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<b>Exhibit R-2, RDT&amp;E Budget Item Justification: FY 2018 Navy</b>	<b>Date: May 2017</b>
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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>					<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	265.396	77.895	97.066	152.977	-	152.977	168.639	153.435	121.673	77.296	Continuing	Continuing
2901.: <i>AAUSN IT</i>	26.147	20.374	15.177	17.530	-	17.530	31.673	24.250	4.579	4.633	Continuing	Continuing
2903: <i>NAVAIR IT</i>	3.159	6.530	5.332	10.915	-	10.915	6.131	6.017	5.479	2.394	Continuing	Continuing
2904: <i>NAVSEA IT</i>	138.399	16.827	30.879	64.233	-	64.233	52.136	36.501	41.739	23.989	Continuing	Continuing
2905.: <i>BUPERS IT</i>	45.011	12.879	29.664	52.957	-	52.957	65.959	74.545	59.118	35.310	Continuing	Continuing
3167: <i>Joint Technical Data Integration (JTDI)</i>	24.122	6.093	5.514	2.533	-	2.533	4.748	4.534	4.034	4.113	Continuing	Continuing
3185: <i>Joint Airlift Information System (JALIS)</i>	1.370	0.328	0.329	0.348	-	0.348	0.357	0.364	0.371	0.378	Continuing	Continuing
9406: <i>Maintenance Data Warehouse</i>	27.188	11.002	10.171	4.461	-	4.461	7.635	7.224	6.353	6.479	Continuing	Continuing
9999: <i>Congressional Adds</i>	0.000	3.862	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.862

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

2901 AAUSN IT

DEPARTMENT OF NAVY TASKING RECORDS AND CONSOLIDATED KNOWLEDGE ENTERPRISE REPOSITORY (DoN TRACKER)  
 Department of the Navy Tasking, Records and Consolidated Knowledge Enterprise Repository (DON TRACKER - formerly known as Enterprise Records and Task Management (ERTM)) is a single, auditable, compliant Records and Task Management process, implemented uniformly across all DON Divisions and Commands, and administered by DON/AA, to enable efficient and effective execution of Records Management (RM) and Task Management (TM) policy in compliance with statute.

ELECTRONIC PROCUREMENT SYSTEM (ePS)

FY18 funding increase supports Product Demonstration and Evaluation (PD&E) which was added to the ePS deployment strategy as a risk reduction methodology. The addition of PD&E has caused the scheduled award of the option to the single solution provider to shift 17 months to the right. ePS will award the PD&E multi-award contract in Fiscal Year (FY) 2018, moving the contract award of the option to the single solution provider to FY 2019.

ePS provides the Department of the Navy Solution for Electronic Contract Writing replacing the existing Standard Procurement System (SPS) and DoN Integrated Contracting Environment (DICE) capabilities and deficiencies. ePS aligns Contract Writing System (CWS) with Financial Improvement Audit Readiness requirements mandated by Congress and the Department of Navy's goal for an auditable link between financial management and contract writing system. It supports strategic sourcing and seamless exchange of data in addition to evolving to meet changing requirements. The improved capabilities will meet emerging data standards

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Procurement Data Standards/Procurement Request Data Standards (PDS/PRDS), in addition to complying with Office of the Secretary of Defense (OSD) Clause Logic Service. ePS meets the intent of the National Defense Authorization Act of 2013 by providing an electronic means to award contracts.		
<b>NMCI ENTERPRISE SERVICE TOOLS (NEST)</b>  The NEST is comprised of the NMCI Enterprise Tool (NET) and Requirements to Award Tool (RAPT) user interfaces, which enables the consumption of services from NMCI IT service contracts. RAPT manages the requirements approval process via workflows and stores associated contract documentation. NET serves as the sole customer interface to the order-to-payment process for NMCI. NEST and its associated interfaces manage the lifecycle for NMCI IT services.		
<b>DONAA IT</b>  The Modernization Initiative includes multiple projects with RDT&E requirements: Multiple Threat Alert Center (MTAC), Data Modernization & Analytical Tools, Knowledge Network (K-Net), Consolidated Law Enforcement Operations Center (CLEOC), and Data Modernization of the Secretariat Automated Resources Management Information System (SARMIS). RDTEN funding will optimize DONAA's capability to make necessary improvements to various Secretariat systems. This modernization will ensure compliance with continued financial emerging requirements. Enhancement of financial auditability will be in compliance with DOD security system requirements.		
<b>MULTIPLE THREAT ALERT CENTER (MTAC)</b> The Post-Cole Secretary of the Navy Anti-terrorism/Force Protection Task Force identified the need for NCIS to enhance the Multiple Threat Alert Center (MTAC). The MTAC provides key anti-terrorism/force protection products in response to Fleet tasking and is critical to Fleet protection during current Overseas Contingency Operations (OCO). This project provides funding for the development of an IT system to track the movement of NCIS special agents deployed in advance of DoN in-transit units. The ability to track and communicate with these agents is necessary in order to forward threat data to those forward deployed agents and to task them to respond to emerging threats. Funding is required for equipment and contractor support to modify COTS software.		
<b>DATA MODERNIZATION &amp; ANALYTICAL TOOLS</b> NCIS data collection, filtering, and analysis infrastructure is unable to handle the increased flow of terrorism investigative and threat reporting of the Post 9/11 era. NCIS must revitalize its infrastructure and its data and investigation management capabilities to effectively counter current terrorist threats. The three main components of this portfolio investment are data modernization, knowledge management, and investigation management.		
<b>KNOWLEDGE NETWORK (K-Net)</b> K-Net is a Data Modernization & analytical tool being developed and soon deployed that greatly enhances NCIS's technological arsenal. K-Net implements an integrated NCIS approach for identifying, capturing, evaluating, retrieving, and sharing all of NCIS's knowledge and expertise. To that end, K-Net is a knowledge management system that improves NCIS's ability to search, analyze, fuse, and distribute both national intelligence and law enforcement information. The envisioned end state for K-Net is a secure, intuitive, web environment that is the one stop shop where applications, data, and tools are easily accessible to all of NCIS users to effectively and securely fulfill their mission regardless of when and where they operate.		

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<p>CONSOLIDATED LAW ENFORCEMENT OPERATIONS CENTER (CLEOC)  The Naval Criminal Investigative Service (NCIS) enhancement of CLEOC will enable meeting Law Enforcement (LE) reporting requirements, satisfy Congressional mandates for the Defense Incident-Based Reporting System (DIBRS) and improve functionality across the Naval criminal justice community.</p> <p>DEPARTMENT OF THE NAVY CRIMINAL JUSTICE INFORMATION SYSTEM (DONCJIS)  The Naval Criminal Investigative Service (NCIS) is the Executive Agent (EA) for the Department of the Navy Criminal Justice Information System (DONCJIS). This system provides a cradle to grave criminal justice and law enforcement information system. The system enables multiple communities within the DON to share criminal justice and law enforcement information. Funding is required for contractor support to develop, test, train, deploy and implement this application.</p> <p>2903 NAVAIR IT</p> <p>JOINT CONFIGURATION MANAGEMENT INFORMATION SYSTEM (JCMIS)  The Joint Configuration Management Information System (JCMIS) Program is Department of Defense (DoD) standard software system for complete and integrated configuration management (CM) of weapon systems from acquisition to disposal. JCMIS efficiently manages all product structure data, including complex interrelationship between assemblies and subassemblies, technical documentation and the parts that comprise the item. JCMIS is designed to manage and control configuration data to support the DoD business processes. Accurate, complete and accessible configuration data is critical to the successful operations of DoD weapon systems or tracked assets. Mission readiness and operational capabilities are enhanced by JCMIS, as instant consistent integrated configuration data is readily available to operators, maintainers and logistics personnel. This system is a CM tool available DoD wide to support all potential customers. JCMIS provides users with a common database infrastructure to ensure compatibility, quality, and consistency of CM processes and provides configuration managers and analysts the validated CM information necessary for accurate maintenance, spare procurements, reliability and safety analysis, and mission readiness. Funding is budgeted to support the services of re-hosting and testing of COTS upgrades to ensure objective performance of JCMIS is achieved.</p> <p>TASK FORCE CYBER AWAKENING (TFCA)  Cyber Warfare consists of many different aspects to include sabotage of our weapon systems, networks as well as enablement of missions. Nation and non-nation state actors are acquiring and employing more advanced cyber-attacks in order to exploit our networks and aviation systems challenging our technological edge. The threats and capabilities are real and range from exploiting capabilities, overloading weapons systems and logistics supply chains, to jamming signals or taking control of weapons systems. We must defend against adversarial cyber-attacks while contributing to the exploitation of cyber warfare capabilities.</p> <p>To meet these challenges and address the Chief of Naval Operations priorities and tasking, these research and development efforts are specifically focused on Naval Air Systems Command weapon or control systems and programs to ensure warfighting effectiveness as part of integrated / multi-platform kill chains. These research and development efforts will strengthen our cyber posture by developing research, development, test and evaluation capabilities and solutions to deter, detect, and mitigate cyber threats and safeguard classified naval aviation systems and platforms from "cradle to grave." These solutions will be integrated into the acquisition of weapons systems to enhance security, increase lethality, and improve resiliency in the expected operational environments. Our weapon or control systems are unique in the</p>		

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<p>aforementioned environments and mission, but also in the presence of numerous non-traditional access points and trusted cyber relationships required for operational environments.</p> <p>DIGITAL THREAD (DT)            Digital Thread (DT) is digital process integration with complete, secure and authoritative data. DT integrates the product life cycle, and includes all the processes that are needed to design, develop, test, produce, and support a product. By connecting these processes, and using a standardized set of digital tools and data, the DT accelerates the product development cycle and lowers costs and for support and new capability integration.</p> <p>2904 NAVSEA IT</p> <p>This program includes the funding for Information Technology (IT) support at NAVSEA for the development, support, and sustainment of maritime shore maintenance and includes multiple modernization efforts to insure effectiveness of Fleet maintenance systems as part of the current Navy Maritime Maintenance Enterprise Solution (NMMES). These efforts include retirement and/or replacement of costly legacy systems, transition planning and systems engineering for integration with national and enterprise interim and future solutions. These efforts align with direction to insure that proposed interim solutions support a planned, single maintenance solution end state, as well as direction to align with data center consolidation plans proposed across the FYDP. It includes the modernization of Naval Shipyard and Regional Maintenance Centers' Maintenance, Repair and Overhaul (MRO) production tools. This includes modifications/enhancements to Shipyard IT systems, such as Advanced Industrial Management (AIM); Project Scheduling and Sequencing (PSS); Workload and Performance Systems; the COST and MAT systems, and other solutions such as the Electronic Technical Working Document (eTWD) Initiative. The goal of PMO-IT is to provide modernization, migration and consolidation of obsolete legacy systems to the next generation of centrally hosted tools supporting Fleet Maintenance and national systems for the Navy.</p> <p>2905 BUPERS IT</p> <p>The increase in the FY18 profile for 2905 stems from the decision to invest in programs that directly align with the Sailor 2025 vision. The 2905 increases are tied directly to the Sailor 2025 pillars calling for modernization of the personnel system and transition to ready, relevant learning. The most significant spike stems from NSIPS, which in FY18 will complete its acquisition processes and award its first task order for Pay Modernization (PayMod), and also includes an add in support of the DoD Force of the Future for a Navy AC/RC Permeability Solution to; (1) extend the reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs. The rest of the increase is largely due to the increase in the Learning Management System - Distance Learning (LMS-DL) program to transition the Collaborative Learning Environment Product from a limited prototype implementation to full production capability.</p> <p>BILLET BASED DISTRIBUTION (BBD)</p>		

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<p>BBD increase in FY18 is a Sailor 2025 initiative aimed at modernizing distribution and order writing systems. The effort begins functional work and follow-on development to collapse NROWS, NMCMPs, EAIS, and OAIS into a single distribution system. The objective of BBD is to increase personnel readiness, improve fit and provide clear visibility to the impact on mission readiness at the billet level. BBD will facilitate maximizing the contributions of every member of the Navy workforce by delivering competency-based career paths.</p>		
<p>LEARNING MANAGEMENT SYSTEM - DISTANCE LEARNING (LMS-DL)</p>		
<p>LMS-DL increase in FY18 is a Sailor 2025 initiative supporting ready relevant learning, with a focus to align Navy learning, create a career learning continuum, and leverage evolving technologies to expand learning solutions when and where the Sailor needs them. The collaborative learning environment (CLE) is a key component within the learning IT strategy that leverages Commercial-Off-the-Shelf products to integrate the CLE with intelligent tutors, a multi-purpose reconfigurable training system (MRTS), electronic classrooms (ECR), trainers and labs, interactive multimedia instruction (IMI), instructors, and a virtual environment. The increase in FY18 is to transition the pilot capability from FY17 into a production capability.</p>		
<p>As part of Sailor 2025 holistic IT approach, ready &amp; relevant learning requires the development of a Learning Management System that permits:</p>		
<p>(1) Mobile &amp; flexible delivery of modular training to the sailor (2) Synchronization of work requirements with learning modules to ensure proper training is delivered at the right time</p>		
<p>This funding will develop and deploy new technologies for modularized training in fleet concentration areas to support the continuum of learning. This includes:</p>		
<p>(1) Development, modification or replacement of the current LMS platform (2) Integration of Manpower, Personnel, Training and Education (MPTE) management tools to support end to end business processes (billet information, assignment, distribution, student management, learning management, personnel information, advancement) that will be impacted by changes to learning delivery and career profiles via Progressive NECs (e.g. TFMMS,NSIPS, Learning Assessment System, Navy Training Management Planning System) .</p>		
<p>The Learning Management tools and supporting IT infrastructure must also be modified to support management of training into the Delayed Entry Program, the growing use of demonstration videos, social media, student and learning management for MPTE mobility efforts, gaming and simulation technology as it is brought on-line.</p>		
<p>LMS-DL will also introduce the Learning Continuum Pilot, a risk reduction effort that develops proof of concept alignment of sailor training requirements with learning content delivery.</p>		
<p>MY NAVY PORTAL (MNP)</p>		

