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 7: *Operational Systems Development*						**R-1 Program Element (Number/Name)** PE 0308601N *I Modeling & Simulation Support*						
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	21.252	4.932	4.719	4.757	-	4.757	4.979	5.076	5.172	5.280	Continuing	Continuing
2222: *Modeling & Simulation*	21.252	4.932	4.719	4.757	-	4.757	4.979	5.076	5.172	5.280	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element addresses projects under the Navy Modeling and Simulation (M&S) Office. It supports technical and management initiatives directed by Congress, Department of Defense (DoD), Secretary of the Navy (SECNAV), and Chief of Naval Operations (CNO) with the aim of bringing organization, focus, and efficiency to the development and use of M&S throughout the Navy and DoD. It provides a central agency for the formulation and implementation of policy and guidance in M&S, and represents Navy interests in Joint and other Agency initiatives. It funds efforts to define and coordinate the corporate Navy M&S policy and guidance to evolve an interoperable and reusable core M&S capability consistent with the M&S technical framework prescribed by DoD. Efforts are organized around three product areas: (1) Core Services: This activity provides essential planning and coordination of M&S efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, and other agencies to develop policies and procedures necessary for M&S standards, visibility, and potential reuse across DoD. (2) Community Services: This activity provides M&S subject matter expert support embedded in the DON M&S Communities to recommend implementations for M&S policies, standards, VV&A, and reuse within their Community and to ensure that the wider DON and DoD are aware (visibility) of the M&S products and services, initiatives, processes, and standards. (3) Community Experiments and Prototypes: This activity conducts experiments and prototypes aimed at determining the feasibility and applicability of proposed standards or technical approaches to Navy M&S and investigates Service-unique requirements for standards or guidance to achieve M&S efficiencies.

B. Program Change Summary ($ in Millions)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	5.116	4.719	4.795	-	4.795
Current President's Budget	4.932	4.719	4.757	-	4.757
Total Adjustments	-0.184	-	-0.038	-	-0.038
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.184	-			
• Rate/Misc Adjustments	-	-	-0.038	-	-0.038

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy											Date: February 2015	
Appropriation/Budget Activity 1319 *I* 7				**R-1 Program Element (Number/Name)** PE 0308601N *I Modeling & Simulation Support*					**Project (Number/Name)** 2222 *I Modeling & Simulation*			

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
2222: *Modeling & Simulation*	21.252	4.932	4.719	4.757	-	4.757	4.979	5.076	5.172	5.280	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Program Element addresses projects under the Navy Modeling and Simulation (M&S) Office. It supports technical and management initiatives directed by Congress, Department of Defense (DoD), Secretary of the Navy (SECNAV), and Chief of Naval Operations (CNO) with the aim of bringing organization, focus, and efficiency to the development and use of M&S throughout the Navy and DoD. It provides a central agency for the formulation and implementation of policy and guidance in M&S, and represents Navy interests in Joint and other Agency initiatives. It funds efforts to define and coordinate the corporate Navy M&S policy and guidance to evolve an interoperable and reusable core M&S capability consistent with the M&S technical framework prescribed by DoD. Efforts are organized around three product areas: (1) Core Services: This activity provides essential planning and coordination of M&S efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, and other agencies to develop policies and procedures necessary for M&S standards, visibility, and potential reuse across DoD. (2) Community Services: This activity provides M&S subject matter expert support embedded in the DON M&S Communities to recommend implementations for M&S policies, standards, VV&A, and reuse within their Community and to ensure that the wider DON and DoD are aware (visibility) of the M&S products and services, initiatives, processes, and standards. (3) Community Experiments and Prototypes: This activity conducts experiments and prototypes aimed at determining the feasibility and applicability of proposed standards or technical approaches to Navy M&S and investigates Service-unique requirements for standards or guidance to achieve M&S efficiencies.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: CORE SERVICES	1.153	1.465	1.657	-	1.657
Articles:	-	-	-	-	-
Description: This activity provides essential planning and coordination of M&S efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, and other agencies to develop policies and procedures necessary for M&S visibility and potential reuse across DoD. It provides updates to the DoD Enterprise Catalog, M&S Master Plan, and M&S Investment Strategy. This activity supports development of common services, tools, and databases to ensure the integration and connectivity of M&S products employed in Naval assessments, training, acquisition, and among operational communities. It manages and maintains the Navy M&S Information Service (NMSIS), the central Naval M&S information resource to support informed M&S investment decision making across DON. It implements and manages the Modeling and Simulation (M&S) Quality Assurance (VV&A) process and guidelines for implementing for modeling, simulation, and data. It reviews both new and legacy M&S VV&A plans and reports and develops and maintains the Naval M&S VV&A repository. It establishes and implements a VV&A training curriculum for developers and Accreditation Agents.					

