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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2020 Navy	<b>Date:</b> March 2019
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<b>Appropriation/Budget Activity</b> 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U)Automated Test and Analysis							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	36.685	24.145	37.931	7.653	-	7.653	7.775	7.947	8.112	8.274	Continuing	Continuing
9999: Congressional Adds	0.000	16.406	30.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	46.406
9B88: Automated Test and Analysis	36.685	7.739	7.931	7.653	-	7.653	7.775	7.947	8.112	8.274	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

In FY 2016, OPNAV N94 took on the challenge to implement a Naval enterprise approach to Automated Test and Analysis (ATA). ATA expands the automated test methods currently in use such as 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 from FY16 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. In addition, funding supports the development of enterprise level strategies to apply ATA technology to the software-intensive acquisition programs. The FY 2015 ATRT project was funded on Program Element 0603597N: "Automated Test and Re-Test". Starting in FY16 and through the out-years, the project is renamed "Automated Test and Analysis" on Program Element 0603597N.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
Previous President's Budget	8.052	7.931	7.926	-	7.926
Current President's Budget	24.145	37.931	7.653	-	7.653
Total Adjustments	16.093	30.000	-0.273	-	-0.273
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	30.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.907	0.000			
• Program Adjustments	0.000	0.000	-0.204	-	-0.204
• Rate/Misc Adjustments	0.000	0.000	-0.069	-	-0.069
• Congressional Add Adjustments	17.000	-	-	-	-

