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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy										Date: February 2015		
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 (U)Automated Test and Re-Test (ATRT)							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	0.000	9.639	8.115	8.000	-	8.000	8.000	8.000	8.000	8.000	Continuing	Continuing
9B88: Automated Test and Re-Test	0.000	9.639	8.115	8.000	-	8.000	8.000	8.000	8.000	8.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

From FY2015 and prior, the Navy, through Automated Test and Re-Test (ATRT) is developing an automated test/analysis capability, which is applicable at phases within system development and integration which provides reproducible and quantitative evaluation of system performance with reduced levels of effort and schedule in order to support one of the Navy's priority initiatives of reduction of Total Ownership Cost (TOC). Funding will provide additional work towards ongoing testing and analysis efforts within the Combat Systems Integration, AEGIS Combat System Advanced Capability Build (ACB) 12, Antisubmarine Warfare Integrated Common Processor/Acoustic Rapid Commercial Off The Shelf (COTS) Insertion, the Littoral Combat Ship (LCS) Mission Module development and other major acquisition programs. In addition, funding will support the development of guidance to facilitate NAVSEA-affiliated programs' adoption of this TOC-reducing discipline and technology.

Starting in FY2016 and through the out-years, the project has been renamed Automated Test and Analysis (ATA). ATA will extend the use of automated test methods currently in use such as Automated Test and Re-Test, research new methods of testing and use of automated test technologies, and standardize test practices, methods and tools across the Naval Enterprise. In addition, funding will support the development of enterprise level strategies to apply ATA to the software-intensive acquisition programs, establish standards, specifications, and guidance, as well as use business case analysis to select future pilot projects and applications.

The ATRT project is funded on Program Element 0603597N under Project Unit 9B88: "Automated Test and Re-Test". Starting in FY16 and through the out-years, the project will be renamed "Automated Test and Analysis" on Program Element 0603597N under Project Unit 9B88 to be consistent with the program's enterprise approach to develop automated test tools.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	10.005	8.115	8.236	-	8.236
Current President's Budget	9.639	8.115	8.000	-	8.000
Total Adjustments	-0.366	-	-0.236	-	-0.236
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.366	-			
• Program Adjustments	-	-	-0.236	-	-0.236

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<u>Change Summary Explanation</u> The FY 2016 funding request was reduced by \$.236 million to account for the availability of prior years execution balances.		

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603597N / (U)Automated Test and Re-Test (ATRT)				Project (Number/Name) 9B88 / Automated Test and Re-Test			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
9B88: Automated Test and Re-Test	-	9.639	8.115	8.000	-	8.000	8.000	8.000	8.000	8.000	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

From FY2015 and prior, the Navy, through Automated Test and Re-Test (ATRT) is developing an automated test/analysis capability, which is applicable at phases within system development and integration which provides reproducible and quantitative evaluation of system performance with reduced levels of effort and schedule in order to support one of the Navy's priority initiatives of reduction of Total Ownership Cost (TOC). Funding will provide additional work towards ongoing testing and analysis efforts within the Combat Systems Integration, AEGIS Combat System Advanced Capability Build (ACB) 12, Antisubmarine Warfare Integrated Common Processor/Acoustic Rapid Commercial Off The Shelf (COTS) Insertion, the Littoral Combat Ship (LCS) Mission Module development and other major acquisition programs. In addition, funding will support the development of guidance to facilitate NAVSEA-affiliated programs' adoption of this TOC-reducing discipline and technology.

Starting in FY2016 and through the out-years the project moves from N96 to N84 and has been renamed Automated Test and Analysis (ATA). ATA will extend the use of automated test methods currently in use such as Automated Test and Re-Test, research new methods of testing and use of automated test technologies, and standardize test practices, methods and tools across the Naval Enterprise. In addition, funding will support the development of enterprise level strategies to apply ATA to the software-intensive acquisition programs, establish standards, specifications, and guidance, as well as use business case analysis to select future pilot projects and applications.

The ATRT project is funded on Program Element 0603597N under Project Unit 9B88: "Automated Test and Re-Test". Starting in FY16 and through the out-years, the project will be renamed "Automated Test and Analysis" on Program Element 0603597N under Project Unit 9B88 to be consistent with the program's enterprise approach to develop automated test tools.