Exhibit R-2A, **RDT&E Project Justification:** PB 2016 Navy		**Date:** February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*	**Project (Number/Name)** 2222 / *Modeling & Simulation*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**

FY 2014 Accomplishments:
Title: CORE SERVICES

This activity provides essential planning and coordination of Modeling and Simulation (M&S) efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, other agencies, and International organizations to develop policies, procedures, and guidance necessary for M&S visibility and potential reuse across DoD. It provides updates to the DoD Enterprise Catalog, DoD M&S Master Plan, and DoD M&S Investment Strategy. This activity supports development of common services, tools, and data to ensure the integration and connectivity of M&S products employed in Naval assessments, training, acquisition, and among operational communities. It manages and maintains the Navy M&S Information Service (NMSIS), which is the central Naval M&S information resource to support informed M&S investment decision making across DON. This activity leads the standardization of M&S capabilities to enable interoperability for reuse across DON and DoD.

Verification, Validation, and Accreditation (VV&A) and Standards Support
- Provided near real-time direct responses to specific questions about M&S Standards and VV&A implementation, policy, and guidance from various organizations to include the USN Operational Test and Evaluation Force, Naval Air Systems Command, OPNAV N81 Assessment Division, and the Office of Naval Intelligence, Institute for Defense Analyses, and U.S. Army Modeling and Simulation Office.
- Collected USN and USMC VV&A documents, published the listing via the Navy M&S Information Service (NMSIS), and made VV&A resources visible and discoverable for sharing and reuse in the DoD Enterprise Catalog, and DoD M&S Catalog.
- As the USN Technical Deputy for DoD M&S SC Priority Objective 2.g (PO2G), coordinated all DoD M&S SC PO2G efforts and initiated proposed actions to address member feedback. Completed the review, comment adjudication, and revision of DoD Instruction 5000.61 and provided to the DoD M&S Coordination Office to formally reissue through the DoD Directives Systems.

Navy Modeling and Simulation Information Service (NMSIS) & Data Team
- International Technical Activity: Chaired the NATO Modeling and Simulation Group -100 technical activity on Resource Discovery and Access to develop processes for generation and maintenance of NATO metadata; led the United States writing team that authored draft Technical Report and submitted it for participating country

