Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0604256N *I Threat Simulator Development*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	0.000	30.323	16.633	91.819	-	91.819	98.492	71.748	32.620	32.533	Continuing	Continuing
0602: *Eletronics W/F Env Simulation (ECHO)*	0.000	20.975	3.462	76.886	-	76.886	83.044	56.403	17.052	16.666	Continuing	Continuing
0672: *Effect Nav E/W (ENEWS)*	0.000	9.348	13.171	14.933	-	14.933	15.448	15.345	15.568	15.867	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is a continuing program that consolidates the design, fabrication and integration of Naval Electronic Warfare (EW) threat simulators for increased managerial emphasis and coordination. These simulator development efforts provide realistic Developmental and Operational Test and Evaluation environments to test EW systems and defensive tactics. These projects develop threat Anti-Air and Anti-Ship weapon system simulators in accordance with the Services' requirements.

The 0602 Project, Electronic Warfare Environment Simulation, directly supports the Test and Evaluation resource requirements for all Naval Air EW development programs to include multi-spectral situational awareness and countermeasures. Programs in development and future programs include: ALR-67(v) 3, Integrated Defensive Electronic Countermeasures Suite ALQ-214, the AAR-47 (v) 3, AVR-2, ALQ-144A, Joint Strike Fighter, EA-18G, LR700, Low Band Transmitter, P-8A, and the Next Generation Jammer.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RESEARCH, DEVELOPMENT, TEST and EVALUATION MANAGEMENT SUPPORT because it supports efforts directed toward sustaining or modernizing installations or operations required for general research, development, test and evaluation.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	30.769	16.633	28.494	-	28.494
Current President's Budget	30.323	16.633	91.819	-	91.819
Total Adjustments	-0.446	0.000	63.325	-	63.325
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.446	0.000			
• Program Adjustments	0.000	0.000	5.705	-	5.705
• Rate/Misc Adjustments	0.000	0.000	57.620	-	57.620

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0604256N *I Threat Simulator Development*

Change Summary Explanation

The funding increase from FY 2017 to FY 2018 supports upgrades to the Naval Air Warfare Center land and sea ranges to close capability gaps identified during the operational test (OT) planning for the Joint Strike Fighter (JSF) by Director, Operational Test and Evaluation (DOT&E). The gaps exist in several categories including threat density, type of threat and representation of specific threat systems and, if not mitigated, will prevent an effective OT for JSF. The requested funding will procure 12 systems, in four categories, that increase the threat density, threat type and specific threat representation and upgrade an additional two systems to provide a higher fidelity representation of several threat types. Additionally, funding supports the initiation of site preparation and integration for radar signal emulators and the requirement to purchase additional materials for the open air radio frequency beam measurement capability.

The funding increase in the ENEWS program from FY17 to FY18 reflects the addition of one hardware simulator to the Effectiveness of Navy Electronic Warfare Systems (ENEWS) hardware simulators to support the Surface Electronic Warfare Improvement Program (SEWIP) Block 3.

Technical: Not applicable.

Schedule: Not applicable.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0604256N / *Threat Simulator Development*	Project (Number/Name) 0602 / *Eletronics W/F Env Simulation (ECHO)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
0602: *Eletronics W/F Env Simulation (ECHO)*	0.000	20.975	3.462	76.886	-	76.886	83.044	56.403	17.052	16.666	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The objective of this project is development of necessary simulation facilities and approaches to allow determination of the effectiveness of Electronic Warfare (EW) in real world engagement situations and to support the introduction of modern, effective systems into Naval Aviation. The heavy use of test resources by all Services demonstrates the importance of these assets. The Navy has been very successful in executing all of its major programs, and to date has had no major technical problems.

The Electronic Warfare Environment Simulation project is unique because it is the only program within the Department of Defense which develops and provides Naval anti-air warfare threat assets for Test and Evaluation (T&E).