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

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Automated Test and Re-Test	9.639	8.115	8.000	-	8.000
Articles:	-	-	-	-	-
FY 2014 Accomplishments: In FY14, the ATRT program successfully completed eight (8) FY13 ATRT projects to be employed on Navy Surface, Undersea, Littoral, and Mine Warfare Combat System Programs. These Programs are strategically transitioning developed ATRT capabilities into test processes for further use. The ATRT program awarded nine (9) new projects via the ATRT Executive Selection Panel (ESP) to NAVSEA-affiliated PEOs. Projects were					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
evaluated and prioritized by an ATRT Screening Panel represented by each NAVSEA-affiliated PEO, who then made recommendations to the Executive Committee for final selections. The program has continued to mature training modules and share best practices for Navy ATRT users which will be further developed in FY15 to the Navy automated testing community. The Program successfully completed Congressional taskers for both the Chief of Naval Operations and the Secretary of the Navy. FY 2015 Plans: The ATRT program will continue a number of ATRT efforts with the intent of increasing the widespread use of automated testing in software intensive program execution. Also, the ATRT program will continue to advocate the maturation/development of standards, specifications, and contract language that would improve test tool commonality and reuse across the Navy testing domains. NAVSEA will investigate the applicability of ATRT to Warfare System Certification Testing. FY 2016 Base Plans: The ATA program will continue to explore enterprise-level pilot projects accelerating ATA implementation as part of acquisition program development across the Navy. As part of this enterprise approach, the Navy will institute a governance structure that will establish an overarching enterprise perspective, broaden stakeholder participation and ensure the use of ATA across all SYSCOMs (NAVSEA, NAVAIR, SPAWAR) that can use these automated test technologies. Also, the ATA program will continue to advocate the maturation/development of standards, specifications, and contract language that would improve test tool commonality and reuse across the Navy testing domains. FY 2016 OCO Plans: N/A						
Accomplishments/Planned Programs Subtotals		9.639	8.115	8.000	-	8.000
C. Other Program Funding Summary (\$ in Millions)						
N/A						
Remarks						
D. Acquisition Strategy						
The Program Strategy for the ATA program includes the following:						

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- Investigation of applicable similarities to industry standards, specifications, and processes that are relevant to ATA program to recognize best practices and leverage opportunities - Development of standards and specifications for ATA tools/processes - Funding and execution of ATA startup projects within acquisition programs per submission of proposals and Business Case Analyses (BCA) - Development of training and outreach efforts to promote awareness of automated test technologies and tools/processes - Setup and maintenance of an ATA portal for the collection and dissemination of body of knowledge		
<u>E. Performance Metrics</u> Progress towards meeting the objectives of the ATA efforts will be monitored via the following: - Progress Briefs at Quarterly ATA Executive Steering Group Meetings - Bi- Monthly ATA Program Reviews - Return-on-Investment Metrics based on work hours for test process execution - before and after automation - Return-on-Investment Metrics based on work hours for test process execution - before and after automation		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
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Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Auto Test & Retest	C/CPFF	Innovative Defense Technologies (IDT) : Ballston, VA	0.000	8.576	Mar 2014	7.575	Jan 2015	7.166	Jan 2016	-		7.166	Continuing	Continuing	Continuing
Auto Test & Retest	WR	Various NSWCs : Not Specified	0.000	0.613	Apr 2014	0.389	Jan 2015	0.578	Jan 2016	-		0.578	Continuing	Continuing	Continuing
Subtotal			0.000	9.189		7.964		7.744		-		7.744	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Auto Test & Retest	C/BA	Gryphon Technologies : Washington, DC	0.000	0.263	Jul 2014	0.151	Jan 2015	0.256	Jan 2016	-		0.256	Continuing	Continuing	Continuing
Auto Test & Retest	C/BA	Alion Sciences : McLean, VA	0.000	0.187	Jul 2014	-		-		-		-	-	0.187	-
Subtotal			0.000	0.450		0.151		0.256		-		0.256	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	9.639		8.115		8.000		-		8.000	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity

1319 / 4

R-1 Program Element (Number/Name)

PE 0603597N / (U)Automated Test and Re-Test (ATRT)

Project (Number/Name)

9B88 / Automated Test and Re-Test

FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
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 9B88

Automated Test and Analysis (ATA):
Annual Startup Projects for ATRT/ATA
Implementation

Automated Test and Analysis (ATA):
Participation in Existing Government and
Industrial Standards Boards

Automated Test and Analysis (ATA):
Evaluation of Business Case Analyses (BCA)
of potential ATRT/ATA investments

Automated Test and Analysis (ATA):
Development of training and lessons learned
for ATRT/ATA

Automated Test and Analysis (ATA):
Development of guidance for contract and
requirements language pertaining to ATRT/
ATA

Automated Test and Analysis (ATA): Conduct
of outreach efforts to NAVSEA programs and
industry

Automated Test and Analysis (ATA):
ATRT/ATA Portal/Navy Toolkit for Body of
Knowledge

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 9B88				
Automated Test and Analysis (ATA): Annual Startup Projects for ATRT/ATA Implementation	1	2014	4	2020
Automated Test and Analysis (ATA): Participation in Existing Government and Industrial Standards Boards	1	2014	4	2020
Automated Test and Analysis (ATA): Evaluation of Business Case Analyses (BCA) of potential ATRT/ATA investments	1	2014	4	2020
Automated Test and Analysis (ATA): Development of training and lessons learned for ATRT/ATA	1	2014	4	2020
Automated Test and Analysis (ATA): Development of guidance for contract and requirements language pertaining to ATRT/ATA	1	2014	4	2020
Automated Test and Analysis (ATA): Conduct of outreach efforts to NAVSEA programs and industry	1	2014	4	2020
Automated Test and Analysis (ATA): ATRT/ATA Portal/Navy Toolkit for Body of Knowledge	1	2014	4	2020