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<p>MNP is building an integrated web portal that consolidates the Navy's Human Resource portals, knowledge, and applications into a single and simplified user experience. Through the use of a multi-phased development approach, MNP will provide an intuitive self-service single point of entry for Sailors to view and manage their personnel and career information. MNP provides Active and Reserve Sailors with personalized interactive experiences and allows access to relevant information including learning content, human resource applications, and career business processes.</p> <p>MNP Phase 2C continues to mature eleven Career Life Event (CLE) capabilities. Phase 2C continues requirements refinement work with key Fleet stakeholders and integrates or develops the identified CLEs.</p> <p>My Navy Portal may address previously deferred requirements from prior phases. Should MNP exceed schedule/delivery, planned follow-on phases or activities may be accelerated.</p> <p><b>ANALYSIS OF ALTERNATIVE/ECONOMIC ANALYSIS (AOA)</b>  The Navy will conduct multiple AoAs to analyze viable alternatives in order to determine the most efficient and effective solution to address the modernization of elements of the Navy's Manpower, Personnel, Training and Education (MPTE) IT portfolio. AOA will assess operational effectiveness, suitability, and costs of non-tactical systems to meet emerging capability requirements.</p> <p><b>NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)</b>  NSIPS increase in FY18 is aligned with the Sailor 2025 initiative to modernize personnel systems. The substantial increase is attributed to the planned start of the Pay Modernization (PayMod) program, and also includes an add in support of the DoD Force of the Future for a Navy AC/RC Permeability Solution to; (1) extend the reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs.</p> <p>NSIPS facilitates the Navy's portion of the largest Federal PeopleSoft Human Resources implementation, providing the Navy with a systematic modernization of our web-based pay and personnel system - both afloat and ashore. NSIPS collects, validates, processes and transfers the data necessary to ensure accurate and timely pay and maintenance of personnel records.</p> <p>Pay Modernization (Pay Mod) will integrate the PeopleSoft Global Payroll solution with Navy Standard Integrated Personnel System (NSIPS) to provide an integrated Personnel and Pay solution for the Navy. Pay Mod will improve efficiency by eliminating current Defense Joint Military Pay System (DJMS) workarounds, improve business intelligence by providing real-time access to pay data, and improve auditability by having authoritative data in an integrated personnel and pay capability. Pay Mod is a solution to make more efficient use of military member time and funding for pay of active and reserve personnel.</p> <p>Determining the retirement eligibility for Navy active duty service with both Active Component (AC) and Reserve Component (RC) time is complicated by the fact the computation has to be performed manually and requires consultation with numerous data sources. Current solutions make it difficult to account for who is on active</p>		

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<p>duty at any point in time and time-in-grade calculations for Selected Reserve (SELRES) personnel. Limitations in both payroll processes and systems induce a lapse between orders to effect change in status. SELRES personnel gained to Active Duty Special Work (ADSW) incur a delay in pay stemming from issues with loss/gain timing in systems. SELRES personnel who re-enlist while on active duty orders are not retained when transitioning back to SELRES, and there is no retention of active duty Career History for Reserve personnel. The Navy AC/RC Permeability Solution will be included in the Manpower, Personnel, Training and Education (MPTE) Transformation effort to leverage data in the authoritative data environment, modernize personnel and pay systems, and provide modern commercial solutions to; (1) extend the reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs.</p> <p>NAVY MANPOWER REQUIREMENTS SYSTEM (NMRS)</p> <p>NMRS will modernize obsolete software and incorporate a wide array of enhancements (expanded capabilities based on sponsor's approved Functional Requirements Document) of new capabilities in support of Manpower Requirement efficiencies. Should NMRS deliver early, planned follow-on phases may be accelerated.</p> <p>NMRS is a key tool which Navy manpower managers rely on to set, implement, and execute manpower requirements. Recommendations for improving data bases and the Navy's mobilization capacity rely on NMRS to make strength determinations. The planned effort also includes technical evaluation and integration of products produced by the Simulation Toolset for Analysis of Mission, Personnel and Systems (STAMPS) program.</p> <p>RISK MANAGEMENT INFORMATION (RMI)</p> <p>The RMI program is a consolidation of DON risk management requirements into a single Program of Record (POR) to provide modern safety reporting and management capabilities for both active and reserve Navy and Marine Corps commands. RMI enables agile responses to business rule changes, automation of routine actions, improved data integrity, and facilitates self-service for organizations and individuals.</p> <p>RMI is being developed in three increments of capabilities: Streamlined Incident Reporting (SIR), Safety Program Management (SPM), and Analysis &amp; Dissemination (A&amp;D). A fourth requirement, Single Point of Entry (SPOE), will be accomplished as part of the development of the three RMI increments since each will be built on the same Commercial Off The Shelf (COTS) platform. Each of these capabilities will be acquired as individual Abbreviated Acquisition Programs using an incremental development approach for reengineered business processes, while consolidating five legacy systems [Web-Enabled Safety System (WESS), Enterprise Safety Application Management Systems (ESAMS), Portsmouth Occupational Accident and Illness Reporting System (POAIRS), Medical Mishap and Compensation (MMAC), and Injury Tracker (INJTRK)].</p> <p>AUTHORITATIVE DATA ENVIRONMENT (ADE)</p> <p>ADE increase in FY18 is a Sailor 2025 initiative aimed at transitioning the current project based ADE into a full enterprise solution that is based on modern IT service models and cloud hosting technology. This specific increase will advance data analytics and visualization capabilities, and add common platform services in a big data</p>		

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<p>environment that is consistent with private industry. This acceleration toward a true Navy-wide personnel authoritative data environment is a transformational increase in capability for decision support and improving personnel readiness.</p> <p>As part of the Sailor 2025 strategy, the Chief of Naval Personnel has directed an acceleration of expansion and development of the ADE and improvements in making MPTE data more available to commanders, sailors, business owners and MPTE and fleet executive leadership. The ADE provides infrastructure, operations and sustainment of the Navy MPTE Authoritative Data Warehouse(ADW), enterprise service bus, and web support services.</p> <p>The capabilities delivered by this funding includes the following:</p> <ul style="list-style-type: none"> <li>(1) Completed "golden record" expansion increments             <ul style="list-style-type: none"> <li>- Data quality</li> <li>- Governance</li> <li>- Security</li> <li>- Data standardization</li> </ul> </li> <li>(2) Increased capabilities for MPTE supply chain &amp; business operations             <ul style="list-style-type: none"> <li>- Data discovery</li> <li>- Advanced visualization tools</li> <li>- Predictive analytics</li> </ul> </li> <li>(3) Enhanced architecture to support unstructured data and "big data" analytics</li> <li>(4) Improved support for future identity management &amp; access for mobile device capability</li> </ul> <p><b>APPLICANT RELATIONSHIP MANAGEMENT (ARM)</b>          ARM provides automated support of the management of recruiting information. ARM enables all levels of recruiting to have real-time access to timely and accurate information. ARM provides managers with decision-making support by consolidating Navy Recruiting Command (NRC) legacy application systems. The complete ARM Systems Dev/Mod effort will incorporate biometrics and paperless implementation across all lines of business systems to gain additional efficiencies.</p> <p>Included in the ARM program is the Self Service Accessions Application (SSAA). Phase II of this effort will build the SSAA application into the ARM system. SSAA is a mobile device-based software application. SSAA supports a change in the NRC business processes from a recruiter-driven business model to an applicant self-service business model. This "app" will be used by applicants to collaborate with recruiters anytime &amp; anywhere to more efficiently and effectively navigate the recruiting process.</p> <p><b>3167 JOINT TECHNICAL DATA INTEGRATION (JTDI)</b></p> <p>Funding supports the evaluation, testing and integration to develop a JTDI Commercial-Off-The-Shelf (COTS) solution for installation on a Carrier (CV) and Amphibious Assault (L) class ships and up to 104 Navy/Marine Corp aviation activities. JTDI is a digital technical data access, delivery and local O&amp;I level library management toolset and telemaintenance collaboration process enabler. It improves accuracy and timeliness of technical manual and other technical data delivery and minimizes</p>		

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<p>the Fleet's library management burden. JTDI reduces maintenance work hours with saving Return on Investment (ROI) of 2.5:1. It facilitates the transition of the Joint Distance Support and Response (JDSR) Advanced Concept Technology Demonstration (ACTD) for telemaintenance and provides for process efficiencies to support ongoing Aviation Fleet Technical Representative reductions.</p> <p>MARINE AVIATION LOGISTICS ENTERPRISE INFORMATION TECHNOLOGY (MAL-EIT)  Funding supports the evaluation, development, testing and integration of software and hardware solutions across all US Marine Corps Aviation activities to be used in the planning and execution of geographically distributed, expeditionary Aviation Logistics (AVLOG) chains in support of deployed USMC Air Combat Element operations. The Marine Aviation Logistics Enterprise Information Technology (MAL-EIT) Program is one of four programs contained within the Marine Aviation Logistics Support Program (MALSP) modernization program known as MALSP II. Legacy MALSP is nearly 25 years old and grossly inadequate in IT capability to meet the informational, planning, and C2 needs of a dynamic, geographically distributed nodal AVLOG system. MAL-EIT is a Defense Business System Abbreviated Acquisition Program that will develop and deliver the required IT capability necessary to eliminate the IT related gaps existing in the legacy MALSP.</p> <p>3185 JOINT AIR LOGISTIC INFORMATION SYSTEM (JALIS)  JALIS is an operational scheduling and aircraft management system that facilitates real-time data analysis. JALIS is a critical element in the management of DoD air logistics assets. JALIS allows:</p> <ol style="list-style-type: none"> <li>(1) DoD Service Personnel to submit airlift requirements for DoD Personnel and cargo</li> <li>(2) Air Logistics Flying Units to communicate their aircraft availability in a real-time graphic display</li> <li>(3) Designated Scheduling Organizations to compare airlift requirements with available aircraft</li> <li>(4) Designated Scheduling Organizations to create mission assignments</li> </ol> <p>JALIS informs applicable users of mission details and modifications by using a combination of system displays and email updates. JALIS is geographically distributed and has a user base in excess of 4,000 members. JALIS facilitates the movement of thousands of DoD Personnel and tons of cargo annually in support of the following:</p> <ol style="list-style-type: none"> <li>(1) Navy Unique Fleet Essential Airlift</li> <li>(2) Army's Operational Support Airlift Agency (OSAA)</li> <li>(3) United States Transportation Command (USTRANSCOM)</li> <li>(4) United States Marine Corps (USMC)</li> </ol> <p>9406 MAINTENANCE DATA WAREHOUSE  Aviation Data Warehouse Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE) - The development of the DECKPLATE program is the next generation data warehouse for aircraft maintenance, flight, and usage data. It provides a web-based interface to a single source of information currently being stored in multiple Naval Aviation Logistics Data Analysis systems. Through the use of analysis, query, and reporting tools the user has the capabilities</p>		

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<p>to effectively obtain readiness data in a near real-time environment, as well as providing historical data for long range planning, trend analysis and records analysis, records reconstruction, and compliance with technical directives. DECKPLATE supports the mission of the warfighter who requires a single source of near real-time aviation data in which to base critical readiness decisions. This requires collecting data from authoritative sources into a data warehouse. Because the warfighter only needs to access one database, the time consuming task of collecting various pieces of data from various sources will be reduced and ultimately eliminated. This improves data quality because it reduces the possibility of two systems providing identical data elements, but slightly different data. Data availability is improved through continuous near real-time feeds from the data sources, giving the warfighter the most current information to base decisions. In addition, this also accomplishes a reduction in legacy systems mandated by Office of the Chief of Naval Operations. DECKPLATE manages total inventory for two major categories of assets, Aircraft and Engine/Propulsion Systems/Modules (EPSMs). DECKPLATE is comprised of the Aircraft Inventory and Readiness Reporting (DECK-AIRRS) and the Engine Transaction Reporting (DECK-ETR) subsystems which provide the complete lifecycle for aircraft and Engine/ Propulsion System/Modules (EPSMs). Both DECK-ETR and DECK-AIRRS are undergoing a FISCAM assessment (FY16) and audit (FY17) and are undergoing review for designation as the Accountable Property System of Record (APSR) for aircraft and uninstalled engines.</p> <p>CONDITION BASED MAINTENANCE PLUS (CBM+)</p> <p>Through automated analysis and decision making processes, the CBM+ Initiative provides Naval Aviation Enterprise with common enabling capabilities which deliver timely data-driven decisional information to optimize aircraft availability and materiel readiness by incorporating health and usage leading indicators into the failure mode mitigation process, enabling the Warfighter to more efficiently meet mission requirements. The CBM+ Initiative increases readiness by streamlining maintenance processes, provide the sustainment base with timely, actionable logistics data not previously available, and enable engineers and acquisition professionals to support system improvements based on CBM+ acquired data results. CBM+ provides the enabling solutions needed to extend the life of current and new acquisition aircraft, realizing savings from reductions in field (organizational and intermediate) maintenance actions, reduced functional check flight hours, mishap mitigation, and reduced parts usage.</p> <p>INTEGRATED LOGISTICS SUPPORT MANAGEMENT SYSTEM (ILSMS)</p> <p>The development of the ILSMS program is the next generation analytical tool set for Unit, Aircraft, Engines, Component Readiness and Cost metrics. It will be a web-based tool that will provide the user with validated and aggregated data. ILSMS provides analysts with the means to pull data on type/model/series (TMS) readiness, run detailed component analysis, manage aircraft life by bureau number, request lists of TMSs' top degraders, model the impacts of degraded components on readiness and cost, generate production scenarios, and manage the incorporation of technical directives. ILSMS institutionalizes a data analysis process that is repeatable and establishes a common understanding of readiness and cost degraders among its users. This is also the foundation for working with provider organizations to establish metrics, actionable mitigation plans and milestones. ILSMS will give its users a one stop shop to proactively identify readiness and cost degraders quickly with a consistent methodology across all TMS thus providing a standardized tool to assist programs in reducing total ownership costs.</p> <p>9999 CONGRESSIONAL ADD</p> <p>Congressional Add (Project C286): The enterprise Product Lifecycle Management (ePLM) Integrated Decision Environment (IDE) will serve as a central knowledge repository for process and product evolution and history. It will promote integration, data exchange, and analysis among all business users and information systems that will interact with any Weapon System Configuration Item (CI) during its lifecycle. ePLM IDE enables product support providers and the warfighter to maintain weapon</p>		