This project directly supports the T&E resource requirements for all Naval Air EW development programs, to include multi-spectral situational awareness and countermeasures. Programs in development and future programs include: ALR-67(v) 3, Integrated Defensive Electronic Countermeasures Suite ALQ-214, the AAR-47 (v) 3, AVR-2, ALQ-144A, Joint Strike Fighter, EA-18G, LR700, Low Band Transmitter, P-8A, and the Next Generation Jammer.

This project provides for the development of an Integrated Air Defense T&E capability to be fielded at each of the three sites comprising the Navy's Tri-Center complex: Naval Air Warfare Center Weapons Division, China Lake and Point Mugu in CA, and Naval Air Warfare Center Aircraft Division, Patuxent River, MD.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: ACQUISITION AND MEASUREMENT CAPABILITIES	2.398	0.250	66.062	0.000	66.062
Articles:	-	-	-	-	-
Description: Provide the test community with the modern threat acquisition systems and effectiveness measurement systems necessary for Test and Evaluation of airborne alert, Situation Awareness, targeting systems and airborne response systems.					
Funding decreases from FY16 to FY17 due to the completion of the open-loop threat simulators.					
The funding increase from FY 2017 to FY 2018 supports upgrades to the Naval Air Warfare Center land and sea ranges to close capability gaps identified during the operational test (OT) planning for the Joint Strike Fighter					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0602 / *Eletronics W/F Env Simulation (ECHO)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
(JSF) by Director, Operational Test and Evaluation (DOT&E). The gaps exist in several categories including threat density, type of threat and representation of specific threat systems and, if not mitigated, will prevent an effective OT for JSF. The requested funding will procure 12 systems, in four categories, that increase the threat density, threat type and specific threat representation and upgrade an additional two systems to provide a higher fidelity representation of several threat types. Additionally, funding supports the initiation of site preparation and integration for radar signal emulators and the requirement to purchase additional materials for the open air radio frequency beam measurement capability. ***FY 2016 Accomplishments:*** - Continue the development of an open air radio frequency beam measurement capability. - Complete the upgrade of open-loop threat simulators at Electronic Combat Range. - Complete the upgrade of open air radio frequency signal density enhancement systems. ***FY 2017 Plans:*** - Continue the development of an open air radio frequency beam measurement capability. ***FY 2018 Base Plans:*** - Continue development of an open air radio frequency beam measurement capability - Initiate upgrades to the Naval Air Warfare Center ranges to support operational testing (OT) of the Joint Strike Fighter (JSF) - Initiate the site preparation and integration of radar signal emulators at the Electronic Combat Range - Initiate the development of a threat signal augmentation capability. - Initiate the procurement of three L-Band radar signal emulators for Naval Air Warfare Center Weapons Division (NAWCWD). - Initiate and complete the upgrade of two S-Band radar signal emulators for NAWCWD. - Initiate the procurement of three passive radar systems for NAWCWD. - Initiate the procurement of three early warning radar systems for NAWCWD. ***FY 2018 OCO Plans:*** N/A					
Title: REQUIREMENTS AND VALIDATION	0.893	0.627	0.775	0.000	0.775
Articles:	-	-	-	-	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0602 / *Eletronics W/F Env Simulation (ECHO)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Description: Validate and track intel updates of the threat systems necessary for the operation and continuous improvement of Navy laboratories and ranges which provide engineering support, testing and analysis to the developers, integrators, testers and users of systems and technologies that counter or penetrate air defenses. ***FY 2016 Accomplishments:*** - Continue to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continue to validate simulators and stimulators at the Navy tri-lab centers. ***FY 2017 Plans:*** - Continue to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continue to validate simulators and stimulators at the Navy tri-lab centers. ***FY 2018 Base Plans:*** - Continue to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continue to validate simulators and stimulators at the Navy tri-lab centers. ***FY 2018 OCO Plans:*** N/A					
Title: ENGAGEMENT CAPABILITIES	17.684	2.585	10.049	0.000	10.049
Articles:	-	-	-	-	-
Description: Provide the test community with the modern threat engagement systems necessary for Test and Evaluation of airborne alert, Situation Awareness, targeting systems and airborne response systems. Funding decreases from FY16 to FY17 because the major purchase of materials for the development of a closed-loop threat surface to air missile system simulator is complete. Funding increases from FY17 to FY18 due to the factory acceptance test, site integration and test of the closed-loop threat surface to air missile system and the purchase of additional parts for the conversion of a threat system. ***FY 2016 Accomplishments:***					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0602 / *Eletronics W/F Env Simulation (ECHO)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Continue the upgrade and integration of missile simulation models. - Continue the development of a closed-loop threat surface to air missile system simulator. - Continue the conversion of a threat system. - Continue the minor upgrades to open air and laboratory threat systems. ***FY 2017 Plans:*** - Continue the upgrade and integration of missile simulation models. - Continue the development of a closed-loop threat surface to air missile system simulator. - Continue the conversion of a threat system. - Continue the minor upgrades to open air and laboratory threat systems. - Initiate the integration of a threat engagement system at Electronic Combat Range (ECR). ***FY 2018 Base Plans:*** - Continue the upgrade and integration of missile simulation models. - Continue the development of a closed-loop threat surface to air missile system simulator. - Continue the conversion of a threat system. - Continue the minor upgrades to open air and laboratory threat systems. - Continue the integration of a threat engagement system at ECR. - Initiate the development of a naval based threat radar closed-loop simulator for installation in laboratories at Naval Air Warfare Center Weapons Division (NAWCWD) and Naval Air Warfare Center Aircraft Division (NAWCAD) and designed for open air range implementation. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	20.975	3.462	76.886	0.000	76.886