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

**Project:** 9999: Congressional Adds

Congressional Add: Program Increase

<b>FY 2018</b>	<b>FY 2019</b>
16.406	0.000

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2020 Navy		<b>Date:</b> March 2019	
<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 Program Element (Number/Name)</b> PE 0603597N I (U) <i>Automated Test and Analysis</i>	
<b>Congressional Add Details (\$ in Millions, and Includes General Reductions)</b>		<b>FY 2018</b>	<b>FY 2019</b>
Congressional Add: <i>Program Increase (ATA)</i>		0.000	30.000
Congressional Add Subtotals for Project: 9999		16.406	30.000
Congressional Add Totals for all Projects		16.406	30.000
<b>Change Summary Explanation</b> FY19: Program increase of \$30 million due to congressional add. FY20: Contract Services Reform reduction of \$69,000. Reduction of \$204,000 to fund NAVSEA Headquarters FTE in OMN.			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis				Project (Number/Name) 9999 / Congressional Adds			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
9999: Congressional Adds	0.000	16.406	30.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	46.406
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
In response to CNO initiatives, NAVSEA 05H, under the sponsorship of OPNAV N96, in 2008 began developing tools and executing projects for NAVSEA programs in support of "Automated Test and Re-Test". In 2014, CNO/ASN RDA implemented an "Enterprise" approach to automated testing to foster increased automated test tool use and collaboration between Navy SYSCOMs. PE 0603582N Project 9B88, "Automated Test and Re-Test," in OPNAV N96 was modified and moved in PB2016 to "Automated Test and Analysis" (ATA) under PE 0603597N in OPNAV N94. ATA expands the automated test methods currently in use such as 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. In addition, funding supports the development of enterprise level strategies to apply ATA technology to Navy software-intensive acquisition programs.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2018	FY 2019			
Congressional Add: Program Increase								16.406	0.000			
FY 2018 Accomplishments: With a Program Increase within Project Unit (PU) C311 of \$16.4M in FY 2018, ATA was able to provide support to an additional thirteen projects												
o Collaborative Software Armory(CSA) Phase 1												
o HAVEN/SABER												
o SoS Virtualization												
o 32 to 64 Bit Code Conversion Automated Testing												
o Automated Analysis for BL5 Upgrade												
o Automated Requirements Verification Reporting for Common Control System (CCS)												
o Test Site Validator												
o Intermediary Application (iApp) Automated Testing												
o Automated End-to-End Testing for Aircraft Support Equipment												
o Tactical Service Oriented Architecture Performance Testing												
o Test Execution Server												
o ATRT Operational Readiness and Test System (ORTS) Improvement & Modernization Plan												
o Enterprise Framework												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Navy		<b>Date:</b> March 2019																																										
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U)Automated Test and Analysis	<b>Project (Number/Name)</b> 9999 / Congressional Adds																																										
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<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A <b>Remarks</b>  <b>D. Acquisition Strategy</b> The ATA program solicits automated test tool proposals 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 proposals will be evaluated by an Executive Steering Group (ESG) composed of Senior Executive level representatives from NAVSEA, NAVAIR, SPAWAR and US Marine Corps Systems Commands. Proposals selected by the ESG will typically be funded for one year, in which time they must demonstrate their ability to significantly reduce the time to complete critical testing, improve and speed test analysis, or find and correct critical design flaws in testing of Naval acquisition programs. Successful funded proposals and artifacts will be advertised and made available across the Naval enterprise for acquisition program consideration, funding, and use.																																												
<b>E. Performance Metrics</b> FY 2018 Program Management was directed to assess ATA projects for: <ul style="list-style-type: none"> <li>o Technical improvements/quality of the end-product,</li> <li>o Use of automation to optimize resource allocation to increase productivity/robustness and to execute/analyze/report a test</li> </ul>																																												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Navy		<b>Date:</b> March 2019
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U) <i>Automated Test and Analysis</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
<ul style="list-style-type: none"> <li>o Use of automation to optimize resource allocation to: <ul style="list-style-type: none"> <li>-Increase productivity/robustness</li> <li>- Plan a test</li> <li>- Execute a test</li> <li>- Analyze a test</li> <li>- Report a test,</li> </ul> </li> <li>o Cost avoidance for the program/project,</li> <li>o Length of time to see the return on investment.</li> </ul> <p>Progress towards meeting these objectives of ATA efforts is being monitored via the following:</p> <ul style="list-style-type: none"> <li>o Monthly Project Manager technical reports, expenditures and risk assessments</li> <li>- Quarterly Program Reviews</li> <li>o Bi-Annual ATA Executive Steering Group Meetings</li> </ul>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis				Project (Number/Name) 9999 / Congressional Adds					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Automated Test & Analysis	C/CPFF	Innovative Defense Technologies (IDT) : Ballston, VA	0.000	8.797	Sep 2018	17.174	Apr 2019	0.000		-		0.000	0.000	25.971	-
Automated Test & Analysis	WR	SPAWAR Pacific : San Diego, CA	0.000	4.383	Jul 2018	0.000		0.000		-		0.000	0.000	4.383	-
Automated Test & Analysis	WR	Marine Corp : Not Specified	0.000	0.450	Jul 2018	0.000		0.000		-		0.000	0.000	0.450	-
Automated Test & Analysis	WR	NAVAIR : Lakehurst NJ	0.000	2.095	Jul 2018	0.000		0.000		-		0.000	0.000	2.095	-
Automated Test & Analysis	WR	Various NSWCs : NSWC DD	0.000	0.000	Aug 2018	12.530	Apr 2019	0.000		-		0.000	0.000	12.530	-
Automated Test & Analysis	C/FFP	AFLCMC/AZS : Hanscomb AFB	0.000	0.478	Sep 2018	0.000		0.000		-		0.000	0.000	0.478	-
Automated Test & Analysis	C/FFP	AFIT : Wright- : AFB, OH	0.000	0.203	Sep 2018	0.000		0.000		-		0.000	0.000	0.203	-
Subtotal			0.000	16.406		29.704		0.000		-		0.000	0.000	46.110	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Automated Test & Analysis	C/CPFF	DELTA Resources, Inc. : Washington, DC	0.000	0.000		0.296	Apr 2019	0.000		-		0.000	0.000	0.296	-
Subtotal			0.000	0.000		0.296		0.000		-		0.000	0.000	0.296	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	16.406		30.000		0.000		-		0.000	0.000	46.406	N/A
Remarks															

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Exhibit R-4, RDT&amp;E Schedule Profile: PB 2020 Navy

Date: March 2019

## Appropriation/Budget Activity

1319 / 4

## R-1 Program Element (Number/Name)

PE 0603597N / (U)Automated Test and Analysis

## Project (Number/Name)

9999 / Congressional Adds

FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
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 9999**

Automated Test and Analysis (ATA): FY18  
Project 1: Collaborative Software Armory  
(CSA) Phase I

Automated Test and Analysis (ATA): FY18  
Project 2: HAVEN/SABER

Automated Test and Analysis (ATA):  
FY18 Project 3: System of Systems (SoS)  
Virtualization

Automated Test and Analysis (ATA): FY18  
Project 4: 32 to 64 Bit Code Conversion  
Automated Testing

Automated Test and Analysis (ATA): FY18  
Project 5: Automated Analysis for BL5  
Upgrade

Automated Test and Analysis (ATA):  
FY18 Project 6: Automated Requirements  
Verification Reporting for Common Control  
System (CCS)