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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 5: System Development & Demonstration (SDD)			R-1 Program Element (Number/Name) PE 0605013N I Information Technology Development				
systems in the most ready condition at the lowest lifecycle cost by linking readiness and cost impacts with every decision. The ePLM IDE will effectively address each weapon system program requirement for an IDE as stated in the Defense Acquisition Guidebook.							
B. Program Change Summary (\$ in Millions)			FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget			85.816	97.066	111.160	-	111.160
Current President's Budget			77.895	97.066	152.977	-	152.977
Total Adjustments			-7.921	0.000	41.817	-	41.817
• Congressional General Reductions			-	-			
• Congressional Directed Reductions			-	-			
• Congressional Rescissions			-	-			
• Congressional Adds			-	-			
• Congressional Directed Transfers			-	-			
• Reprogrammings			-5.080	0.000			
• SBIR/STTR Transfer			-2.842	0.000			
• Program Adjustments			0.000	0.000	41.412	-	41.412
• Rate/Misc Adjustments			0.001	0.000	0.405	-	0.405
Congressional Add Details (\$ in Millions, and Includes General Reductions)						FY 2016	FY 2017
Project: 9999: Congressional Adds							
Congressional Add: Information Technology Development Increase						3.862	0.000
Congressional Add Subtotals for Project: 9999						3.862	0.000
Congressional Add Totals for all Projects						3.862	0.000
Change Summary Explanation							
Technical: Not applicable.							
Schedule Changes: 3167, Marine Aviation Logistics Enterprise Information Technology (MAL-EIT) Schedule verbiage updated to depict MAL-EIT releases as 1.0, 2.0, and 3.0 vice Increments 1, 2, and 3 to conform to current developer naming conventions							
Schedule Changes: 9406, Integrated Logistics Support Management System, (ILSMS)- System Development: Software Development: V2.2.2 ILSMS Power and Propulsion Software Development will change from 1st-2nd Qtr of FY15 to 4th Qtr FY16 through 2nd Qtr of FY17. Test and Evaluation: ILSMS V2.2.2 Power and Propulsion Test and Evaluation will change from 2nd Qtr FY15 to 4th Qtr FY16 through 2nd Qtr of FY17, and Deliveries will change from 4th Qtr FY16 to 3rd Qtr FY17. The previous contract was terminated due to performance issues. A new contractor has been identified and efforts can now begin the 4th Quarter of FY16.							

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<p>Funding increases addressed within individual projects.</p> <p>The FY 2018 funding request was reduced by \$22.030 million to account for the availability of prior year execution balances.</p>		

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 2901. / <i>AAUSN IT</i>			
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
2901.: <i>AAUSN IT</i>	26.147	20.374	15.177	17.530	-	17.530	31.673	24.250	4.579	4.633	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

DATA MODERNIZATION & ANALYTICAL TOOLS: The Secretariat Automated Resources Management Information System (SARMIS) is a financial tool used by the Secretariat to formulate, execute, and report changes to organizational resources. DON/AA employs this system to support financial and resource decisions for the entire Secretariat. SARMIS produces budget materials and analysis, as well as generating allocation data. In addition, SARMIS contains organizational manpower data that assists our leaders in making necessary personnel decisions for the Secretariat. This RDTE funding will optimize DON/AA's capability to make necessary modernization to various Secretariat systems in order to ensure compliance with FIAR and other financial emerging requirements of a clean financial statement. This modernization will provide transparency and enhance the level of financial auditability in the system. RDTE funding is required to support systems technology upgrades and DOD security system requirements.

**CORB IT System Modernization:**

The CAPS-II programs is used by the Navy Clemency and Parole Board (NCPB) and the Combat Related Special Compensation Board(CRSC) to process and adjudicate approximately 3,200 cases per year. The current system defects have resulted in additional man-hours and reduced reporting functionality. This has created a longer manual process, and hinders adequate and accurate statistical data from being collected or retrieved. RDTE funding will be used to modernize the CAPS-II program in order to meet current IT standards and enhance system capabilities. The system is currently non-serviceable and is not aligned with NCPB and CRSC current mission requirements.

**DON TRACKER**

Department of the Navy Tasking, Records and Consolidated Knowledge Enterprise Repository (DON TRACKER - formerly known as Enterprise Records and Task Management (ERTM)) is a single, auditable, compliant Records and Task Management process, implemented uniformly across all DON Divisions and Commands, and administered by DON/AA, to enable efficient and effective execution of Records Management (RM) and Task Management (TM) policy in compliance with statute.

**ELECTRONIC PROCUREMENT SYSTEM (ePS)**

The electronic Procurement System (ePS) is the Department of the Navy's (DON) End-to-End (E2E) Contract Writing System (CWS). It will provide the Navy and Marine Corps contracting community with a full contract writing management capability and facilitate integration with federally mandated systems, DON financial systems, and industry. The ePS will utilize Department of Defense (DoD) standards and support auditability. The ePS will address existing CWS challenges including outdated architecture, limited capabilities, scalability concerns, and existing legacy systems.

Full deployment of the ePS ensures compliance of the DON's contracting abilities with the following legislative mandates: the writing and management of all contracts must now occur in congressionally approved computer systems (Section 862 of the National Defense Authorization Act (NDAA) of 2013); the central management and

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
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oversight of all DoD business (10 U.S. Code (U.S.C.) Section 2222); and all contracting actions must be fully auditable and traceable (Section 1003 of the NDAA 2010 & Office of the Secretary of Defense (OSD) Financial Improvement and Audit Readiness (FIAR) Guidance).						
The ePS will use DoD data exchange capabilities (e.g.; Procurement Data Standard (PDS) and Purchase Request Data Standard (PRDS)) in order to achieve standardized data interoperability with external systems. The Navy Enterprise Service Bus (NESB) serves as the hub to relay procurement data to various finance and other systems of record, such as Navy Enterprise Resource Planning (Navy ERP), Standard Accounting & Reporting System (STARS) and Standard Accounting Budgeting & Reporting System (SABRS).						
In FY18, the Program will continue systems engineering and interface mapping efforts, as well as support of software hosting and the start of the Limited Deployment (LD) phase of the ePS program. The Product Demonstration and Evaluation (PD&E) process will also be initiated to evaluate performance and usability of EPS product.						
The result of successful ePS implementation will be a contracting workforce that issues accurate and timely contracts in a standard format that comply with all DoD/ Federal laws, regulations, and policies.						
NMCI ENTERPRISE SERVICE TOOLS SET The NMCI Enterprise Service Tools (NEST) is the NMCI IT service management system that supports the Navy IT service lifecycle business workflow. The NEST currently is comprised of two government owned tools, the NMCI Enterprise Tool (NET) and the Requirements to Award Process Tool (RAPT), which enables and manages the business workflow. NET is a custom .NET application that has been built and maintained by the DON to support ordering of IT services. RAPT manages the requirements approval process and stores supporting documentation for previously unpriced line items. RAPT provides NET with relevant identification information for the new orderable solution, which supports the creation of orderable services. NET serves as the single point of entry for lifecycle management of IT services on the NMCI network.						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: CORB IT System Moderization		0.500	0.500	0.000	0.000	0.000
Articles:		-	-	-	-	-
Description: The Secretariat has numerous requirements to combat cyber security and improve efficiencies. Funding will be used to support the mission of the Combat Related Special Compenstation (CRSC) and the Navy Clemency and Parole Board (NCBP). Modernization of the CAPS-II program will enable the CRSC and NCBP to meet current IT standards and improve their record processing cycle.						
FY 2016 Accomplishments: Funding will support the modernization of the current system used by Navy Clemency and Parole Board(NCPB) and the Combat Related Special Compensation Board(CRSC) to process and adjudicate approximately 3,200						

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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
cases per year. Fulfilling this requirement aligns with the Department of Navy's objective to "Drive Innovation Enterprise Transformation" which will maximize Information Technology Efficiencies.						
FY 2017 Plans: Continue FY2016 modernization effort.						
FY 2018 Base Plans: N/A						
FY 2018 OCO Plans: N/A						
Title: Modernization - Secretariat		0.683	1.180	0.703	0.000	0.703
Articles:		-	-	-	-	-
Description: The Secretariat has numerous requirements to modernize its financial management system and portal applications. SARMIS will be updated from older technologies to include new FIAR and web based requirements. These upgrades are necessary to continue functionality of the system and ensures timely, accurate and efficient operation of the Secretariat's mission.						
FY 2016 Accomplishments: Continue with SARMIS modernization and design within the Navy Secretariat.						
FY 2017 Plans: Continue with FY2016 modernization and design effort.						
FY 2018 Base Plans: Continue with FY2017 modernization and design effort.						
FY 2018 OCO Plans: N/A						
Title: Department of the Navy Tasking, Records and Consolidated Knowledge Enterprise Repository (DON TRACKER)		0.422	0.595	0.465	0.000	0.465
Articles:		-	-	-	-	-
Description: The DON TRACKER will streamline DON's electronic records and task management processes under a consolidated enterprise solution and will enable the DON to capture unstructured and structured electronic records, seamlessly manage tasking across and within all commands, ensure uniform metadata						

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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
of content, provide workflow-enabled reporting, and aid in compliance with all applicable laws, policies, and regulations. In addition, this will eliminate duplicative capabilities and result in cost-saving opportunities and efficiencies. The DON TRACKER solution will be extended to all authorized, shore and afloat-based users across the DON enterprise, including the Continental United States (CONUS) and Outside the Continental United States (OCONUS) communities.  <b>FY 2016 Accomplishments:</b> 1. Updated program to incorporate enhancements 2. Initiated development for SIPR component 3. Continued DON TRACKER development & operational testing (a) Tested software enhancements (b) Conducted operator testing for user validation 4. Further prioritize user needs and identify capability shortfalls  <b>FY 2017 Plans:</b> 1. Continue Development of SIPR Component (a) Test and Fix Software (b) Conduct User Evaluation Testing 2. Provide Software Updates 3. Commence Development to Provide Afloat Capability  <b>FY 2018 Base Plans:</b> 1. Conduct Production Readiness Review for DON TRACKER v1.4 2. Begin Deployment  <b>FY 2018 OCO Plans:</b> N/A						
Title: NMCI Enterprise Service Tools (NEST)  <b>Articles:</b>		0.000 -	0.000 -	5.200 -	0.000 -	5.200 -
FY 2016 Accomplishments: N/A  FY 2017 Plans:						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2901. / AAUSN IT	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A					
<b>FY 2018 Base Plans:</b> - Conduct configuration and development of NET Release 3.X to attain the following capabilities: integration with Defense Logistics Agency (DLA) and Defense Finance Accounting System (DFAS) via Global Exchange (GEX), invoicing and delivery request, and ONE-NET integration. - Conduct middleware analysis & implementation. - Conduct Central Data Repository (CDR) Integration Analysis & Implementation. - Conduct Integrated Solution Framework (ISF) Tools Requirement Analysis & Implementation. - Conduct DFAS Auditability Analysis & Implementation (Compliance and Continuous Improvement). - Reconfiguration of the NET for compliance with DFAS audit requirements, reconfiguration of the hosting environment from a service hosted enclave to a government approved hosting facility.					
<b>FY 2018 OCO Plans:</b> N/A					
<b>Title:</b> Electronic Procurement System (ePS)		18.769	12.902	11.162	0.000
<b>Articles:</b>		-	-	-	-
<b>Description:</b> Funding required for the Electronic Procurement System (ePS) to provide support for source selection, configuration, integration, testing, training, deployment and implementation of the system.					
<b>FY 2016 Accomplishments:</b> - Developed and received approval of the Capabilities Requirements Document (CRD), the Systems Engineering Plan (SEP), and the System Requirements Specification (SRS) that supported Gates 3 and 4, which provided Navy Leadership endorsement of the ePS SRS Development approach; endorsement of the ePS Test and Evaluation (T&E) and Sustainment strategies, approval to proceed to the ePS Systems Requirements Review, and endorsement for the program to proceed to the ePS request for proposal (RFP) Gate 5 review. - Began development of the following draft documents in support of Gate 5 review / RFP Release Decision: Cost Analysis Requirements Document (CARD), Acquisition Strategy/Acquisition Plan (AS/AP), Program Protection Plan (PPP) / Cyber Security Strategy (CSS), Test & Evaluation Master Plan (TEMP), Life-Cycle Sustainment Plan (LCSP), and the RFP Package. - Began data mapping efforts for Navy Enterprise Service Bus (NESB) interface to send committed Purchase Requisition (PR) data from Navy Enterprise Resource Planning (ERP) to ePS. - Received the NCCA Independent Cost Assessment (ICA) memo.					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017				
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development	Project (Number/Name) 2901. / AAUSN IT				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>- Held Industry Day and created technical data repository (TDR) to share documentation with Industry</p> <p><b>FY 2017 Plans:</b></p> <p>- Continued NESB data mapping efforts required for ePS Limited Deployment, including sending committed Purchase Requisition (PR) data from additional financial systems (Navy ERP, IMPS, PR Builder, and Standard Accounting, Budgeting and Reporting System (SABRS)) to ePS; and sending award data from ePS to Navy financial systems (Navy ERP, IMPS and SABRS).</p> <p>- Drafted Memorandums of Agreement (MOA) between ePS and all interfacing financial systems.</p> <p>- Developed requirements for Navy ERP programming changes required for interfacing with ePS in support of NESB efforts.</p> <p>- Received required approvals at RFP release for the Acquisition Strategy / Acquisition Plan (AS/AP), the Test and Evaluation Plan (TEMP), the Life-Cycle Sustainment Plan (LCSP), the Program Protection Plan (PPP) and Cybersecurity Strategy (CS) and the Initial Economic Analysis (EA).</p> <p>- Updated the Systems Requirements Specification (SRS)</p> <p>- Completed the Navy Gate 5, indicating approval of the ePS RFP package and agreement on product affordability</p> <p>- Completed the DAB Planning Meeting, OIPT, DAB Readiness Meeting, and the Development RFP Release Decision DAB.</p> <p>- The Acquisition Strategy/Acquisition Plan (AS/AP) and the Acquisition Decision Memorandum (ADM) were signed by USD(AT&amp;L).</p> <p>- Held additional Industry Day to share strategy changes with Industry.</p> <p>- Submitted the RFP Package for Navy Peer Review</p> <p>- Support for RFP Release and Source Selection proposal evaluations.</p> <p>- Continue system engineering efforts to include interface documentation coordination and development, refinement and elaboration of architectural artifacts.</p> <p>- Update required documents for Authority to Proceed (ATP) decision and contract award.</p> <p>- Begin Navy Enterprise Resource Planning (ERP) programming changes required for interfacing with ePS.</p> <p>- Complete the Navy Peer Review inclusive of comment adjudication and alignment with cybersecurity processes</p> <p>- Continue NESB data mapping efforts required for ePS Limited Deployment.</p> <p>- Set up government provided hosting environment for Product Development and Evaluation (PD&amp;E) so that contractors are able to install, configure, and demonstrate their products once awards are made.</p> <p><b>FY 2018 Base Plans:</b></p>							