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*	**Project (Number/Name)** 2222 / *Modeling & Simulation*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
review. Adjudicated and incorporated international comments and submitted final technical report to NATO Research and Technology Office. - National Technical Activity: Joined the National Information Exchange Model (NIEM), Military Operations (MilOps) Domain working groups on content development and implementation. Organized MilOps status briefings to the DoD M&S Community of Interest (M&S COI) Data Management Working Group (DMWG). - Navy Net-Centric Discovery: Collaborated with Naval Infrastructure and Capability (NICAP) management and development team members to develop DoD Discovery Metadata Specification (DDMS) data from the NICAP database schema; developed procedures to federate NICAP data records with the DoD Enterprise Catalog. Worked with the NAVAIR Portable Source Initiative (NPSI) and Enterprise Catalog points of contact resulting in 159,303 geospatial DDMS metadata records uploaded to the DoD Enterprise Catalog. Plans and Policies - Provided substantive inputs to DoD plans, strategies, guidance, and definitions including revisions and a refined draft of M&S VV&A (5200.40) and M&S Management (5200.38A). Revisions are in response to significant advances and changes in both subject areas and to comply with SECNAVINST 5215.1D and DoD Instruction 5025.01 regulations. *FY 2015 Plans:* - Full NATO country review of NMSG-100 technical report on Resource Discovery and Access required prior to publishing final report. - Assist Navy M&S Communities in their efforts to make M&S resources discoverable for reuse to the Global Information Grid Enterprise Service ensuring compliance with DoD Net Centric Data Strategy (dated May 9, 2003) and Directive 8320.02 (Data Sharing in a Net Centric Department of Defense). - Revisions to documents are required in response to significant advances and changes in both subject areas and to comply with DON (SECNAVINST 5215.1D) and DoD (DoD Instruction 5025.01) regulation. Plans are to promulgate M&S VV&A Instruction (5200.40) and M&S Management (5200.38A), review Navy M&S Policy for coverage gaps new requirements, and assist in the development of an: "A Review of RDT&E M&S Factors in Policy" Current Policy Status Snapshot - Continue development of the Navy M&S Strategic Plan and articulate a Comprehensive M&S Vision (Echelon 1), and begin Implementing Goals (Echelon 2) *FY 2016 Base Plans:*					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015		
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*		**Project (Number/Name)** 2222 / *Modeling & Simulation*		

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
- Continue FY15 efforts **FY 2016 OCO Plans:** N/A					
Title: COMMUNITY SERVICES ***Articles:***	2.562 -	2.303 -	2.416 -	- -	2.416 -
Description: This activity provides M&S subject matter expert support embedded in the DON M&S Communities to recommend implementations for M&S policies and standards within their Community and to ensure that the wider Navy is aware of the M&S products and services, initiatives, processes, and standards (visibility). It promotes M&S reuse through cooperative Community M&S activities which identify and prioritize M&S capability requirements between and across Communities. It also provides an M&S degree program through the Naval Postgraduate School (NPS), Modeling Virtual Environments and Simulation (MOVES) curriculum which qualifies officers to fill 6202-P coded billets. Financial support for thesis and dissertation efforts done by the students is covered by this funding. Topics are broad M&S topics of concern which are prioritized based on how they meet the requirements across, between and within the M&S Communities. *FY 2014 Accomplishments:* Training Integrated Direct Support (TNG IDS) - Training IDS team is an integral member of the U.S. Fleet Forces Command (USFF) N73-led Readiness Kill Chain Cross-Functional Team. Provided insights and assisted with analysis of possible actions the USFF Commander can take now to initiate improvements for training readiness kill chain. - Supported US Fleet Forces Command Training Directorate in development of Navy wide training policies and programs that facilitate effective force generation at lower costs through the effective use of M&S in the continued development of the Navy Continuous Training Environment and Fleet Synthetic Training Program. - Developed a Fleet Live-Virtual-Constructive Training Roadmap based on the Fleet Live-Virtual-Constructive Training Capability Requirement document developed in 2013. This document provides further detail, scope, and specificity to the necessary system-of-systems capabilities required to best enable Fleet readiness and force generation in the most efficient and effective manner. - Conducted the Fleet Training Integration Panel (FTIP). The FTIP provides a venue for the Fleet Training stakeholders (Fleet Command, Numbered Fleet Commander, Naval Education and Training Command, OPNAV Resource Sponsors, SYSCOMs, etc.) to come together and discuss strategy, plans, and programs for the Navy Training Enterprise.					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015		
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*	**Project (Number/Name)** 2222 / *Modeling & Simulation*		