Automated Test and Analysis (ATA): FY18  
Project 7: Test Site Validator

Automated Test and Analysis (ATA): FY18  
Project 8: Intermediary Application (iApp)  
Automated Testing

Automated Test and Analysis (ATA): FY18  
Project 9: Automated End-to-End Testing for  
Aircraft Support Equipment

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy																Date: March 2019																					
Appropriation/Budget Activity										R-1 Program Element (Number/Name)								Project (Number/Name)																			
1319 / 4										PE 0603597N / (U)Automated Test and Analysis								9999 / Congressional Adds																			
										FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Automated Test and Analysis (ATA): FY18 Project 10: Tactical Service Oriented Architecture Performance Testing																																					
Automated Test and Analysis (ATA): FY18 Project 11: Test Execution Server																																					
Automated Test and Analysis (ATA): FY18 Project 12: ATRT Operational Readiness and Test System (ORTS) Improvement & Modernization Plan																																					
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Automated Test and Analysis (ATA): FY19 Project 4:Next Generation Network integration and hardware																																					
Automated Test and Analysis (ATA): FY19 Project 5: Integrated software, test and security environment for Virtual Twins																																					



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Appropriation/Budget Activity 1319 / 4										R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis										Project (Number/Name) 9999 / Congressional Adds								
	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Automated Test and Analysis (ATA): FY19 Project 6:Developmental software for Distributed Combat System (DCS)																												
Automated Test and Analysis (ATA): FY19 Project 7:Combat Management System (CMS) Re-architecture																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2020 Navy			<b>Date:</b> March 2019
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U)Automated Test and Analysis	<b>Project (Number/Name)</b> 9999 / Congressional Adds	

**Schedule Details**

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
<b>Proj 9999</b>				
Automated Test and Analysis (ATA): FY18 Project 1: Collaborative Software Armory (CSA) Phase I	3	2018	3	2019
Automated Test and Analysis (ATA): FY18 Project 2: HAVEN/SABER	2	2019	2	2020
Automated Test and Analysis (ATA): FY18 Project 3: System of Systems (SoS) Virtualization	1	2019	1	2020
Automated Test and Analysis (ATA): FY18 Project 4: 32 to 64 Bit Code Conversion Automated Testing	2	2019	2	2020
Automated Test and Analysis (ATA): FY18 Project 5: Automated Analysis for BL5 Upgrade	2	2019	2	2020
Automated Test and Analysis (ATA): FY18 Project 6: Automated Requirements Verification Reporting for Common Control System (CCS)	2	2019	2	2020
Automated Test and Analysis (ATA): FY18 Project 7: Test Site Validator	4	2018	4	2019
Automated Test and Analysis (ATA): FY18 Project 8: Intermediary Application (iApp) Automated Testing	3	2018	4	2019
Automated Test and Analysis (ATA): FY18 Project 9: Automated End-to-End Testing for Aircraft Support Equipment	2	2019	2	2020
Automated Test and Analysis (ATA): FY18 Project 10: Tactical Service Oriented Architecture Performance Testing	3	2018	3	2019
Automated Test and Analysis (ATA): FY18 Project 11: Test Execution Server	3	2018	3	2019
Automated Test and Analysis (ATA): FY18 Project 12: ATRT Operational Readiness and Test System (ORTS) Improvement & Modernization Plan	2	2019	2	2020
Automated Test and Analysis (ATA): FY18 Project 13: Enterprise Framework	1	2019	4	2019
Automated Test and Analysis (ATA): FY18 Project 14: Scientific Test and Analysis Techniques Center of Excellence (STAT COE)	4	2018	4	2019

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019		
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		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Automated Test and Analysis (ATA): FY19 Project 1: SoS Virtualization (follow-on to FY18 SOS Virtualization effort)		2	2019	2	2020
Automated Test and Analysis (ATA): FY19 Project 2: Virtualization installed on Aegis platforms		2	2019	2	2020
Automated Test and Analysis (ATA): FY19 Project 3: Virtual Twins installed at the Surface and Air Integration laboratory		2	2019	2	2020
Automated Test and Analysis (ATA): FY19 Project 4:Next Generation Network integration and hardware		2	2019	2	2020
Automated Test and Analysis (ATA): FY19 Project 5: Integrated software, test and security environment for Virtual Twins		2	2019	2	2020
Automated Test and Analysis (ATA): FY19 Project 6:Developmental software for Distributed Combat System (DCS)		2	2019	2	2020
Automated Test and Analysis (ATA): FY19 Project 7:Combat Management System (CMS) Re-architecture		2	2019	2	2020