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Not Applicable.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0602 / *Eletronics W/F Env Simulation (ECHO)*

E. Performance Metrics

Successfully achieve Initial Operational Capability of Navy Threat Simulation projects within 60 days of approved schedule and have test capabilities scheduled in support of Navy test programs within 180 days.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0604256N / *Threat Simulator Development*	Project (Number/Name) 0672 / *Effect Nav E/W (ENEWS)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
0672: *Effect Nav E/W (ENEWS)*	0.000	9.348	13.171	14.933	-	14.933	15.448	15.345	15.568	15.867	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The objective of the Effectiveness of Navy Electronic Warfare (EW) Systems (ENEWS) Project is the development and application of necessary simulation assets to determine the effectiveness of Electronic Warfare for Navy ships in simulated real-world engagement situations. The project primarily supports the introduction of modern, effective shipboard and off-board Electronic Warfare systems, and tactics for the Surface Navy. The heavy use of Effectiveness of Navy Electronic Warfare Systems resources by Naval Sea Systems Command, Operational Test and Evaluation (OT&E) Force, Special Operations, and other Electronic Warfare Research, Development, Test and Evaluation (T&E) agencies speaks to the overall importance of this project. The project provides support for Electronic Warfare system design, Engineering Test (ET), Development Test (DT), Operational Test (OT), and the development of utilization tactics. In the past Effectiveness of Navy Electronic Warfare Systems quick reaction capabilities have had great impact on crisis situations such as the Libyan crises, Iran threat, Persian Gulf crisis, and Operation Desert Shield/ Storm. Simulation Display (SIMDIS) is an Effectiveness of Navy Electronic Warfare Systems modeling tool that was developed to support Testing and Evaluation. Simulation Display has been adopted by most Department of Defense (DoD) Testing and Evaluation and training ranges to provide visualization of Testing and Evaluation and training scenarios. One of the primary threats to surface ships is Anti-Ship Capable Missile systems. The Effectiveness of Navy Electronic Warfare Systems Project is unique in that it is the only project within the Department of Defense dedicated to developing and providing realistic Anti-Ship Capable Missile assets to test and evaluate the effectiveness of shipboard Electronic Warfare systems and tactics against these type threats. The Effectiveness of Navy Electronic Warfare Systems Project is a critical part of the Office of the Secretary of Defense Test Resource Master Plan. This plan employs many of the Effectiveness of Navy Electronic Warfare Systems assets for planning, analysis, testing, and verification of shipboard and off-board Electronic Warfare systems techniques and tactics. As part of its normal activities, Effectiveness of Navy Electronic Warfare Systems provides Development Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E), and Follow-on Operational Test and Evaluation (FOT&E) support to the surface Navy for all ship classes. Development Test, Operational Test and Follow-on Operational Test and Evaluation support includes AN/SLQ-32 Surface Electronic Warfare Improvement Program (SEWIP), Nulka, Rapid