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
- Facilitated a 3-day workshop for the Fleet Training Integration Panel (FTIP) Executive Steering Committee (ESC) - Advisory Group. The ESC recommended forwarding the following issues to the Flag FTIP: Fleet training recommendations to fulfill the CUSFF,CPF Commanders' Intent; Budget Estimate Submission impact to Fleet training; Carrier Tactical Operations Center, Tactical Support Center training way ahead; Fleet Integrated Synthetic Training Roadmaps; Readiness Kill Chain analysis of Ballistic Missile Defense Fleet Synthetic Training at Sea; and the Fleet Battle Experiment plan for the future. During the subsequent brief to COMSEVENTHFLT N7, RDML Grady added the Cruiser Destroyer requirements for Visit, Board, Seizure, and Search (VBSS), and the COMSEVENTHFLT brief on "Silent Banshee" as topics for the Flag FTIP. - Developed the Fleet Training Investment Priorities Working Group briefings. The Numbered Fleet Command brief is designed to solicit their respective theater warfare area priorities. The Training Provider brief is designed to solicit the Type Commanders and Centers of Excellence assessment of their respective training capability in academic, synthetic and live training. Inputs will be used to develop recommended training prioritization for POM16. Research, Development, and Acquisition Integrated Direct Support (RDA IDS) - Provide innovative M&S enterprise solutions to emulate the Battlespaces of the future for Integrated and Interoperable SoS War-fighting Capability Assessment, Analysis, RDT&E, and Training. Improve the way we do business using M&S as a key enabler to improve support of our programs, identify critical gaps, shortfalls, and make "every last dollar count". - Conducted multiple M&S Forums across the Navy System Commands to coordinate, advise, inform, advocate, and implement M&S plans, strategies, goals, objectives and activities across the M&S acquisition, testing and experimentation communities. USMC Integrated Direct Support (USMC IDS) - Re-scoped the Marine Corps Modeling & Simulation Management Office (MCMSMO) with input from Integrated Process Teams and M&S authorities in the Marine Corps. Update to the Marine Corps Order 5200.28A that will ultimately sharpen MCMSMO's relevance to future M&S issues. - Increased the number of billets for Marine M&S officers to nearly 20 (8825 MOS) - Supported Marine Corps University in its use of commercial game technology for the education of lieutenant colonels and colonels at the War College. Naval Postgraduate School Modeling, Virtual Environments, and Simulation Institute (NPS MOVES)					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*	**Project (Number/Name)** 2222 / *Modeling & Simulation*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
- Ensures NMSO research priorities, faculty core competencies, and student's subject matter expertise, interests and abilities are aligned to provide the military relevant M&S research. It helps ensure thesis research extends and leverages the appropriate science and technology to address DoD-relevant problems producing the highest quality research and practical cost-effective solutions. Additionally, this project aligns MOVES faculty research themes to these same DoD requirements. - Provides Officers with postgraduate M&S education to fill billet requirements throughout DoD. *FY 2015 Plans:* - Continue FY14 efforts. - Coordinate with Naval Systems Commands and other solution providers to ensure the required system-of-systems training capability is delivered across the system life-cycle to enable effective Fleet training in an integrated live and synthetic training venue. Examples of mission areas, capabilities that require an integrated venue to effectively train are Navy Integrated Fire Control - Counter Air (NIFC-CA) and Anti-Access, Area Denial (A2AD). - Continue to research expanded use of commercial game technology as a cost saving measure and to speed development in M&S education and training *FY 2016 Base Plans:* - Continue FY15 efforts *FY 2016 OCO Plans:* N/A					
Title: COMMUNITY EXPERIMENTS and PROTOTYPES	1.217	0.951	0.684	-	0.684
Articles:	-	-	-	-	-