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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					
<div>- Complete Source Selection so that contractor proposals can be evaluated and award can be made, and award the contract to the contractor selected by the Source Selection Authority to begin limited deployment.</div> <div>- Continue NESB data mapping efforts required for ePS Limited Deployment, including sending committed Purchase Requisition (PR) data from additional financial systems (IMPS, PR Builder, and Standard Accounting, Budgeting and Reporting System (SABRS)) to the Electronic Procurement System (ePS); and sending award data from ePS to Navy financial systems (Navy ERP, IMPS and SABRS).</div> <div>- Continue implementation of Navy Enterprise Resource Planning (ERP) programming changes required for interfacing with ePS.</div> <div>- Continue Systems Engineering efforts including updating required documentation, updating architecture models, preparing for cyber security requirements, and developing required testing plans.</div> <div>- Data cleansing and logistics analysis in preparation for data migration from legacy systems into the new ePS solution to reduce the risk of data migration errors.</div> <div>- Continue Project Management efforts including source selection, implementation preparation, scheduling, configuration management, and updating required documentation.</div> <div>- Provide licensing for the required Architecture Tool.</div> <div>- Conduct the beginning of Limited Deployment (LD) for ePS including integration efforts, business process re-engineering, and system configuration.</div> <div>FY 2018 OCO Plans: N/A</div>											
Accomplishments/Planned Programs Subtotals		20.374	15.177	17.530	0.000	17.530					
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• 8106: Command Support Equipment	0.000	3.875	3.658	-	3.658	4.408	6.063	0.000	0.000	0.000	18.004
Remarks											
D. Acquisition Strategy											
The NMCI Acquisition strategy aims to shift the DON to a multi-vendor, multi-contract environment that aims to provide government-owned IT service lifecycle management. The NEST tools are currently being updated to incorporate enhancements that will enable to new environment.											
MODERNIZATION - Contract will be awarded under a competitive, all source, RFP. NO ACAT											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
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<p>The selected contractor must have knowledge of the existing information systems pertinent to the task. They must also have the corporate experience and a staff of knowledgeable personnel to provide the required services. The task will be monitored by the Contracting Officer Representative (COR), who reviews technical data submissions, system deliverables, and invoices to ensure acceptable contractor performance and scheduled deliveries.</p> <p>CORB IT System Modernization: Contract will be awarded under a competitive, all source, RFP. NO ACAT</p> <p>DON TRACKER</p> <p>As a general rule, IT development programs use an agile software development methodology therefore milestones, tasks and phases are often conducted in parallel vice sequentially.</p> <p>This planned acquisition will be a Cost-Plus-Fixed-Fee (CPFF) single award Indefinite Delivery Indefinite Quantity (IDIQ) contract to a selected Vendor in support of sustainment, software development, legacy data transfer, and additional fielding of the DON TRACKER application.</p> <p>ELECTRONIC PROCUREMENT SYSTEM (ePS) The ePS program intends to award a 10-year hybrid contract to a single System Integrator (SI). The SI (Prime) will provide required software licenses and required activities for program management, maintenance, systems engineering, design and interface development, testing, deployment, training, and support documentation. This includes all efforts through Full Deployment (FD) and continued sustainment support during the 10-year period of performance.</p> <p>The ePS will leverage Commercial Off-the-Shelf (COTS) products and capabilities, and is anticipated to consist of three components to achieve full end-to-end capability: 1) a COTS Contract Writing System (CWS) solution; 2) a COTS middleware interfacing capability, known as an Enterprise Service Bus (ESB); and 3) Gap-closure methodologies (e.g.; Business Process Management (BPM) tools, Business Process Re-Engineering (BPR), COTS updates, or a secondary COTS solution).</p> <p>The ePS acquisition strategy has been revised to move the risk reduction Product Demonstration and Evaluation (PD&amp;E) phase into source selection rather than after award. This updated strategy adjusted the anticipated award date to Q4 FY18, and is expected to reduce the risk associated with gap-closure and establish user buy-in and ownership of the solution.</p> <p>NMCI ENTERPRISE SERVICE TOOLS (NEST)</p> <p><b><u>E. Performance Metrics</u></b> Program cost, schedule and performance are measured using a systematic approach with approved programs and methods. The results of these measurements are presented to DON/AA management through a governance review board process on a regular basis to determine program effectiveness and to provide new direction as needed to ensure the efficient use of</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
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<p>resources. To monitor and manage the execution of projects in addition to other IT investments, management and governance boards review metrics and key performance indicators that are outlined in various plans. Some of the plans that expound on the data captured to attribute to performance measures include: Project Management Plan, Risk Mitigation Plan, Communication Plan, Procurement Plan, and a Certification &amp; Accreditation Plan.</p> <p>Other specific performance measurements include:</p> <ol style="list-style-type: none"> <li>1. Actual versus planned project scope</li> <li>2. Actual versus planned time schedule</li> <li>3. Actual versus planned costs</li> <li>4. Actual versus planned risks and the mitigation of those risks</li> </ol> <p>CORB IT System Modernization specific performance measurements include:</p> <ol style="list-style-type: none"> <li>1. CRSC processes and adjudicates approximately 2,600 cases per year</li> <li>2. NCPB processes and adjudicates approximately 800 cases per year</li> </ol> <p>DON TRACKER</p> <p>PII-100% of flagged PII shall be protected</p> <p>Automation-95% of requests will be processed using automated system without a manual workaround</p> <p>Operational Availability-99% of transactions shall be resolved correctly per System Accuracy definition</p> <p>ELECTRONIC PROCUREMENT SYSTEM (ePS):</p> <p>Reliability:</p> <p>(Threshold) Mean Time Between Failure (MTBF) &gt;= 720 Hours (Hrs)</p> <p>(Objective) Mean Time Between Failure (MTBF) &gt;= 1080 Hrs</p> <p>Operational Availability:</p> <p>(Threshold) = 96% Including Scheduled Downtime</p> <p>(Objective) = 99.5% Discounting Scheduled Downtime</p> <p>Maintainability:</p> <p>(Threshold) Mean Time to Repair (MTTR) &lt;= 6.7 Hrs</p> <p>(Objective) Mean Time to Repair (MTTR) &lt;= 2.7 Hrs</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
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Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Software Development (Modernization)	C/FP	CACI : Chantilly, VA	4.555	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Contractor Engineering Support (DONCJIS)	SS/T&M	Interimage Inc. : Manassas, VA	1.272	0.000		0.000		0.000		-		0.000	0.000	1.272	-
Software Development	C/FP	Dell Marketing LP : Round Rock, TX	1.938	0.000		0.000		0.000		-		0.000	0.000	1.938	-
Software Development (CLEOC)	C/FP	NSA : Various	0.500	0.000		0.000		0.000		-		0.000	0.000	0.500	-
Software Development (EPS)	TBD	NA : NA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
SYSTEM Moderization	WR	SPAWAYSYSCEAN ATLANTIC : CHARLESTON, SC	1.151	0.683	Oct 2015	1.180	Oct 2016	0.703	Oct 2017	-		0.703	0.000	3.717	-
CORB SYSTEM Modernization	WR	SPAWASYSCEAN : CHARLESTON, SC	0.000	0.500	Oct 2015	0.500	Oct 2016	0.000		-		0.000	0.000	1.000	-
DON TRACKER Engineering	C/CPFF	Progeny : Manassas, VA	4.750	0.422	Feb 2016	0.595	Feb 2017	0.465	Feb 2018	-		0.465	Continuing	Continuing	Continuing
ePS Data Transition Strategy	Various	NAVSUP BSC : Mechanicsburg, PA	1.502	0.000		0.100	Nov 2016	0.000		-		0.000	0.000	1.602	-
ePS NESB Data Mapping	C/FP	BOOZ ALLEN : Tysons Corner, Va	0.400	5.000	Dec 2015	1.629	Dec 2016	0.452	Dec 2017	-		0.452	Continuing	Continuing	Continuing
NESB Configuration and Validation	C/FP	SPAWAR : San Diego, CA	0.000	7.371	Apr 2016	0.000		0.000		-		0.000	0.000	7.371	-
Contract Writing System	C/FP	SPAWAR : San Diego, CA	0.000	0.000		0.000		4.000	Jul 2018	-		4.000	Continuing	Continuing	Continuing
NERP Interface Analysis	Various	SPAWAR : San Diego, CA	0.000	0.000		1.150	Mar 2017	1.000	Mar 2018	-		1.000	0.000	2.150	-
Subtotal			16.068	13.976		5.154		6.620		-		6.620	-	-	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: FY 2018 Navy</b>												<b>Date: May 2017</b>			
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>						<b>Project (Number/Name)</b> 2901. / <i>AAUSN IT</i>			
<b>Support (\$ in Millions)</b>				<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Acquisition Documentation (ePS)	C/IDIQ	MAGA : Washington, DC	1.734	2.000	Dec 2015	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Cost Analysis (ePS)	C/CPFF	SPAWAR : San Diego, CA	0.641	0.404	Oct 2015	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering (ePS)	Various	SPAWAR : San Diego, CA/ Charleston, SC	3.986	3.478	Oct 2015	5.564	Oct 2016	2.020	Oct 2017	-		2.020	Continuing	Continuing	Continuing
Logistics Analysis (ePS)	Various	SSC LANT : Charleston, SC	0.788	0.416	Oct 2015	0.227	Oct 2016	0.230	Oct 2017	-		0.230	Continuing	Continuing	Continuing
Requirements Validation (EPS) - Small Business set aside	C/FFP	SPAWAR : San Diego, CA	1.500	0.000		0.000		0.000		-		0.000	0.000	1.500	-
Project Management/ Implementation	Various	Enterprise Horizon : San Francisco, CA	0.000	0.000		1.756	Nov 2016	1.780	Nov 2017	-		1.780	0.000	3.536	-
Engineering Services - Small Business set aside	Various	Bowhead : Alexandria, VA	0.000	0.000		1.561	Jun 2017	1.580	Jun 2018	-		1.580	0.000	3.141	-
DAU Support	Various	SPAWAR : San Diego, CA	0.000	0.000		0.000	Nov 2016	0.000		-		0.000	0.000	0.000	-
Testing and Validation/ Architecture Tool	Various	NSWC Dahlgren : Dahlgren, VA	0.000	0.000		0.050	Nov 2016	0.050	Nov 2017	-		0.050	0.000	0.100	-
System Engineering Support	C/CPFF	Deloitte : Rosslyn, VA	0.000	0.000		0.000		5.200	Nov 2017	-		5.200	Continuing	Continuing	Continuing
<b>Subtotal</b>			8.649	6.298		9.158		10.860		-		10.860	-	-	-
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Testing Preparations (ePS)	C/FFP	SSC LANT : Charleston, SC	0.800	0.000		0.000		0.000		-		0.000	0.000	0.800	-
Software Hosting	C/FP	SPAWAR : San Diego, CA	0.000	0.000		0.815	Sep 2017	0.000		-		0.000	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017				
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development				Project (Number/Name) 2901. / AAUSN IT						
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	
Testing	C/FP	OPTEVFOR : NORFOLK,VA	0.130	0.100	Jun 2016	0.050	Jun 2017	0.050	Jun 2018	-		0.050	Continuing	Continuing	Continuing	
Subtotal			0.930	0.100		0.865		0.050		-		0.050	-	-	-	
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	
ePS Program Support	C/FFP	PEO EIS : Arlington, VA	0.500	0.000		0.000		0.000		-		0.000	0.000	0.500	-	
Subtotal			0.500	0.000		0.000		0.000		-		0.000	0.000	0.500	-	
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			26.147	20.374		15.177		17.530		-		17.530	-	-	-	
Remarks																