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Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

In FY 2016, OPNAV N94 took on the challenge to implement a Naval enterprise approach to Automated Test and Analysis (ATA). ATA expands the automated test methods currently in use such as 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 from FY16 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. In addition, funding supports the development of enterprise level strategies to apply ATA technology to the software-intensive acquisition programs. The FY 2015 ATRT project was funded on Program Element 0603597N under Project Unit 9B88: "Automated Test and Re-Test". Starting in FY16 and through the out-years, the project is renamed "Automated Test and Analysis" on Program Element 0603597N under Project Unit 9B88.

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

	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
<b>Title:</b> Automated Test and Analysis	7.739	7.931	7.653	0.000	7.653
<b>Articles:</b>	-	-	-	-	-
<p><b>FY 2019 Plans:</b></p> <p>Each year, submitted ATA proposals are reviewed and selected based on their ability to best describe technical merit for nine criteria to include productivity, reusability, enhanced coverage, improved fidelity and reduction in Total Ownership Cost by the Executive Steering Group, which includes Senior Executive level representatives from Naval Sea, Naval Air, Space and Naval Warfare, and US Marine Corps Systems Commands.</p> <p>With a budget of \$7.9M, ATA was able to provide support to six projects in FY 2019:</p> <ul style="list-style-type: none"> <li>o SQQ-89 Automated Combat System of Systems(SoS)Integrated Test system(ACSIT)</li> <li>o Collaborative Software Armory (CSA) Phase II</li> <li>o Joint-Communications Engineering, Development, and Integration (JEDI) MUOS Automated Call System (JMACS)</li> <li>o Common Data Link</li> <li>o Combat Operations Center (COC) Testing Automation</li> <li>o ATA for Surface Electronic Warfare (EW)</li> </ul>					

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy			Date: March 2019			
Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis		Project (Number/Name) 9B88 / Automated Test and Analysis		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
<p>The ATA Enterprise Program Office will continue with another Naval enterprise-wide data call soliciting automated test tool proposals that will spring-board from some of these efforts and can significantly reduce the time to complete critical testing, increase productivity or system robustness, improve and speed test analysis, and identify commonalities for reuse in Navy acquisition programs for further study in FY 2019. These automated testing projects will reduce errors, increase capabilities and enhance reporting timelines while decreasing Total Ownership Costs for testing critical Navy program initiatives.</p> <p><b>FY 2020 Base Plans:</b> Continue to improve on the automated testing and analysis investments to date while also pursuing system virtualization projects similar to Aegis Virtual Twin. Reevaluate selected ATA FY 2019 proposals for improving technologies in FY 2020 and potential collaboration in development. FY 2020 plans will also build upon the results and lessons learned from the FY 2018 and FY 2019 selection process for improved ATA program planning, selection, execution and analysis with the ATA ESG.</p> <p>The Navy intends to continue improvements in the quality of end products, reducing the time to plan, evaluate, analyze and/or report testing requirements, identify cost avoidance and determine the reduction in total ownership costs for each ATA project. The Navy will also determine enterprise solutions that significantly reduce test and evaluation man-hours, positively impact fleet training, and improve test plans and procedures.</p> <p>The Navy will continue:</p> <ul style="list-style-type: none"><li>o Assessing undersea warfare capabilities or fleet modernization and future Navy testing competencies</li><li>o Evaluating best practices and research capabilities for platform network resiliency and system function validation</li><li>o Determining common elements through ATA analysis and reporting across multiple SYSCOMs and identifying synergies in development, implementation and training</li><li>o Augmenting both surface and air Mission Planning for requirements traceability.</li></ul> <p>Specific topics include but are not limited to:</p> <ul style="list-style-type: none"><li>o Automating Test Framework for Operations Centers or Service Oriented Architectures</li><li>o Continuing advanced Combat System development/enhancements (SSDS and AEGIS)</li><li>o Testing of shipboard navigation or mechanical systems and tactical data links analysis (Link-16)</li><li>o Integrating test and analyses among various Strike Force Interoperability platforms</li></ul>						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Navy			<b>Date:</b> March 2019		
<b>Appropriation/Budget Activity</b> 1319 / 4		<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U)Automated Test and Analysis		<b>Project (Number/Name)</b> 9B88 / Automated Test and Analysis	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>					
	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
o Implementing test planning/manager improvements					
<p>The Navy will conduct another Naval enterprise-wide data call soliciting automated test tool proposals that can significantly reduce the time to complete critical testing, improve and speed test analysis, and identify and correct critical design flaws in testing of Naval acquisition programs for further study in FY 2021.</p> <p><b>FY 2020 OCO Plans:</b> N/A</p> <p><b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> Decrease due to rate adjustments.</p>					
<b>Accomplishments/Planned Programs Subtotals</b>	7.739	7.931	7.653	0.000	7.653
<b>C. Other Program Funding Summary (\$ in Millions)</b>					
N/A					
<b>Remarks</b>					
<b>D. Acquisition Strategy</b>					
<p>The ATA program solicits automated test tool proposals 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 proposals will be evaluated by an Executive Steering Group (ESG) composed of Senior Executive level representatives from NAVSEA, NAVAIR, SPAWAR and US Marine Corps Systems Commands. Proposals selected by the ESG will be funded for one year, in which time they must demonstrate their ability to significantly reduce the time to complete critical testing, improve and speed test analysis, or find and correct critical design flaws in testing of Naval acquisition programs. Successful funded proposals and artifacts will be advertised and made available across the Naval enterprise for acquisition program consideration, funding, and use.</p>					
<b>E. Performance Metrics</b>					
<p>FY 2018 Program Management was directed to assess ATA projects for:</p> <ul style="list-style-type: none"> <li>o Technical improvements/quality of the end-product,</li> <li>o Use of automation to optimize resource allocation to increase productivity/robustness and to execute/analyze/report a test</li> <li>o Use of automation to optimize resource allocation to: <ul style="list-style-type: none"> <li>-Increase productivity/robustness</li> <li>- Plan a test</li> <li>- Execute a test</li> <li>- Analyze a test</li> </ul> </li> </ul>					