Anti-ship Integrated Defense System, all MK245 Giant tests, advanced InfraRed (IR) decoys, decoy placement, ship InfraRed signature and radar cross section measurement of DDG-51, LPD-17, DD-21 and Patrol Craft class ships, High Power Microwave program, and other ship self-defense initiatives, including Test and Evaluation of Future Naval Capability process. In addition, Effectiveness of Navy Electronic Warfare Systems assets are regularly employed to test the effectiveness of North Atlantic Treaty Organization (NATO) ships' Electronic Warfare systems in joint allied exercises. Effectiveness of Navy Electronic Warfare Systems assets also support Joint Electronic Warfare exercises that are conducted with Rim of the Pacific (RIMPAC) nations.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: CLASSIFIED PROGRAM	3.161	8.100	8.200	0.000	8.200
Articles:	-	-	-	-	-
Description: Details about this program are classified.					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0672 / *Effect Nav E/W (ENEWS)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Details about this program and any changes are classified. ***FY 2016 Accomplishments:*** - Details are of a higher classification. FY16 funds were realigned to support the Electronic Attack (EA) Test and Evaluation (T&E) for Surface Electronic Warfare Improvement Program (SEWIP) Block 3 POR. ***FY 2017 Plans:*** - Details are of a higher classification. ***FY 2018 Base Plans:*** - Details are of a higher classification. ***FY 2018 OCO Plans:*** N/A					
Title: HARDWARE SIMULATION SYSTEMS	3.336	2.201	3.564	0.000	3.564
Articles:	-	-	-	-	-
Description: Maintain and perform Hardware and Software Upgrades to the inventory of Effectiveness of Navy Electronic Warfare Systems flyable and shore based Anti-Ship Capable Missile (ASCM) Electro-Optic/ Infrared (EO/IR), Visible and Radio Frequency (RF) Simulators. Perform characterization of Infrared and Radio Frequency simulators as part of the periodic evaluation of simulation performance and collect performance data for comparison with previously recorded data. Also includes development and maintenance of all simulator control panels. The decrease between FY 2016 and FY 2017 is due to the completion of a simulator capability upgrade. The increase between FY 2017 and FY 2018 is due to the addition of one hardware simulator to the Effectiveness of Navy Electronic Warfare Systems inventory and the requirement for Effectiveness of Navy Electronic Warfare Systems hardware simulators to support the Surface Electronic Warfare Improvement Program (SEWIP) Block 3. These requirements include Operational Assessment (OA) and Factory Qualification					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0672 / *Effect Nav E/W (ENEWS)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Tests (FQT) in FY 2018 and preparing hardware simulators to support Developmental Testing (DT) and First Article Qualification Test (FAQT) scheduled for FY 2019. ***FY 2016 Accomplishments:*** - Initiated hardware and software upgrades for the Anti-ship Cruise Missile (ASCM) signal processor in the loop (ASPIL) - Initiated software upgrades for the MEIR 3, MIKE 3, TOWSIM Electro-Optical (EO) and NU VICTOR 1 SIP simulators - Continued annual maintenance of Effectiveness of Navy Electronic Warfare Systems simulators to support flight/shore based tests. - Continued hardware upgrades to the SUMMIT Simulator. - Continued software upgrades to the