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2901. / AAUSN IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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 2901.L12</b>																												
Technology Development (Modernization)																												
System Development & Demonstration (Modernization)																												
Production & Deployment (Modernization)																												
Operations & Support (Modernization)																												
System Development (Secretariat)																												
System Testing (Secretariat)																												
Deployment (Secretariat)																												
DON TRACKER System Enhancement Contract Award / Modification																												
DON TRACKER Development																												
DON TRACKER Critical Design Review																												
DON TRACKER Application Test Readiness Review																												
DON TRACKER User Acceptance Functional Testing																												
DON TRACKER Production Readiness Review																												
DON TRACKER Enhancement Deployment																												
ePS / Navy Enterprise Service Bus (NESB) Data Mapping, Validation and Testing																												
ePS / Request for Proposal (RFP)																												
ePS / Source Selection																												
ePS / Award the ePS contract																												
ePS / Conduct Limited Deployment																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy																							Date: May 2017					
Appropriation/Budget Activity										R-1 Program Element (Number/Name)										Project (Number/Name)								
1319 / 5										PE 0605013N / Information Technology Development										2901. / AAUSN IT								
	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
ePS / Deploy System Releases																												
ePS / Conduct Susatinment of System																												
NEST/DBS Upgrades																												

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Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology  
Development

## Project (Number/Name)

2901. / AAUSN IT

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 2901.L12</b>				
Technology Development (Modernization)	3	2018	4	2019
System Development & Demonstration (Modernization)	3	2018	4	2019
Production & Deployment (Modernization)	1	2016	4	2016
Operations & Support (Modernization)	1	2016	4	2016
System Development (Secretariat)	1	2018	1	2019
System Testing (Secretariat)	1	2016	1	2017
Deployment (Secretariat)	1	2016	1	2017
DON TRACKER System Enhancement Contract Award / Modification	2	2016	2	2016
DON TRACKER Development	2	2016	3	2018
DON TRACKER Critical Design Review	3	2016	4	2016
DON TRACKER Application Test Readiness Review	4	2016	1	2017
DON TRACKER User Acceptance Functional Testing	1	2017	2	2017
DON TRACKER Production Readiness Review	2	2018	3	2018
DON TRACKER Enhancement Deployment	4	2018	1	2019
ePS / Navy Enterprise Service Bus (NESB) Data Mapping, Validation and Testing	2	2016	3	2018
ePS / Request for Proposal (RFP)	2	2017	3	2017
ePS / Source Selection	3	2017	3	2018
ePS / Award the ePS contract	3	2018	4	2018
ePS / Conduct Limited Deployment	4	2018	1	2020
ePS / Deploy System Releases	1	2020	2	2022
ePS / Conduct Sustainment of System	2	2022	4	2022

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy				Date: May 2017	
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2901. / AAUSN IT	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
NEST/DBS Upgrades		1	2018	4	2020

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 2903 / NAVAIR IT			
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
2903: NAVAIR IT	3.159	6.530	5.332	10.915	-	10.915	6.131	6.017	5.479	2.394	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

\$5.8M increase in FY18 for Task Force Cyber Awakening to close funding gap for identified capabilities investments to assess, verify, validate, and mitigate cyber vulnerabilities with tailored solutions for aviation weapon systems programs and improve cyber security at control system entry points to enable mission assurance in cyber contested environments.

The Joint Configuration Management Information System (JCMIS): The JCMIS Program is DoD's standard software system for complete and integrated Configuration Management (CM) of weapon systems from acquisition to disposal. JCMIS efficiently manages all product structure data, including complex interrelationship between assemblies and subassemblies, technical documentation and the parts that comprise the item. JCMIS is designed to manage and control configuration data to support the DoD business processes. Accurate, complete and accessible configuration data is critical to the successful operations of DoD weapon systems or tracked assets. Mission readiness and operational capabilities are enhanced by JCMIS, as instant consistent integrated configuration data is readily available to operators, maintainers and logistics personnel. This system is a CM tool available DoD wide to support all potential customers. JCMIS provides users with a common database infrastructure to ensure compatibility, quality, and consistency of CM processes and provides configuration managers and analysts the validated CM information necessary for accurate maintenance, spare procurements, reliability and safety analysis, and mission readiness. Funding is budgeted to support the services of re-hosting and testing of Commercial off-the-shelf (COTS) upgrades to ensure objective performance of JCMIS is achieved. This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

Task Force Cyber Awakening (TFCA)- Cyber Warfare consists of many different aspects to include sabotage of our weapon systems, networks as well as enablement of missions. Nation and non-nation state actors are acquiring and employing more advanced cyber-attacks in order to exploit our networks and aviation systems challenging our technological edge. The threats and capabilities are real and range from exploiting capabilities, overloading weapons systems and logistics supply chains, to jamming signals or taking control of weapons systems. We must defend against adversarial cyber attacks while contributing to the exploitation of cyber warfare capabilities.

To meet these challenges and address the Chief of Naval Operations priorities and tasking, these R&D efforts are specifically focused on Naval Air Systems Command weapon or control systems and programs to ensure warfighting effectiveness as part of integrated / multi-platform kill chains. These research and development efforts will strengthen our cyber posture by developing research, development, test and evaluation capabilities and solutions to deter, detect, and mitigate cyber threats and safeguard classified naval aviation systems and platforms from "cradle to grave." These solutions will be integrated into the acquisition of weapons systems to enhance security, increase lethality, and improve resiliency in the expected operational environments. Our weapon or control systems are unique in the aforementioned environments and mission, but also in the presence of numerous non-traditional access points and trusted cyber relationships required for operational environments.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2903 / NAVAIR IT		
Digital Thread - Digital Thread (DT) is digital process integration with complete, secure and authoritative data. DT integrates the product life cycle, and includes all the processes that are needed to design, develop, test, produce, and support a product. By connecting these processes, and using a standardized set of digital tools and data, the DT accelerates the product development cycle and lowers costs and for support and new capability integration.						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: JCMIS Annual Software Release		0.418	0.716	0.624	0.000	0.624
Articles:		-	-	-	-	-
FY 2016 Accomplishments: Re-baseline JCMIS Software to upgrade to latest version of Oracle, incorporate development efforts associated with COTS obsolescence and evolve an open standard interface to other systems.						
FY 2017 Plans: Re-baseline of JCMIS software to upgrade to latest versions of Cold Fusion and Oracle. Incorporate development efforts associated with COTS obsolescence and evolve an open standard interface to other systems. Maintain system compliance with Section 508 requirements. Constantly evolving threats, new vulnerabilities, and changing DON Cyber Security policy require increasingly strong efforts on behalf of JCMIS to ensure that system software and architecture remain secure. Continue generation of solutions and mitigation plans for any vulnerabilities identified during system assured compliance assessment solution scans. Continue monitoring for changes and compliance with applicable security technical implementation guided checklists and security content automation protocol results. Compliance with applicable information assurance updates including information assurance vulnerability alert, information assurance vulnerability bulletin, information assurance vulnerability technical, Microsoft, and supporting software updates. Generation of timely and efficient system and/or software solutions to assist with requests that may involve modification/update to system software/architecture.						
FY 2018 Base Plans: Continue development efforts associated with COTS obsolescence and evolve an open standard interface to other systems. Maintain system compliance with Section 508 requirements. Constantly evolving threats, new vulnerabilities, and changing DON Cyber Security policy require increasingly strong efforts on behalf of JCMIS to ensure that system software and architecture remain secure. Continue generation of solutions and mitigation plans for any vulnerabilities identified during system assured compliance assessment solution scans. Continue monitoring for changes and compliance with applicable security technical implementation guided checklists and security content automation protocol results. Compliance with applicable information assurance updates including information assurance vulnerability alert, information assurance vulnerability bulletin, information assurance vulnerability technical, Microsoft, and supporting software updates. Generation						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2903 / NAVAIR IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
of timely and efficient system and/or software solutions to assist with requests that may involve modification/ update to system software/architecture.						
FY 2018 OCO Plans: N/A						
Title: Task Force Cyber Awakening (TFCA)		5.825	4.616	10.291	0.000	10.291
Articles:		-	-	-	-	-
FY 2016 Accomplishments: Develop unique tactical cyber solutions for customized control systems where solutions currently do not exist. Many of the traditional security measures are inappropriate or inadequate for use in control systems due to the presence of real time operating systems, latency sensitivity, and disconnected or intermittent connections to networks. Additionally, many control systems have access vectors, such as maintenance connections or RF apertures that may bypass the layered enterprise defenses typically viewed as the first lines of a layered defense. This R&D effort is a deliberate investment to develop tailored solutions for our control systems and improve the cyber security at control system entry points.						
FY 2017 Plans: Continue development of unique tactical cyber solutions for customized control systems where solutions currently do not exist. Many of the traditional security measures are inappropriate or inadequate for use in control systems due to the presence of real time operating systems, latency sensitivity, and disconnected or intermittent connections to networks. Additionally, many control systems have access vectors, such as maintenance connections or RF apertures that may bypass the layered enterprise defenses typically viewed as the first lines of a layered defense. This R&D effort is a deliberate investment to develop tailored solutions for our control systems and improve the cyber security at control system entry points.						
FY 2018 Base Plans: - Broad Agency Announcement (BAA) new awards / continuation of development/demonstration of cyber security solutions across 8 identified technology areas. - Augmentation and maturation of lab capabilities across multiple NAVAIR sites to conduct Cyber security RDT&E for NAVAIR programs. - Continued development and maturation of new customized tools, methodologies, and procedures for RDT&E of control system interfaces that tie to identified risk assessment capability gaps and emergent threats. This is a direct tie to ability to conduct penetration testing.						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy				<b>Date:</b> May 2017	
<b>Appropriation/Budget Activity</b> 1319 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>		<b>Project (Number/Name)</b> 2903 / <i>NAVAIR IT</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>					
	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<p>- Continued support of emergent FLTCYBERCOM TASKORDs requiring urgent development of customized control systems solutions for identified Fleet risks.</p> <p>- Increased FY18 Capability investment directly supports emergent intelligence, FCC TASKORDs, Blackbeard AAR, NDAA 1647, Aviation Resiliency and OSD DSB study. Without this capability investment the US Navy will continue to be vulnerable to attacks on its non-traditional systems (e.g., aircraft, weapons, radars, ALRE) and will result in significant residual risk to aviation combat systems. Broad Agency Announcements are in place to execute FY18 funding increases.</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>					
<p><b>Title:</b> Digital Thread</p> <p><b>FY 2016 Accomplishments:</b> Develop use cases and Cyber Security architecture assessment completed focused on industrial security approaches used in industry. The cyber security assessment includes prioritized demonstration plans for the Naval Aviation Enterprise Digital Thread environment.</p> <p><b>FY 2017 Plans:</b> N/A</p> <p><b>FY 2018 Base Plans:</b> N/A</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>	<p><b>Articles:</b></p> <p>0.287</p> <p>-</p>	<p>0.000</p> <p>-</p>	<p>0.000</p> <p>-</p>	<p>0.000</p> <p>-</p>	<p>0.000</p> <p>-</p>
<b>Accomplishments/Planned Programs Subtotals</b>	6.530	5.332	10.915	0.000	10.915
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A					
<b>Remarks</b>					
<b>D. Acquisition Strategy</b> The Joint Configuration Management Information System (JCMIS) Program used Joint Logistics Systems Center (JLSC) funds to evolve JCMIS to Software Release 5.0. In June 1998 JCMIS was transferred to the Navy as executive agent and NAVAIR as program manager. Program Budget Decision 401 transferred joint funding					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2903 / <i>NAVAIR IT</i>
<p>from JLSC to NAVAIR to continue evolving JCMIS. The JCMIS Program Manager continues to evolve the program to keep pace with cost, Military Standards, and evolving commercial standards. Various contractors using competitively awarded contracts have supported the program. Currently, Intergraph Corporation is the JCMIS integration contractor selected through a GSA contract.</p> <p>Task Force Cyber Awakening (TFCA) - The TFCA strategy is in 3 concurrent steps:</p> <p>1. Broad Agency Announcements (BAA) for resilient cyber warfare capabilities and control system solutions for NAVAIR Weapon Systems. Draft BAA delineating Naval Research Areas of Interest; Specific Areas of Interest; Technologies Being Sought; Proposal Submission; Proposal Abstracts; Full Proposal; General Information, and Evaluation Criteria.</p> <p>The objective of the BAA is principally to orchestrate germane research and development to fill the gaps in cyber warfare capabilities for Naval Air Systems Command (NAVAIR) weapon systems, i.e., secure weapon systems able to survive and exploit cyber warfare. Areas of interest include but not limited to:</p> <ol style="list-style-type: none"> <li>1) SWaP sensitive cyber resiliency for RTOS and aviation warfare environment</li> <li>2) Access point identification, prioritization and defense</li> <li>3) Cyber-Electronic Warfare convergent capabilities</li> <li>4) Full acquisition cycle cyber security measures</li> <li>5) Cyber test, inspection, incident response and training tools</li> <li>6) Cyber warning systems</li> <li>7) Cyber fault, risk and threat assessment methodologies</li> </ol> <p>2. Stand-up Advanced Cyber Lab (ACL)</p> <p>Achieve capability to respond to cyber incidents, conduct federated avionics penetration tests in support of cyber risk assessments and develop control system solutions for NAVAIR weapon systems and acquisition programs. Stand-up capability to assess BAA solutions. Acquire delineated specialized equipment, software tools, space, power, cooling, and security.</p> <ol style="list-style-type: none"> <li>1) Secure Messaging - Cryptography, Steganography, etc.</li> <li>2) Embedded Operating System Threat Assessment, Software Reverse Engineering, Federated Penetration Testing of Custom Control Systems</li> <li>3) Advanced Anti-tamper, Digital Forensics</li> <li>4) Microelectronics Reverse Engineering</li> <li>5) Capabilities in response to Denial of Service, Precision Direct Attack/ Root Kits, Interdiction / Data in transit and Infrastructure / SCADA attacks.</li> <li>6) Portable Assessment and Test</li> </ol> <p>3. Organic Cyber Solutions for NAVAIR Customized Control Systems</p> <p>Project investigation and development of tools and tailored solutions for our control systems and improve the cyber security at control system entry points will be completed. Areas discovered include but are not limited to:</p> <ol style="list-style-type: none"> <li>1) Intrusion Detection / Prevention Systems (IDS/IPS) for Real Time systems</li> <li>2) Live-CD boot</li> <li>3) Out of Band Monitoring &amp; Authentication</li> </ol>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2903 / <i>NAVAIR IT</i>
<p>4) Weapon System of Systems Architecture tools  5) Avionics Fuzzing  6) Federated Penetration Testing Tool Set &amp; Non-Destructive Inspection Tool  7) Dynamic Network Maneuvering  8) Weapon System Side Channel Analysis</p> <p>Digital Thread - Digital Thread Cyber Security Architecture and Strategy  1) Develop Cyber Security architecture for NAE Digital Thread including detailed demonstration plan  2) Execute cyber security demonstrations for NAE Digital Thread including COMFRC, Logistics IT, PMAs</p> <p><b><u>E. Performance Metrics</u></b></p> <p>Joint Configuration Management Information System (JCMIS) - Milestone C Spiral Development:  1. During the life of the contract verify conformance with agency specific information processing standards and functional requirements. Prior to delivery of enhanced software, demonstrate the operational capability of the system software. Functionality of the software must meet required systems architecture and processing capabilities. All requirements mandated by law or regulation must be 100% compliant. Independent Verification and Validation will be used for testing new releases of software to determine that previous functionality is maintained. Customer satisfaction will be measured through limited validated customer complaints, feedback, and surveys.</p> <p>Task Force Cyber Awakening (TFCA):  1. Establish Broad Agency Announcements (BAA) for Resilient Cyber Warfare Capabilities for Naval Air Systems Command Weapon Systems: Receive responses that address at key areas of interest.  2. Stand-up Advanced Cyber Lab: Operating capability workstations and inter agency task team.  3. Organic Cyber Solutions for NAVAIR Control Systems: Complete all projects.</p> <p>Digital Thread:  During execution of the funding the following will be used to validate the performance:  1) Contract performance to plan and on time delivery of all contract deliverables  2) Completion of NAE Digital Thread environment Standup FY16  3) Execution of NAE Digital Thread Demonstrations  4) Execution of Digital Thread Cyber Security architecture demonstrations</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 2903 / <i>NAVAIR IT</i>					
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Solutions for Cyber Warfare Capabilities for Task Force Cyber Awakening	Various	Various : Various	0.000	4.725	Oct 2015	3.900	Oct 2016	6.650	Oct 2017	-		6.650	0.000	15.275	15.275
Solutions for Digital Thread	Various	Various : Various	0.514	0.100	Jul 2016	0.000		0.000		-		0.000	0.000	0.614	0.614
Subtotal			0.514	4.825		3.900		6.650		-		6.650	0.000	15.889	15.889
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Software Support for Joint Configuration Management Information System (JCMIS)	C/FFP	NAVSUP : Mechanicsburg, PA	1.869	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Software Support for Joint Configuration Management Information System (JCMIS)	C/FFP	Wyle : Lexington Park, MD	0.000	0.313	Mar 2016	0.572	Mar 2017	0.480	Mar 2018	-		0.480	Continuing	Continuing	Continuing
Subtotal			1.869	0.313		0.572		0.480		-		0.480	-	-	-
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Program Management Support for Joint Configuration Management Information System (JCMIS)	WR	NAWCAD : Patuxent River, MD	0.676	0.105	Dec 2015	0.144	Dec 2016	0.147	Dec 2017	-		0.147	Continuing	Continuing	Continuing
Systems Engineering Support for Task Force Cyber Awakening	WR	NAWCAD : Patuxent River, MD	0.000	1.100	Oct 2015	0.716	Oct 2016	3.638	Oct 2017	-		3.638	0.000	5.454	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: FY 2018 Navy</b>												<b>Date:</b> May 2017			
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>						<b>Project (Number/Name)</b> 2903 / <i>NAVAIR IT</i>			