Description: This activity conducts experiments and prototypes aimed at determining the feasibility and applicability of proposed standards or technical approaches to Navy M&S, and investigate Service-unique requirements for standards or guidance. Individual efforts focus on developing or evaluating approaches to optimize training, assessments and acquisition functional,mission objectives through more efficient development and use of M&S. This activity develops methodologies and standards that will result in model and data reusability and interoperability through the formulation of a technical framework. These standards support the full range of architecture and engineering design requirements across the Navy. This activity also supports Fleet exercises and experiments through the application of distributed simulations across a wide variety of warfighting and supporting communities. Specifically, it develops and integrates appropriate M&S into Fleet Synthetic Training (FST), and develops simulation efforts to test and evolve the standards for models, interfaces, and data.					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*	**Project (Number/Name)** 2222 / *Modeling & Simulation*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
It supports development of tools necessary to enable the seamless access and use of operationally relevant M&S products to support Navy training, warfare assessments and acquisition requirements. ***FY 2014 Accomplishments:*** Architecture Management Integration Environment (AMIE), Virtual World Standard Interfaces (VWSI) - Establish broad-based application of Enabling Architecture Interoperability Initiative (EAII), Architecture Management Integration Environment (AMIE), and Virtual World Standard Interfaces (VWSI) as Enterprise "Best Business Practices" for rapid support of the warfighter through: Unprecedented collaboration between systems at this stage of acquisition for early assurance of interoperability and identification of integration risks. True reuse of models, simulations, and hardware-in-loop in their native environments. Showcase how these RDA M&S Enterprise Solutions support a rapid and efficient response to warfighter needs through a collaborative and immersive Live, Virtual, and Constructive (LVC) architecture that supports the full life cycle through reuse of cross-SYSCOM,cross-Community labs and facilities over Secure Defense Research and Engineering Network (SDREN). Assess integration of best of breed components such as Dalhgren's Orchestrated Simulation for Modeling, USMC Framework for Assessing Cost and Technology (FACT), NWDC M&S Framework, OSD Engineered Resilient Systems (ERS), Open Unified Technical Framework - OpenUTF, Tactical Operational Software Engineering Environment (TOSEE), Battle Force Tactical Training (BFFT) for potential integration and demonstration. Tactical Operational Software Engineering Environment (TOSEE) - Deliver an initial release of the Tactical Operational Software Engineering Environment (TOSEE) which enables helicopter tactical software to execute on commercial-off-the-shelf (COTS) hardware, increasing the rate, ease at which low cost training devices and simulators can integrate new tactical software capabilities after the software is released to the Fleet. VV&A of Real Time Propagation Loss Model / WAVEQ3D - Completed initial review and assessment of the VV&A of Real Time Propagation Loss Model / WAVEQ3D sonar propagation loss model in order to ascertain its effectiveness, efficiency, and determine its capability to be implemented in low cost commercial off the shelf (COTS) hardware to run in real-time. WAVEQ3D has the potential to significantly improve the representation of underwater sound propagation for simulations that require a lightweight implementation.					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / *Modeling & Simulation Support*	Project (Number/Name) 2222 / *Modeling & Simulation*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
VCE for CPD&T - The Virtual Collaborative Environment for Conducting Project Design & Test (VCE for CPD&T) research effort will provide enhanced systems engineering toolsets and provide design data to improve the productivity of system test and evaluation. - VCE for CPD&T is designed to complement and be integrated with the Framework for Assessing Cost and Technology (FACT) and Architecture Management Integration Environment (AMIE). *FY 2015 Plans:* - VV&A of Real Time Propagation Loss Model / WaveQ3d will progress to prototype / demonstration implementation model in order to validate its effectiveness and efficiency in a simulation infrastructure. *FY 2016 Base Plans:* Continue FY15 efforts. *FY 2016 OCO Plans:* N/A					
Accomplishments/Planned Programs Subtotals	4.932	4.719	4.757	-	4.757