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis	Project (Number/Name) 9B88 / Automated Test and Analysis
<p>- Report a test, o Cost avoidance for the program/project, o Length of time to see the return on investment. Progress towards meeting these objectives of ATA efforts is being monitored via the following: o Monthly Project Manager technical reports, expenditures and risk assessments - Quarterly Program Reviews o Bi-Annual ATA Executive Steering Group Meetings</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis				Project (Number/Name) 9B88 / Automated Test and Analysis					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Automated Test & Analysis	C/CPFF	Innovative Defense Technologies (IDT) : Ballston, VA	27.103	4.886	Dec 2017	3.778	Jan 2019	4.760	Dec 2019	-		4.760	0.000	40.527	-
Automated Test & Analysis	WR	SPAWAR Pacific : San Diego, CA	4.321	1.432	Nov 2017	3.941	Jan 2019	1.417	Nov 2019	-		1.417	0.000	11.111	-
Automated Test & Analysis	WR	Marine Corp : Not Specified	0.833	0.000		0.000		0.000		-		0.000	0.000	0.833	-
Automated Test & Analysis	WR	NAVAIR : Lakehurst NJ	1.835	0.834	Nov 2017	0.000		0.824	Nov 2019	-		0.824	0.000	3.493	-
Automated Test & Analysis	WR	Various NSWCs : NSWC DD	0.750	0.095	Jun 2018	0.079	Dec 2018	0.094	Nov 2019	-		0.094	0.000	1.018	-
Automated Test & Analysis	C/CPFF	AFIT : Wright-Patterson AFB, OH	0.500	0.000		0.000		0.000		-		0.000	0.000	0.500	-
Subtotal			35.342	7.247		7.798		7.095		-		7.095	0.000	57.482	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Automated Test & Analysis	C/CPFF	DELTA Resources, Inc. : Washington, DC	1.343	0.492	Jan 2018	0.133	Jan 2019	0.558	Jan 2020	-		0.558	Continuing	Continuing	Continuing
Subtotal			1.343	0.492		0.133		0.558		-		0.558	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			36.685	7.739		7.931		7.653		-		7.653	Continuing	Continuing	N/A
Remarks															



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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2020 Navy			<b>Date:</b> March 2019		
<b>Appropriation/Budget Activity</b> 1319 / 4		<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U)Automated Test and Analysis			<b>Project (Number/Name)</b> 9B88 / Automated Test and Analysis