<b>Management Services (\$ in Millions)</b>				<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Systems Engineering Support for Digital Thread	WR	NAWCAD : Patuxent River, MD	0.100	0.187	Jul 2016	0.000		0.000		-		0.000	0.000	0.287	-
<b>Subtotal</b>			0.776	1.392		0.860		3.785		-		3.785	-	-	-

	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	3.159	6.530	5.332	10.915	-	10.915	-	-	-

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

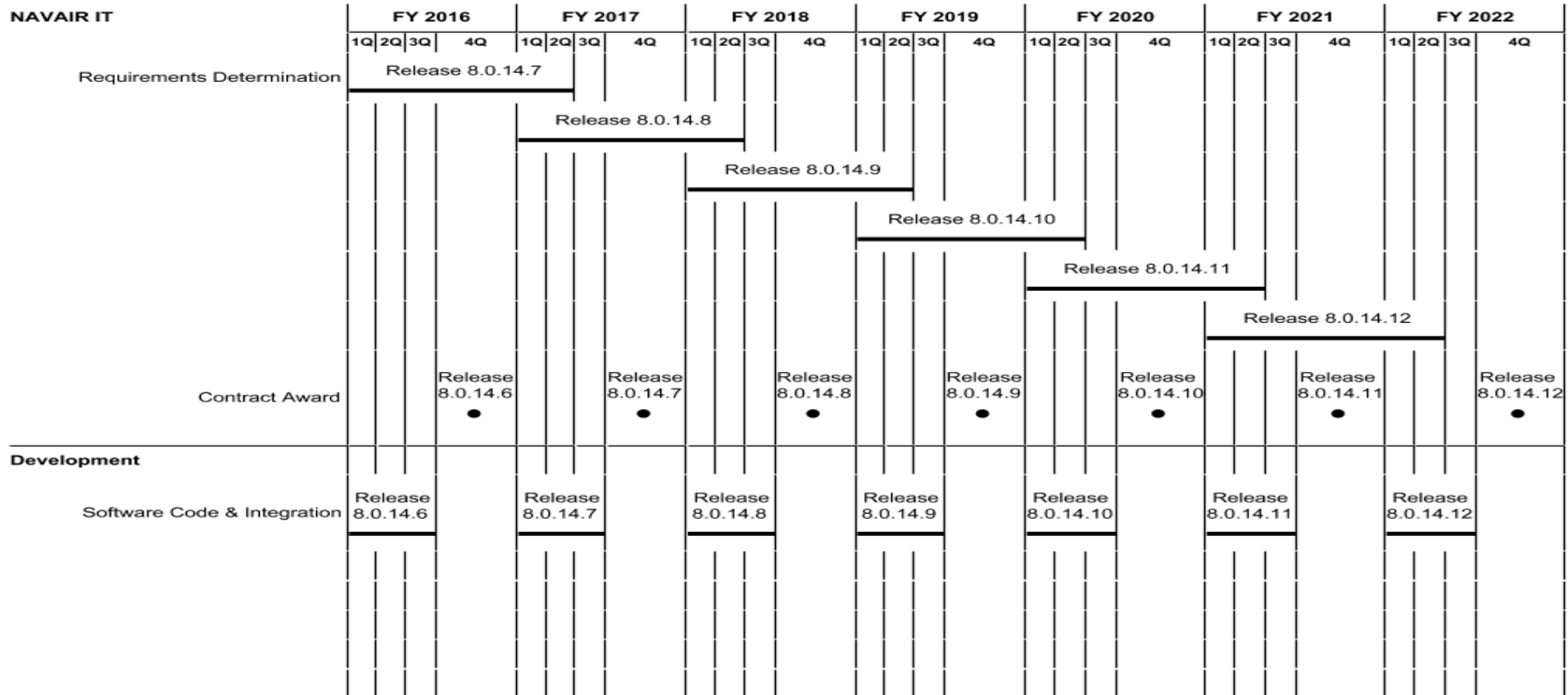
1319 / 5

R-1 Program Element (Number/Name)

PE 0605013N / Information Technology Development

Project (Number/Name)

2903 / NAVAIR IT



2018DON - 0605013N - 2903

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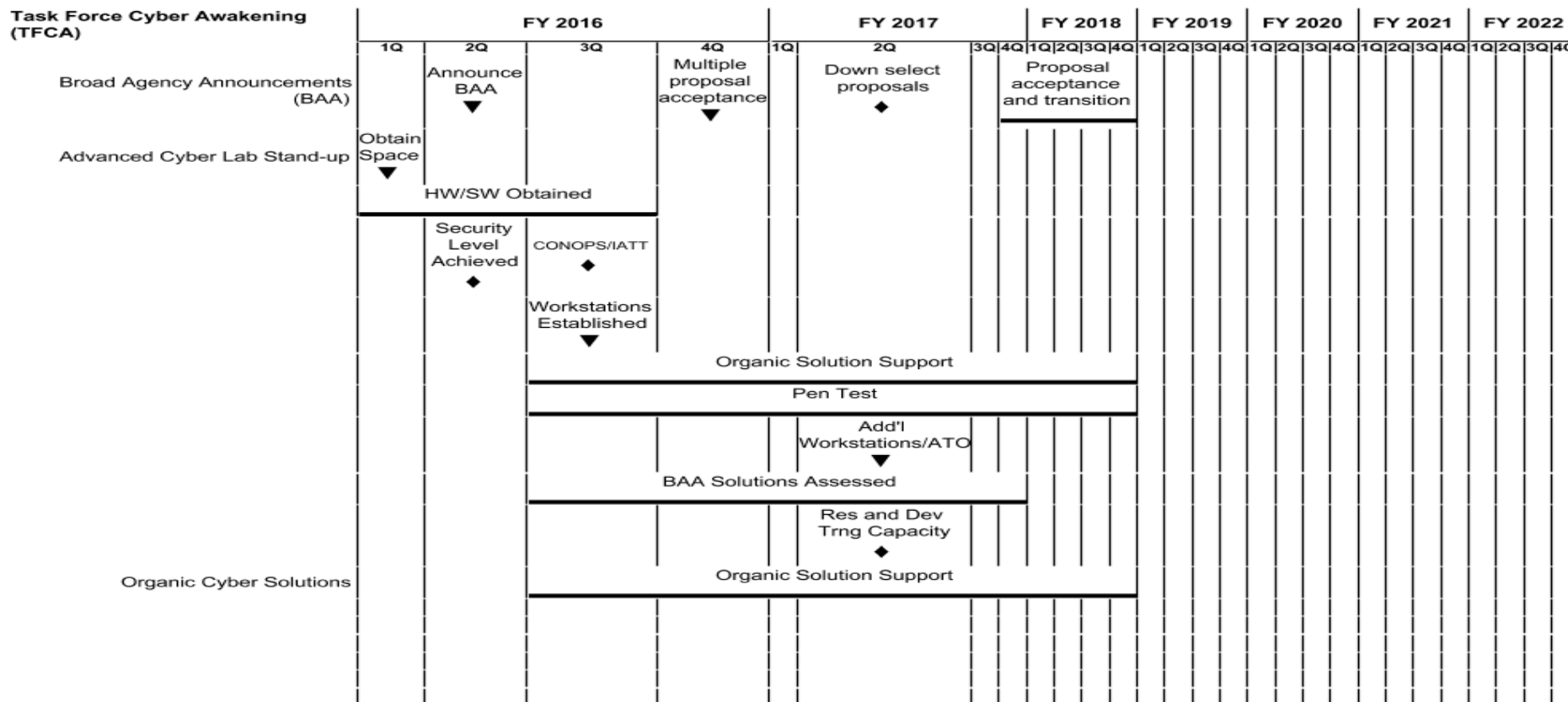
**Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy**

**Date:** May 2017

**Appropriation/Budget Activity**  
1319 / 5

**R-1 Program Element (Number/Name)**  
PE 0605013N / *Information Technology Development*

**Project (Number/Name)**  
2903 / *NAVAIR IT*



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**Appropriation/Budget Activity**  
1319 / 5

**R-1 Program Element (Number/Name)**  
PE 0605013N / *Information Technology Development*

**Project (Number/Name)**  
2903 / NAVAIR IT

[illegible]

2018DON - 0605013N - 2903

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Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0605013N / Information Technology  
Development

Project (Number/Name)

2903 / NAVAIR IT

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>NAVAIR IT</b>				
Requirements Determination: Release 8.0.14.6	1	2016	2	2016
Requirements Determination: Release 8.0.14.7	1	2016	2	2017
Requirements Determination: Release 8.0.14.8	1	2017	2	2018
Requirements Determination: Release 8.0.14.9	1	2018	2	2019
Requirements Determination: Release 8.0.14.10	1	2019	2	2020
Requirements Determination: Release 8.0.14.11	1	2020	2	2021
Requirements Determination: Release 8.0.14.12	1	2021	2	2022
Contract Award: Contract Award, Release 8.0.14.6	4	2016	4	2016
Contract Award: Contract Award, Release 8.0.14.7	4	2017	4	2017
Contract Award: Contract Award, Release 8.0.14.8	4	2018	4	2018
Contract Award: Contract Award, Release 8.0.14.9	4	2019	4	2019
Contract Award: Contract Award, Release 8.0.14.10	4	2020	4	2020
Contract Award: Contract Award, Release 8.0.14.11	4	2021	4	2021
Contract Award: Contract Award, Release 8.0.14.12	4	2022	4	2022
Development: Software Code & Integration: Release 8.0.14.6	1	2016	3	2016
Development: Software Code & Integration: Release 8.0.14.7	1	2017	3	2017
Development: Software Code & Integration: Release 8.0.14.8	1	2018	3	2018
Development: Software Code & Integration: Release 8.0.14.9	1	2019	3	2019
Development: Software Code & Integration: Release 8.0.14.10	1	2020	3	2020
Development: Software Code & Integration: Release 8.0.14.11	1	2021	3	2021
Development: Software Code & Integration: Release 8.0.14.12	1	2022	3	2022