C. Other Program Funding Summary ($ in Millions)
 N/A
Remarks

D. Acquisition Strategy
 This is a non-ACAT program. The focus of the Navy Modeling and Simulation (M&S) Office is to facilitate and enable the efficient use of M&S by minimizing duplication of M&S efforts and maximize the reuse of M&S and data.

E. Performance Metrics
 This program supports efforts to define, develop, and utilize M&S technologies, standards and techniques in DON and joint programs across a wide range of disciplines and technical arenas. As such, performance metrics are specific to individual projects initiated under this program element. Representative examples of performance criteria for M&S support include the following: VV&A of deployed M&S systems to support Fleet and Force missions and assessments; degree of composability and adaptability of system architectures employed M&S systems; ability of M&S systems to replicate and permit recreation of force or system interactions that otherwise would be performed by more labor-intensive or expensive personnel, forces, or elements; degree to which M&S frameworks would permit rapid integration and

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*	**Project (Number/Name)** 2222 / *Modeling & Simulation*

employment of analytic capabilities for the analysis and documentationof warfighter missions, weapons systems or Tactics, Techniques and Procedures (TT&P); and ability od a specific M&S technology or technique to meet the requirements specified in an individual project supported by this program.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015		
Appropriation/Budget Activity 1319 / 7						**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*						**Project (Number/Name)** 2222 / *Modeling & Simulation*		

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**
DoD Support	WR	SPAWAR : Charleston, SC	0.303	0.080	Jul 2014	-		-		-		-	Continuing	Continuing	Continuing
NMSO Director	WR	SPAWAR : Charleston, SC	0.780	0.258	Jan 2014	0.258	Jan 2015	0.263	Jan 2016	-		0.263	-	1.559	-
NMSO Data Archiving Effort	WR	NAVAIR : Pax River, MD	0.295	0.069	Mar 2014	0.069	Mar 2015	0.070	Mar 2016	-		0.070	-	0.503	-
DREN Connectivity	WR	SPAWAR : Charleston, SC	0.022	0.007	Mar 2014	0.007	Mar 2015	0.007	Mar 2016	-		0.007	-	0.043	-
M & S Data Lead	WR	SPAWAR : Charleston, SC	0.350	0.042	Jan 2014	0.105	Jan 2015	0.243	Jan 2016	-		0.243	-	0.740	-
NMSIS Web Presence	WR	SPAWAR : Charleston, SC	0.401	0.165	Jul 2014	0.165	Jan 2015	0.165	Jan 2016	-		0.165	-	0.896	-
VV&A Standards & Support	WR	SPAWAR : Charleston, SC	0.744	0.250	May 2014	0.062	Mar 2015	0.106	Mar 2016	-		0.106	-	1.162	-
Plans & Policies	WR	SPAWAR : Charleston, SC	0.928	0.200	Jul 2014	0.400	Jan 2015	0.400	Jan 2016	-		0.400	-	1.928	-
DON Mission Level Gap Analysis	WR	NAVAIR : Pax River, MD	1.100	-		-		-		-		-	-	1.100	-
M&S Interopeperability Initiative	WR	NAVAIR : Pax River, MD	0.950	-		-		-		-		-	-	0.950	-
M&S Interopeperability Initiative	WR	SPAWAR : Charleston, SC	0.649	-		-		-		-		-	-	0.649	-
Navy Training Test Harness	WR	NAWC TSD : Orlando, FL	0.375	-		-		-		-		-	-	0.375	-
CSP for NTI	WR	NAWC TSD : Olando, FL	0.247	-		-		-		-		-	-	0.247	-
Navy STORM	WR	NAWC : Pax River, MD	0.500	-		-		-		-		-	-	0.500	-
USMC STORM	WR	MCCDC : Qunatico, VA	0.250	-		-		-		-		-	-	0.250	-
M&S Services	WR	SPAWAR : Charleston, SC	0.000	-		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy														Date: February 2015
Appropriation/Budget Activity 1319 / 7							**R-1 Program Element (Number/Name)** PE 0308601N / Modeling & Simulation Support							**Project (Number/Name)** 2222 / Modeling & Simulation