VICTOR Standard Instrumentation Pod (SIP). - Continued hardware upgrades to the FOXTROT 3 TOWSIM(IOTA). ***FY 2017 Plans:*** Continue all efforts of FY 2016. - Complete software upgrades for ASPIL - Complete software upgrades for the MEIR 3, MIKE 3, NU and VICTOR 1 Standard Instrumentation Pod (SIP) simulators - Complete IOTA hardware upgrades - Initiate hardware upgrades for VICTOR 1 SIP and Anti-Ship Imaging Missile (AIMS) simulators - Initiate software upgrade for FOXTROT 1 Sim 1 simulator - Maintain and upgrade 20 simulators and the Antenna Test Rig to support the Surface Electronic Warfare Improvement Program (SEWIP) Block 3 and Advanced Offboard Electronic Warfare (AOEW) effectiveness evaluations. ***FY 2018 Base Plans:*** - Continue all efforts of FY 2017 less those noted as completed above. - Continue to maintain and perform hardware and software upgrades to the inventory of Effectiveness of Navy Electronic Warfare Systems flyable and shore based Anti-Ship Capable Missile (ASCM) Electro-Optic/Infrared (EO/IR), Visible and Radio Frequency (RF) Simulators and simulator control panels. - Complete software upgrade for the FOXTROT 1 Sim 1 simulator					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0672 / *Effect Nav E/W (ENEWS)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Initiate hardware upgrades for the EPSILON, FOXTROT 1 (ground based) and FOXTROT 1 SIP simulators - Initiate software upgrades for the FOXTROT 1 (ground based), FOXTROT SIP simulators - Maintain and upgrade 21 hardware simulators, 5 programmable simulators and the Antenna Test Rig to support the SEWIP Block 3 and AOEW effectiveness evaluations. ***FY 2018 OCO Plans:*** N/A					
Title: SIMULATION CHARACTERIZATION, VERIFICATION AND REQUIREMENTS ***Articles:*** ***Description:*** Provides for the documentation of Anti-Ship Capable Missile (ASMC) threat simulators. Develops reports that contain detailed descriptions and parametric data of the Anti-Ship Capable Missile threat simulators and compares the simulator's parametric data to the actual threat's parametric data. Provide technical management functions in support of the Effectiveness of Navy Electronic Warfare Systems project; engineering and technical support requirements for the Anti-Ship Capable Missile simulators and upgrades to meet DT/ OT testing requirements, development of detailed test resource requirements and provides an interface between OPNAV N2/N6, Office of Naval Research, and Effectiveness of Navy Electronic Warfare Systems oversight activities. Beginning in FY 2015 the simulator validation effort was terminated and no more validation reports will be published. Effectiveness of Navy Electronic Warfare Systems will continue to develop simulator documentation reports that will include a simulator description with a comparison to the threat it represents. Formerly know as "SIMULATION VALIDATION AND REQUIREMENTS" is now titled "SIMULATION CHARACTERIZATION, VERIFICATION AND REQUIREMENTS" effective FY 2017. The increase between FY 2017 and FY 2018 is due to the scheduled characterization of two hardware simulators in FY 2018. ***FY 2016 Accomplishments:*** - Initiated and complete update of the FY 2016 Effectiveness of Navy Electronic Warfare Systems Program Management Plan. - Initiated and complete FY 2016 monthly reports, performance based management and analysis, financial execution reporting and assessment.	0.521 -	0.596 -	0.691 -	0.000 -	0.691 -