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2903 / NAVAIR IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
<b>Task Force Cyber Awakening (TFCA)</b>				
Broad Agency Announcements (BAA): Announce BAA	2	2016	2	2016
Broad Agency Announcements (BAA): Proposal Acceptance Multiple	4	2016	4	2016
Broad Agency Announcements (BAA): Down Select Detailed Proposals	2	2017	2	2017
Broad Agency Announcements (BAA): Accept Proposals and Transition	4	2017	4	2018
Advanced Cyber Lab Stand-up: Obtain Space	1	2016	1	2016
Advanced Cyber Lab Stand-up: Obtain Specialized HW/SW tools	1	2016	3	2016
Advanced Cyber Lab Stand-up: Achieve Security Level	2	2016	2	2016
Advanced Cyber Lab Stand-up: Initial CONOPS/IATT	3	2016	3	2016
Advanced Cyber Lab Stand-up: Establish Workstations	3	2016	3	2016
Advanced Cyber Lab Stand-up: Support Organic Solutions	3	2016	4	2018
Advanced Cyber Lab Stand-up: Avionics Pen Test	3	2016	4	2018
Advanced Cyber Lab Stand-up: Establish Additional Workstations/ATO	2	2017	2	2017
Advanced Cyber Lab Stand-up: Assess BAA Solutions	3	2016	4	2017
Advanced Cyber Lab Stand-up: Establish Research and Development Training Capacity	2	2017	2	2017
Organic Cyber Solutions: Support Organic Solutions	3	2016	4	2018
<b>Digital Thread</b>				
Development: Digital Thread Development: Digital Thread Development	4	2016	3	2017

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 2904 / NAVSEA IT			
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
2904: NAVSEA IT	138.399	16.827	30.879	64.233	-	64.233	52.136	36.501	41.739	23.989	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

The Navy Maritime Maintenance Enterprise Solution (NMMES) is the Information Technology toolset utilized to execute ship and submarine maintenance in the Naval Shipyards (NSY), Regional Maintenance Centers (RMC), Ship Repair Facility (SRF), Intermediate Maintenance Facilities (IMF), and commercial industrial sites worldwide. These maintenance activities support Fleet operations 24 hours per day, 7 days per week. The NMMES IT solution is used by over 40,000 civilians and military who conduct over \$6.5B of ships maintenance and modernization on an annual basis. The NMMES program includes sustainment as well as multiple modernization efforts to insure the continued effectiveness of the Fleet maintenance IT toolset. These efforts consists of adding mandatory enhancements, such as Financial Audit Improvement Readiness (FIAR) changes and aligning with the Standard Accounting Budget Reporting System (SABRS) system. The NMMES program provides for software changes, retiring and/or replacing of costly legacy systems, transition planning, and systems engineering for integration with existing and future solutions. These efforts align with direction to insure that proposed interim solutions support and facilitate the transition to the planned, maintenance solution end state. This program will provide modernization, migration, testing, and consolidation of obsolete legacy systems to the next generation of centrally hosted tools supporting Fleet Maintenance systems for the Navy.

Increase in funding addresses critical deficiencies and minimizes the inherent risks that a catastrophic systems failure would be to fleet readiness. The increase in funds is required to support the modernizations of products that are on outdated software and to enhance the existing applications to make them cloud capable. It also provides for software enhancements required to make applications Financial Improvement and Audit Readiness (FIAR) compliant and to enable system modifications of financial feeder applications to interface with a FIAR compliant system of record. The requirement to handle 3-D integrated product models being delivered with CVN-78 and Virginia Class are also driving the increase. NAVSEA plans to execute these funds primarily through a current sustainment contract and several separate contracts through existing delivery orders to gain the specialized resources and material necessary to sustain these vital systems until they can be replaced by fully fielding the NMMES Technical Refresh (TR) solution. There is an overlapping period of time where both solutions are operating and requiring sustainment, hence the increase in the requested amounts for current systems and subsequent replacement system(s). An increase to NMMES-TR in FY18 will accomplish the following work increments: 1) the development and implementation of a Work Brokering solution that addresses both public and private yards for planning to be completed in FY20; 2) the architecture, engineering, design and delivery of an Enterprise Services Bus (ESB) network/interfaces to provide for the support and transition from the NMMES solution to the NMMES-TR solution; 3) the planning and preparation for the acquisition, configuration, and deployment of the Maintenance, Repair, and Overhaul (MRO) replacement solution TR increment. An integrated approach of supporting sustainment of current systems and ramping up the Technical Refresh in FY18 reduces risk of development and deployment of critical systems supporting ship maintenance.

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

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Title:</b> electronic Technical Work Document (eTWD)	11.500	12.632	10.500	0.000	10.500
<b>Articles:</b>	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p><b>Description:</b> The eTWD Initiative is a NAVSEA Sponsored, CNO approved Reduction in Total Ownership Cost (RTOC) Initiative to establish interactive electronic Technical Work Document (eTWD) capability for use in the naval shipyards. An eTWD will be used to execute maintenance, repair, overhaul and modernization work packages on ships and submarines undergoing major availabilities in naval shipyards. This solution will provide paperless work packages, pulling authoritative data from the existing NMMES Family of Systems supporting ship maintenance. The interactive electronic work instruction will be used at the jobsite replacing the current paper driven instructions. The overall goal for eTWD is twofold: 1) to reduce the resources and time preparing, executing and certifying work instructions; and 2) enable the non-stop execution of work by having online documents and access to problem resolution. The eTWD Initiative is in progress.</p> <p><b>FY 2016 Accomplishments:</b> Following award of initial contract, performed the design and interfacing planning for this new capability with the current NMMES solution supporting ship and submarine maintenance in the four Naval shipyards. Completed modification of the contract to meet government requirements for the capability to operate in a Navy Data Center and meet Risk Management Framework (RMF) cyber security requirements.</p> <p><b>FY 2017 Plans:</b> Complete the software development and configuration of the eTWD capability. Conduct formal Government Acceptance Testing of the software and validate that the changes made to the current solution are acceptable and working properly. Complete the pre-deployment planning and training necessary to begin implementation in Q4FY17.</p> <p><b>FY 2018 Base Plans:</b> Following stabilization of eTWD operation of first naval shipyard deployment, continue implementation at the remaining naval shipyards.</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>						
<p><b>Title:</b> Project Sequencing &amp; Scheduling (PSS) Upgrade</p> <p><b>Articles:</b></p> <p><b>Description:</b> The PSS scheduling system provides the naval shipyards (Portsmouth Naval Shipyard, Puget Sound Naval Shipyard &amp; IMF, Pearl Harbor Naval Shipyard &amp; IMF, and Norfolk Naval Shipyard) with a customized, flexible scheduling tool for CNO availabilities and other maintenance, repair and overhaul work</p>		0.000 -	1.000 -	2.500 -	0.000 -	2.500 -

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>assigned to the activities. Key system objectives include: 1) Standardization of the scheduling processes and tools; 2) Creation of dates for use in the NMMES project management software; 3) Generation of user and management reports covering all aspects of scheduling of a ship or submarine availability. The current PSS application is based on a 1980s proprietary commercial product originally acquired over 25 years ago. The application is outdated and the vendor has informed the Navy that it will no longer be supported in the near future requiring Navy to pursue an immediate upgrade to a supportable product, while not interrupted maintenance availabilities. The product had already become increasingly difficult to maintain and with the pending loss of vendor support could lead to catastrophic system failure and loss of ability to maintain project schedules. The PSS Upgrade will convert the system from the Robbins-Gioia CAT proprietary solution to the Robbins-Gioia Jaguar 2020 (J2020) solution and improve the web-basing of the system.</p> <p><b>FY 2016 Accomplishments:</b> Added this emerging requirement to the FY17 Navy Organization Execution Plan (OEP) as part of the NMMES Initiative; and conducted advanced planning confirming the ability to successfully transition to the proposed solution.</p> <p><b>FY 2017 Plans:</b> Perform a Scheduling Improvement Analysis to insure that design modifications required for the J2020 product fully aligns with the other NMMES Family of Systems. Following completion of Analysis perform the necessary software develop and integration of the J2020 product and begin Government Acceptance Testing (GAT) of the product.</p> <p><b>FY 2018 Base Plans:</b> Complete GAT of the product and conduct implementation and training of the user community in the use of the PSS Upgrade.</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>						
<p><b>Title:</b> Planned Maintenance System (PMS) Upgrade</p> <p><b>Articles:</b></p> <p><b>Description:</b> The Planned Maintenance System Management Information System (PMSMIS) is a web solution that tracks the status of all Maintenance Index Pages (MIPs) and Maintenance Requirements Cards (MRCs) including new and revised documentation, allows for Technical Feedback Report (TFBR) generation and tracking from initial reporting to problem resolution, management of activity documentation distribution</p>		0.000 -	0.644 -	3.128 -	0.000 -	3.128 -

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
information, document development history including Reliability-Centered Maintenance (RCM) information and other data needed to support all forms of planned maintenance in the Fleet. The existing process requires excessive sailor and shore expert administrative burden, creates complex and ambiguous documents that can be difficult to follow, takes too long to implement changes, leads to equipment maintenance not being properly executed, and lacks tools for leadership to monitor program implementation and assure satisfactory performance. Furthermore, the existing process does not support distributed and optimally-manned ship concepts of operation, such as those now used by the Naval Expeditionary Combat Command and the Littoral Combat Ship. The future PMS Upgrade will also provide visibility to shore maintenance leaders to ensure equipment is consistently scheduled throughout the fleet and to identify execution issues.						
FY 2016 Accomplishments: Added this emerging requirement to the FY17 Navy Organization Execution Plan (OEP) after gaining approval to proceed on PMS Upgrade by maintenance community stakeholders at the NAVSEA Investment Review Board. Conducted advanced planning and preliminary market research to assess potential for acquiring a commercial product.						
FY 2017 Plans: Conduct detailed market analysis, and design appraisals to align replacement solution with other maintenance products. Begin acquisition and software development.						
FY 2018 Base Plans: Complete software design and/or configuration of PMS Upgrade and conduct Government Acceptance Testing (GAT), while planning for deployment and implementation. Begin user community training aligned with implementation and deployment plan.						
FY 2018 OCO Plans: N/A						
Title: Strategic Planning &Forecasting (SPF) Upgrade		0.000	0.103	4.000	0.000	4.000
Articles:		-	-	-	-	-
Description: SPF is part of a suite of tools in the NMMES Family of Systems that are utilized to assist Navy industrial activities in resource planning and long term work forecasting to meet CNO strategic maintenance requirements through the gathering and compiling of workforce data. Two additional systems; 1) Performance Measurement and Control (PMC) and Quality Performance System (QPS) are interfaced with SPF to produce the staffing, planning and performance measurement necessary to successfully accomplish work in navy						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>industrial activities. All three of these systems have known software deficiencies which limit productivity and require cumbersome manual workarounds. Historically to effectively operate and meet mission needs. The shipyards and RMCs have supplemented this suite with additional local spreadsheet and databases, adding to the complexity of this aging solution. One goal of the SPF Upgrade is to eliminate these ad hoc databases and unify the solution to effectively operate in the targeted data center environment.</p> <p>The SPF Upgrade is part of the next Service Life Extension that will address the accumulation of significant problems with this system, update the software platform, provide integrated metrics capabilities across shipyards and include access of data to headquarters' planners. The SPF Upgrade will include add a modern database architecture and a fully functioning data warehouse environment that will eliminate the weekend long running of PMC jobs that hinders efficiency and productivity. The Upgrade will eliminate the currently required manual interfaces with other NMMES systems to produce a seamless real-time environment that can accommodate all project management metrics, as well as all ship maintenance related metrics. Additionally, it will eliminate the manual data gathering and consolidation required to produce Shipyard Interim Metrics; and eliminate the need for Headquarters and each shipyard to maintain their own unique standalone data files.</p> <p><b>FY 2016 Accomplishments:</b> Conducted advanced planning and estimating to support inclusion in the FY17 Organization Execution Plan (OEP) as part of the NMMES Initiative.</p> <p><b>FY 2017 Plans:</b> Begin systems analysis and market research to determine mature technologies and alignment of SPF Upgrade with NMMES Family of Systems.</p> <p><b>FY 2018 Base Plans:</b> Conduct software development and begin Government Acceptance Testing of SPF Upgrade in preparation for FY19 deployment and implementation.</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>						
<p><b>Title:</b> NMMES Technical Refresh (NMMES-TR)</p> <p><b>Articles:</b></p> <p><b>Description:</b> The current Navy Maritime Maintenance Enterprise Solution (NMMES) toolset enables the execution of submarine, aircraft carrier, and surface ship maintenance and repair for the Naval Shipyards (NSY), Intermediate Maintenance Facilities (IMF), Regional Maintenance Centers (RMC), Trident Refit Facilities (TRF),</p>		2.000 -	12.000 -	25.200 -	0.000 -	25.200 -