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**
Data Assistant	WR	SPAWAR : Charleston, SC	0.462	0.082	Jan 2014	0.185	Jan 2015	0.189	Jan 2016	-		0.189	-	0.918	-
Navy VV&A Lead	WR	NAVAIR : Pax River, MD	0.000	-		0.214	Oct 2014	0.214	Oct 2015	-		0.214	-	0.428	-
		Subtotal	8.356	1.153		1.465		1.657		-		1.657	-	-	-

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**
RDA POC	WR	NAVAIR : Pax River, MD	0.333	0.329	Jan 2014	0.349	Jan 2015	0.349	Jan 2016	-		0.349	-	1.360	-
RDA IDS (#1&3)	WR	SPAWAR : Charleston, SC	1.086	0.255	Jan 2014	0.215	Jan 2015	0.215	Jan 2016	-		0.215	-	1.771	-
Training IDS (#1)	WR	SPAWAR : Charleston, SC	0.704	0.280	Mar 2014	0.214	Mar 2015	0.214	Mar 2016	-		0.214	-	1.412	-
Training IDS (#2)	WR	SPAWAR : Charleston, SC	0.247	0.251	Jul 2014	0.232	Jan 2015	0.232	Jan 2016	-		0.232	-	0.962	-
Analysis IDS (#1)	WR	SPAWAR : Charleston, SC	0.000	-		-		-		-		-	-	-	-
Analysis IDS (#2)	WR	SPAWAR : Charleston, SC	0.058	-		-		-		-		-	-	0.058	-
IDS Training and Coordination	WR	SPAWAR : Charleston, SC	0.044	-		-		-		-		-	-	0.044	-
USMC IDS	WR	MCCDC : Quantico, VA	0.282	0.138	Jul 2014	0.110	Mar 2015	0.151	Jan 2016	-		0.151	-	0.681	-
MOVES	WR	NPS : Monterrey, CA	2.541	0.704	Jan 2014	0.643	Jan 2015	0.630	Jan 2016	-		0.630	-	4.518	-
RDA M&S Forum	WR	NAVAIR : Pax River, MD	1.125	0.375	Jan 2014	0.375	Jan 2015	0.337	Jan 2016	-		0.337	-	2.212	-
NMSO Technical Support	WR	SPAWAR : Charleston, SC	0.483	-		-		-		-		-	-	0.483	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / *Modeling & Simulation Support*	Project (Number/Name) 2222 / *Modeling & Simulation*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Simulated Shipboard FMVS	WR	NWDC : Norfolk, VA	0.365	-	-	-	-	-	-	-	-	-	-	0.365	-
M&S Officer Postgraduate Ed	WR	SPAWAR : SSC-LANT	0.130	0.230	Jan 2014	0.165	Jan 2015	0.288	Jan 2016	-		0.288	-	0.813	-
Subtotal			7.398	2.562		2.303		2.416		-		2.416	-	14.679	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Need Item Text	C/BA	Not Specified : Not Specified	0.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal			0.000	-		-		-		-		-	-	-	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Standard Interfaces for Virtual World	WR	NAVAIR : Pax River, MD	1.967	0.175	Feb 2014	0.100	Feb 2015	0.100	Feb 2016	-		0.100	-	2.342	-
Architecture Management Integration Environment	WR	NAVAIR : Pax River, MD	1.180	0.448	Feb 2014	0.350	Feb 2015	0.200	Feb 2016	-		0.200	-	2.178	-
Semantic and Structural Metedata Schema	WR	NAVAIR : Pax River, MD	0.562	-	-	-	-	-	-	-	-	-	-	0.562	-
Semantic and Structural Metedata Schema	WR	SPAWAR : Charleston, SC	0.289	-	-	-	-	-	-	-	-	-	-	0.289	-
Tactical Operational Software Environment (TOSEE)	WR	NAVAIR : TSD, Orlando	0.650	-	-	-	-	-	-	-	-	-	-	0.650	-
Cross Cultural Competence in OPS Environment	WR	NAVAIR : TSD, Orlando	0.350	-	-	-	-	-	-	-	-	-	-	0.350	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy													Date: February 2015
Appropriation/Budget Activity 1319 / 7					**R-1 Program Element (Number/Name)** PE 0308601N / *Modeling & Simulation Support*						**Project (Number/Name)** 2222 / *Modeling & Simulation*		