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 6	**R-1 Program Element (Number/Name)** PE 0604256N / *Threat Simulator Development*	**Project (Number/Name)** 0672 / *Effect Nav E/W (ENEWS)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Initiated and complete all FY 2016 Planning, Programming and Budgeting Systems submissions. - Initiated BETA hardware simulator documentation report. - Initiated and complete the LAMBDA simulator characterization assessment. - Continued LAMBDA simulator hardware validation report. ***FY 2017 Plans:*** - Continue all efforts of FY 2016 less those noted completed above. - Initiate and complete the FY 2017 ENEWS Program Management Plan. - Initiate and complete the FY 2017 monthly reports, performance based management and analysis, financial execution reporting and assessment. - Initiate and complete all FY 2017 Planning, Programming and Budgeting Systems submissions. - Initiate and complete the BETA simulator characterization assessment. - Complete the BETA hardware simulator documentation report. ***FY 2018 Base Plans:*** - Continue all efforts of FY 2017 less those noted as completed above. - Continue to develop reports that compare the parametric data of the Anti-Ship Capable Missile (ASCM) threat simulators to the parametric data of the actual threat and provide technical management functions in support of the Effectiveness of Navy Electronic Warfare Systems project. - Initiate and complete the FY 2018 ENEWS Program Management Plan. - Initiate and complete FY 2018 status reviews, performance based management and analysis, financial execution reporting and assessment. - Initiate and complete all FY 2018 Planning, Programming and Budgeting Systems (PPBS) submissions - Initiate characterization assessment and hardware simulator documentation report for upgraded OMEGA simulator. ***FY 2018 OCO Plans:*** N/A					
Title: SUPPORT AND COMPUTERS SIMULATION SYSTEMS	2.330	2.274	2.478	0.000	2.478
Articles:	-	-	-	-	-
Description: Perform maintenance and intelligence upgrades to Electro-Optic/Infrared, Digital, and Radio Frequency Laboratory Simulation Testing facilities and flight support equipment based on existing and emerging					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
complex threat systems. Development of Testing & Evaluation scenarios and environmental modeling to support electronic support (ES) and electronic attack (EA) testing; modify Anti-ship Cruise Missile (ASCM) threat simulators based on the latest intelligence data obtained from threat databases. ***FY 2016 Accomplishments:*** - Initiated target models to support Surface Electronic Warfare Improvement Program Block 3 and Advanced Offboard Electronic Warfare (AOEW) effectiveness assessments. - Initiated update to the Scenario and Environmental Model used to support open and closed loop simulations. - Continued maintenance and upgrades to shore-based test facilities and mobile test vans as required to conduct testing in support of Surface Electronic Warfare Improvement Program, Nulka and multi-function Electronic Warfare programs. - Continued to transition environmental, threat and platform simulations from Subversion to Mercurial Distributed Version Control System. - Continued upgrades to configuration control software library as new releases became available. - Continued to develop new digital models of Anti-ship Cruise Missile (ASCM) threats as they became available. - Continued upgrades and maintenance of flight support systems as necessary to support the infrared / radio frequency Effectiveness of Navy Electronic Warfare Systems simulators. - Continued upgrades and user friendly enhancements to the Simulation Display (SIMDIS) toolset - Continued development of LIMA III and LIMA IV digital models - Continued digital model upgrades to support Surface Electronic Warfare Improvement Program (SEWIP) Block 3 test and evaluation. - Continued simulator upgrades to support Surface Electronic Warfare Improvement Program (SEWIP) Block 3 test and evaluation. ***FY 2017 Plans:*** - Continue all efforts of FY 2016 less those noted as completed above. - Complete update to the Scenario and Environment Model used to support open and closed loop simulations. ***FY 2018 Base Plans:*** - Continue all efforts of FY 2017					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Continue to perform maintenance and intelligence upgrades to Electro-Optic/Infrared, Digital, and Radio Frequency Laboratory Simulation testing facilities and flight support equipment and provide electronic support (ES) and electronic attack (EA) test support. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	9.348	13.171	14.933	0.000	14.933

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Performance metrics are discussed within each project (R2a).