The increase of (+2.982M) from FY 2021 to FY 2022 is required to further scale, mature, and apply ATRT technologies at a Naval enterprise level, including cloud considerations and AI/ML and application scaling and support.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Automated Test & Analysis	C/CPFF	DELTA Resources, Inc. : Washington, DC	1.915	0.205	May 2020	0.243	Jan 2021	0.300	Jan 2022	-		0.300	-	-	-
Automated Test & Analysis	C/CPFF	Tech-Marine Business : Washington, DC	0.000	0.072	Jul 2020	0.100	Nov 2020	0.100	Nov 2021	-		0.100	-	-	-
		Subtotal	1.915	0.277		0.343		0.400		-		0.400	-	-	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603597N / *Automated Test & Analysis*	Project (Number/Name) 9B88 / *Automated Test and Analysis*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

The increase of ($57K) from FY 2021 to FY2022 is required to further scale, mature, and apply ATRT technologies at a Naval enterprise level, including cloud considerations and AI/ML and application scaling and support.

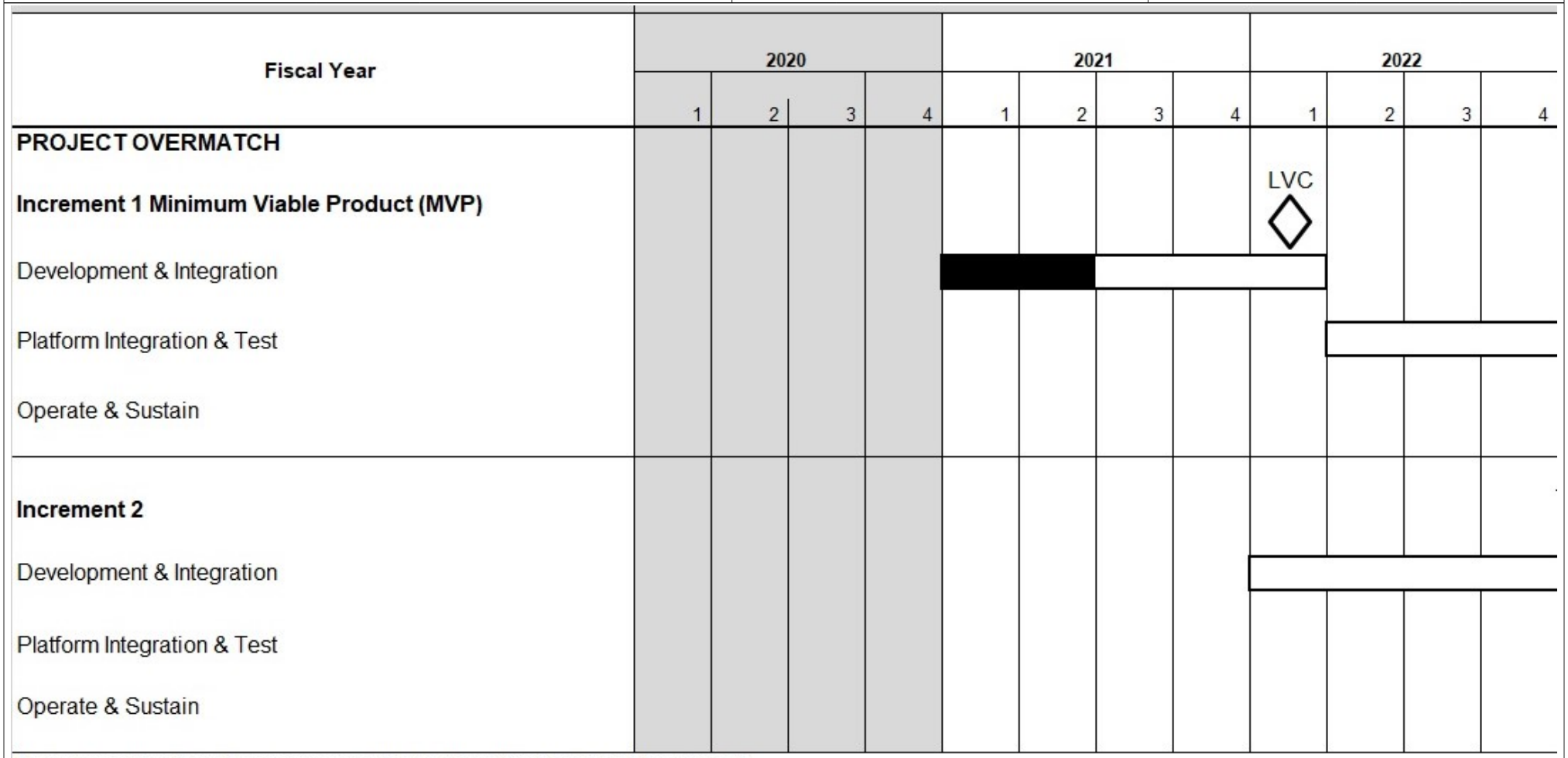
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Digital Transformation and Integration Support	Various	Various : Various	0.000	0.000		0.150	Nov 2020	0.150	Nov 2021	-		0.150	-	-	-
		Subtotal	0.000	0.000		0.150		0.150		-		0.150	-	-	N/A

	Prior Years	FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	52.047	7.625		4.766		7.805		-		7.805	-	-	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9B88 / *Automated Test and Analysis*



Note: Specifics have been removed due to Classified nature of the Project

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603597N / *Automated Test & Analysis*	**Project (Number/Name)** 9B88 / *Automated Test and Analysis*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 9B88				
Increment 1 Minimum Viable Product: Development & Integration	1	2021	4	2022
Increment 1 Minimum Viable Product: Development and Integration: Live, Virtual, and Constructive Test Event	1	2022	1	2022
Increment 1 Minimum Viable Product: Platform Integration & Test	1	2022	4	2022
Increment 2:	1	2022	4	2022