Management Services ($ 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**
Framework for Assessing Cost and Technology (FACT)	WR	MCCDC : Quantico, VA	0.500	-		-		-		-		-	-	0.500	-
Intergrated Air/Missle Defense IAMD	WR	NAVAIR : Pax River, MD	0.000	-		-		-		-		-	-	-	-
Measuring Immersion Training	WR	MCCDC : Quantico, VA	0.000	-		-		-		-		-	-	-	-
VVA of Real Time Propagation Loss Model	WR	ONR : Arlington, VA	0.000	0.294	Feb 2014	0.216	Feb 2015	-		-		-	-	0.510	-
Navy M&S Education Program	WR	NAVAIR : Pax River, MD	0.000	-		-		-		-		-	-	-	-
Sensor Federate	WR	ONR : Pax River, MD	0.000	-		-		-		-		-	-	-	-
Contracting Language for M&S	WR	NAVAIR : Pax River, MD	0.000	-		-		-		-		-	-	-	-
VCE for CPD&T	MIPR	WHS : Arlington, VA	0.000	0.300	Mar 2014	-		-		-		-	-	0.300	-
Navy VV&A Lead	WR	NAVAIR : Pax River, MD	0.000	-		-		-		-		-	-	-	-
LVC Training Enviroment Tech Advisor	WR	NAVSEA JHU : Wash. DC	0.000	-		0.285	Jan 2015	0.288	Jan 2016	-		0.288	-	0.573	-
Human Anatomy Motion Tracking & Display	WR	MARCORSYSCOM : Arlington, VA	0.000	-		-		0.096	Jan 2016	-		0.096	-	0.096	-
Subtotal			5.498	1.217		0.951		0.684		-		0.684	-	8.350	-

	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	21.252	4.932		4.719		4.757		-		4.757	-	-	-

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2016 Navy		**Date:** February 2015
Appropriation/Budget Activity 1319 *I* 7	**R-1 Program Element (Number/Name)** PE 0308601N *I Modeling & Simulation Support*	**Project (Number/Name)** 2222 *I Modeling & Simulation*

Proj 2222

2016OSD - 0308601N - 2222

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 *I* 7	**R-1 Program Element (Number/Name)** PE 0308601N *I Modeling & Simulation Support*	**Project (Number/Name)** 2222 *I Modeling & Simulation*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2222				
Incorporate Best Practices in Contracting in DON	4	2014	4	2016
Publish Contracting Best Practices Guide	4	2014	4	2015
Change Culture through Education, Outreach and Training	1	2015	4	2018
Host Summit for Face to Face Workshop on Issues and Reuse	1	2015	4	2018
Incorporate Learning courses in SYSCOM Workforce Education	1	2015	4	2018
Coordinate across DON& other Services/DoD to develop a Support Plan	1	2015	3	2015
Establish draft MSSP Policy among the Services/DoD	2	2015	3	2016
Draft a Common Digital Environment for (and other) social efforts	1	2015	3	2018
Coordinate quarterly Fleet Training Integration Panels	1	2015	1	2018
Plan Quarterly Fleet Training Requirements Management Group	1	2015	3	2018
Develop Forums across all the Communities	1	2015	1	2015
JBUS AIME Integration to fix future LVC training integration issues	1	2015	1	2016
Aegis, Development Environment_AIME integration	1	2015	2	2016
Integrate NICAP and PEO IWS Portal, knowledge retention and discovery	3	2015	4	2016