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
<b>Proj 9B88</b>																												
Automated Test and Analysis (ATA): FY18 Project 1:Automated System-of-Systems Operability Testing																												
Automated Test and Analysis (ATA): FY18 Project 2:Dev. and Integration of the Enterprise Air Surveillance Radar (EASR)																												
Automated Test and Analysis (ATA): FY18 Project 3: Test Automation Framework for the Distributed Common Ground System-Navy (DCGS-N)																												
Automated Test and Analysis (ATA): FY18 Project 4: Continuous Automated Services Testing for Joint Mission Planning System																												
Automated Test and Analysis (ATA): FY18 Project 5:Joint Tactical Common Operational Picture (COP) Workstation																												
Automated Test and Analysis (ATA): FY19 Project 1:SQQ-89 Automated Combat System of Systems(SoS)Integrated Test system(ACSIT)																												
Automated Test and Analysis (ATA): FY19 Project 2: Collaborative Software Armory (CSA) Phase II																												
Automated Test and Analysis (ATA): FY19 Project 3: Joint-Communications Engineering, Development, and Integration (JEDI) MUOS Automated Call System (JMACS)																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy																Date: March 2019																					
Appropriation/Budget Activity 1319 / 4										R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis								Project (Number/Name) 9B88 / Automated Test and Analysis																			
										FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
										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
Automated Test and Analysis (ATA): FY19 Project 4: Common Data Link																																					
Automated Test and Analysis (ATA): FY19 Project 5: ATA for Surface Electronic Warfare (EW)																																					
Automated Test and Analysis (ATA): Annual Startup Projects for ATA Implementation																																					
Automated Test and Analysis (ATA): FY20: Assessing undersea warfare capabilities or fleet modernization and future Navy testing competencies																																					
Automated Test and Analysis (ATA): FY20: Evaluating best practices and research capabilities for platform network resiliency and system function validation																																					
Automated Test and Analysis (ATA): FY20: Assess common architecture analysis and reporting across SYSCOMS and identify synergies in development, implementation and training																																					
Automated Test and Analysis (ATA): FY20: Augment both surface and air Mission Planning for requirements traceability																																					

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2020 Navy			<b>Date:</b> March 2019
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603597N / (U)Automated Test and Analysis	<b>Project (Number/Name)</b> 9B88 / Automated Test and Analysis	

**Schedule Details**

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 9B88</b>				
Automated Test and Analysis (ATA): FY18 Project 1:Automated System-of-Systems Operability Testing	1	2018	2	2019
Automated Test and Analysis (ATA): FY18 Project 2:Dev. and Integration of the Enterprise Air Surveillance Radar (EASR)	1	2018	2	2019
Automated Test and Analysis (ATA): FY18 Project 3: Test Automation Framework for the Distributed Common Ground System-Navy (DCGS-N)	1	2018	1	2019
Automated Test and Analysis (ATA): FY18 Project 4: Continuous Automated Services Testing for Joint Mission Planning System	2	2018	2	2019
Automated Test and Analysis (ATA): FY18 Project 5:Joint Tactical Common Operational Picture (COP) Workstation	1	2018	1	2019
Automated Test and Analysis (ATA): FY19 Project 1:SQQ-89 Automated Combat System of Systems(SoS)Integrated Test system(ACSIT)	1	2019	4	2020
Automated Test and Analysis (ATA): FY19 Project 2: Collaborative Software Armory (CSA) Phase II	1	2019	4	2020
Automated Test and Analysis (ATA): FY19 Project 3: Joint-Communications Engineering, Development, and Integration (JEDI) MUOS Automated Call System (JMACS)	1	2019	4	2020
Automated Test and Analysis (ATA): FY19 Project 4: Common Data Link	1	2019	4	2020
Automated Test and Analysis (ATA): FY19 Project 5: ATA for Surface Electronic Warfare (EW)	1	2019	4	2020
Automated Test and Analysis (ATA): Annual Startup Projects for ATA Implementation	1	2018	4	2024
Automated Test and Analysis (ATA): FY20: Assessing undersea warfare capabilities or fleet modernization and future Navy testing competencies	1	2020	4	2020

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019		
Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Analysis		Project (Number/Name) 9B88 / Automated Test and Analysis	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Automated Test and Analysis (ATA): FY20: Evaluating best practices and research capabilities for platform network resiliency and system function validation		1	2020	4	2020
Automated Test and Analysis (ATA): FY20: Assess common architecture analysis and reporting across SYSCOMS and identify synergies in development, implementation and training		1	2020	4	2020
Automated Test and Analysis (ATA): FY20: Augment both surface and air Mission Planning for requirements traceability		1	2020	4	2020