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>and Ship Repair Facilities (SRF). It consists of a family of systems and applications that are at (or nearing) their end-of-life. These systems and applications support a workforce of over 51,000 worldwide and enable approximately \$9.5B per year of maintenance and repair work. The critical business processes to schedule, execute, monitor, certify work, and pay employees at each activity are codified within the Information Technology (IT) toolset; there is no manual alternative.</p> <p>Navy has conducted two Service Life Extensions for the current NMMES toolset, and is executing multiple enhancements to maintain its cyber security and operational effectiveness. The current IT toolset requires significant annual investment to maintain its status quo and reactively patch cybersecurity shortfalls; however, even with this investment, many of the underlying issues with the current toolset will not be resolved. Annual efforts to restore the NMMES budgets to meet requirements have only been partially successful and have required multiple annual supplemental actions to address deficiencies. The urgency to modernize these systems has grown every year as deferred upgrades and underfunded sustainment has led to the current state of the NMMES toolset, which is not adaptable, reliable, supportable, affordable, nor maintainable. Failure to replace the toolset will increase the likelihood of IT related maintenance delays for submarines, aircraft carriers, and surface ships directly impacting fleet readiness for meeting national priorities. Also, due to the inflexibility of the NMMES status quo toolset, desired Business Process Reengineering (BPR) functional enhancements (e.g., financial audit compliance, data analytics, ability to interface with digital shipbuilding environment) have not been possible.</p> <p>The NMMES-TR is a pre-Milestone A acquisition program that will provide a sustainable enterprise IT solution leveraging Commercial, Off-The-Shelf (COTS) technology and business processes for shore maritime maintenance, which also standardizes processes and tools. Unlike the uniquely custom designed status quo toolset, the NMMES-TR solution will not implement product customization to match the current maintenance business processes; but rather, maintenance business processes will be modified to match the solution, thereby adopting industry best practices. Accordingly, the solution will be more flexible to the BPR process, and more agile to capitalize on efficiency improvement opportunities and innovations. This will facilitate alignment with the Optimized Fleet Response Plan (OFRP) by assisting the maintenance activities with accomplishing assigned tasks as planned in order that submarines, aircraft carriers, and surface ships can properly train and deploy on schedule. NMMES-TR will also provide a modern solution that will be more effective and efficient in combating cybersecurity threats, and capable of continuous monitoring. The actual solution will be formed after the Analysis of Alternatives (AoA).</p> <p><b>FY 2016 Accomplishments:</b></p>						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Successfully completed Navy Gate I Review. Prepared cost estimates. Formally established Program Office and appointed Program Manager. Established Executive Steering Committee for NMMES-TR program oversight. Establishing a Requirements Integrated Product Team (IPT) to scrutinize, unify, and standardize BPR defined requirements into a contracting-ready document for future procurement. Developing staffing requirements to support ACAT level Program Management Office. Drafted Material Development Decision (MDD) Acquisition Decision Memorandum (ADM) for release.  <b>FY 2017 Plans:</b> Complete Analysis of Alternatives (AoA) for NMMES-TR. Begin analysis and continue market research (and Request(s) for Information) for assessment of industry solutions. Develop and gain approval for documentation in support of Milestone A. Current schedule is forecasting Milestone A in Q4FY17.  <b>FY 2018 Base Plans:</b> NMMES-TR in FY18 will accomplish the following work increments: 1) Completion of the design and development of a Work Brokering solution. This solution addresses both public and private yards for ship maintenance requirements and ship class maintenance plans that are then screened into maintenance availability projects for individual platforms - and then brokered to a maintenance activity for accomplishment based on available capabilities; 2) Conduct the design architecture, systems engineering, configuration and delivery of an Enterprise Services Bus (ESB) network/interfaces environment to provide for the support and transition from the NMMES solution to the NMMES-TR solution; 3) Conduct the planning and preparation for the acquisition (including releasing a Request for Proposal), the configuration, and the deployment of a Maintenance, Repair, and Overhaul (MRO) replacement solution TR increment. The schedule of this increment has been aligned with the Work Brokering solution and the ESB environment.  <b>FY 2018 OCO Plans:</b> N/A						
Title: Financial Technical Upgrade		0.000	2.000	4.910	0.000	4.910
Articles:		-	-	-	-	-
Description: The NMMES Family of Systems has two primary systems that are financial feeders; 1) SYMIS Mission Funded COST (aka COST) system which processes cost related data for mission funded activities with the Standard Accounting & Reporting System - Field Level (STARS-FL); and 2) the SYMIS Pre & Post Payroll Processes system which manages the Time & Attendance data from the NMMES Family of Systems to the						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Defense Civilian Payroll System (DCPS). These systems are targeted for modernization to address the FOUR mandatory requirements: 1) meeting FISCAM and auditability requirements; 2) transitioning COST to interface with SABRS, vice STARS-FL no later than 30 September 2017; 3) as both these systems are COBOL-based - COST, utilizes a 1990s era Case tool (PACBASE) to generate COBOL-ready code. In 2015 vendor support for the PACBASE tool was transitioned to an IBM subsidiary in France (who in 2016 informed the Navy that support for the tool would end by 2018), hence without this tool the COST system must be refreshed in order to operate; and 4) the rapid increase in the cost of gaining sufficient COBOL licenses to operate these two systems in support of fleet maintenance has also created emerging execution year budget challenges for the Navy to such an extent that it is now more feasible to immediately transition these systems to a non-COBOL solution than to continue in the current licensing structure. Hence, the Financial Technical Upgrade is to address these four urgent needs in order to continue operation of the NMMES Family of Systems beyond 2018.						
FY 2016 Accomplishments: N/A						
FY 2017 Plans: Complete analysis of COBOL licensing requirements and feasibility assessment to address COBOL alternatives. Complete planning of first Increment of Financial Technical Upgrade for early delivery of capability to add the SABRS interface to the NMMES Family of Systems. Complete development of the SABRS interface and conduct Government Acceptance Testing (GAT). Deploy and conduct training to the user community to effectively use the SABRS tool in conjunction with the NMMES ship maintenance toolset. Complete and deploy the FISCAM efficiencies and FIAR requirements necessary to meet financial auditability. Conduct the software development necessary to transition both the COST & PPPP systems to be non-COBOL licensees.						
FY 2018 Base Plans: Complete GAT for the modernized COST & PPPP systems, and begin training user in preparation for deployment of these capabilities to the user community. Begin the systems deployment.						
FY 2018 OCO Plans: N/A						
Title: Material Management Upgrade		0.000	1.000	5.250	0.000	5.250
Articles:		-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p><b>Description:</b> The Material Access Technology-Mission Funded (MATmf) system is used by all Naval Shipyards to manage and provide logistical support for services and materials manufactured, purchased and utilized in the overhaul, repair, and maintenance of ships and submarines. MATmf provides quantitative, financial, and status information on industrial materials. It monitors the shop stores in the shipyard and assesses the direct material inventories.</p> <p>The MATmf system has reached end-of-life and is operating on software components that are considered obsolete. A Service Life Extension is required to support the future capabilities (i.e. eTWD requirements), to correct sustainability issues, and to improve the ability to support current and future ships maintenance. While the upcoming MSE releases will consolidate application databases (including MATmf into a data center environment); it does not include material integration across shipyards nor provide usable real time material information or metrics across the ship maintenance community. The MSE releases will also not convert the outdated development code, eliminate the time cumbersome manual batch processing, nor fix a host of long term shortcomings affecting the efficiency of the system (including long time printing limitations affecting for Material Control Tags and waterfront performance). Over the past 5 years, NAVSEA 08 and the Corporate Material Process Action Team through multiple LEAN events has identified and documented many areas that need enhancements. Some of these include: 1) the ability to allow for Fiscal Year rollover of JMLs, 2) the ability to allow redistribution of bulk receipt inspected materials to other shipyards, 3) the ability to report transactions for BP28 assets, 4) improve the ability to create efficient processes for receipt of RFI tagged material into Shop Stores, 5) improve receipt of shipyard contracts into shipyard for receipt inspection, 6) allow DLR material in Shop Stores, 7) address transition to another handheld scanner as the current handhelds are no longer available for purchase. These deficiencies will be addressed in the Material Management Upgrade.</p> <p><b>FY 2016 Accomplishments:</b> N/A</p> <p><b>FY 2017 Plans:</b> Conduct initial design analysis and market research of current technologies. Complete assessment of handheld scanner alternatives insuring that the selected replacement handheld meets NAVSEA 08 cyber security requirements.</p> <p><b>FY 2018 Base Plans:</b></p>						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Conduct software development efforts and begin Government Acceptance Testing (GAT) of the developed solution. Conduct Integration testing to insure the planned solution satisfactorily integrates with the NMMES Family of Systems.  FY 2018 OCO Plans: N/A					
Title: NMMES -- Maritime Systems Environment (MSE) -- Database Optimization  Articles:  Description: Program has the responsibility for maintenance, modernization and improvement of the IT systems which support shore maintenance, modernization, repair, logistics & readiness for ships and submarines across the Navy. The Navy Maritime Maintenance Enterprise Solution (NMMES) Initiative funds the sustainment of deployed systems, as well as the modernization and selected technology refreshment of ship maintenance systems. These existing core ship shore maintenance systems, which are integral to shore ship repair activities, reside in the naval shipyards, regional maintenance centers, ship repair facilities, Supervisors of Shipbuilding, and other industrial activities throughout the world. The present capabilities for this aging Family of Systems continue to require a challenging level of maintenance support. They require information assurance upgrades, selective modernization and/or enhancement to address technological obsolescence and to remove cumbersome work practices to gain efficiencies; and continual protection of Naval Nuclear Propulsion information. These efforts are required to minimize the risk of systems failure that may directly prevent the fleet from operating at its full potential due to interruptions of the Intermediate and Depot level maintenance activities. These NMMES managed systems support over \$9B yearly in ship maintenance and modernization and a military/civilian workforce of over 50,000 personnel supporting worldwide operations. These systems are presently undergoing a second Service Life Extension (SLE) to address cyber security deficiencies, consolidate and align databases across multiple data instances, and to transition the NMMES Family of Systems supporting fleet maintenance into an approved Navy Enterprise Data Center. The SLE is divided into multiple releases: 1) MSE 1.0 - for the Regional Maintenance Centers and Ship Repair Facilities, including FDRMC Rota; 2) MSE 1.1 - for the Naval shipyards; 3) MSE 1.2 - which includes the eTWD capability; 4) MSE 1.3 - for addressing FISCAM requirements, adding an interface for SABRS, and for Database Optimization of the entire environment across the fleet maintenance enterprise to improve throughput for the user community.  FY 2016 Accomplishments:	3.327 -	1.500 -	3.800 -	0.000 -	3.800 -

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Completed stabilization of the MSE 1.0 release in support of the Southeast Regional Maintenance Center; using these lessons learned - implemented MSE 1.0 for the Mid Atlantic Regional Maintenance Center and Southwest Regional Maintenance Center.  <b>FY 2017 Plans:</b> Conduct system training and Go-Live for Ship Repair Facility - Japan, and Forward Deployed RMC at Rota, Spain, Naples, Italy, and Bahrain, Bahrain. Complete MSE 1.1 coding and Government Acceptance Testing (GAT). Complete MSE 1.2 design and integration - begin to conduct GAT. Begin analysis and design of MSE 1.3.  <b>FY 2018 Base Plans:</b> Complete MSE 1.2 release and implementation. Complete GAT for MSE 1.3 and align with database at NEDC-Charleston. Release MSE 1.3 for production use.  <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> SUPDESK - Timekeeping For All  <b>Articles:</b>  <b>Description:</b> The current timekeeping system (SUPDESK) at the shipyards allows managers to input time for their employees. This was considered a financial compliance issue and requires the system be adjusted to allow all shipyard workers to input their time.  <b>FY 2016 Accomplishments:</b> None.  <b>FY 2017 Plans:</b> None.  <b>FY 2018 Base Plans:</b> Begin design and development of SUPDESK system to allow all shipyard workers to input time. This includes code development, integrated testing, government acceptance testing, training and deployment.  <b>FY 2018 OCO Plans:</b> N/A		0.000 -	0.000 -	2.700 -	0.000 -	2.700 -
<b>Title:</b> Local Application Rationalization		0.000	0.000	2.245	0.000	2.245

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy				<b>Date:</b> May 2017		
<b>Appropriation/Budget Activity</b> 1319 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>		<b>Project (Number/Name)</b> 2904 / NAVSEA IT		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>						
		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Articles:</b>		-	-	-	-	-
<p><b>Description:</b> There are numerous local applications at the shipyard that need to be rationalized into several "best of breed" as the Maritime Systems Environment (MSE) is deployed. This requires reviewing all local application functionality and determining which applications should be migrated.</p> <p><b>FY 2016 Accomplishments:</b> None.</p> <p><b>FY 2017 Plans:</b> None.</p> <p><b>FY 2018 Base Plans:</b> Begin reviewing all shipyard local applications and determining which ones best meeting shipyard requirements. Document and develop applications as required to address requirements at each shipyards. This includes review, design, testing, training and implementation.</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>						
<b>Accomplishments/Planned Programs Subtotals</b>		16.827	30.879	64.233	0.000	64.233
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A						
<b>Remarks</b>						
<b>D. Acquisition Strategy</b> The backbone of the present solution is a set of dated information technology (IT) products that are approaching end-of-life. In order to ensure that the IT toolset would continue functioning as required the Fleet Maintenance Board of Directors approved the establishment of the NAVSEA PMO-IT to oversee the selected development and sustainment efforts of this solution; to acquire and manage the IT resources necessary to gain further efficiencies in the systems; and to transition this solution to a more modern and efficient end state. Selected systems modernizations are aligned with ongoing systems sustainment to provide an IT solution until a Commercial of the Shelf (COTS) based Technical Refresh of this solution can be completed and deployed. Existing IT contracts will be used for sustainment services and new contracts will be put in place to support NMES TR services, utilizing existing delivery orders where feasible. ePLM: NSWC-PHD will lead the integration of SBIR-developed technologies through the utilization of Phase 3 SBIR contracts. SBIR technologies will be enhanced and integrated into the ePLM tool suite and will result in execution of a competitive, full acquisition strategy.						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>	Project (Number/Name) 2904 / NAVSEA IT
<b>E. Performance Metrics</b> System performance is measured using the following: A. Operational Availability (A_o): Percent of time systems are available for use. (1) Mean Down Time (MDT) is the mean time the system will be down to start and complete maintenance and corrective task. MDT = (Total Down Time)/(Total Number of Maintenance). Measure of Performance (MOP): Total Down Time ? 87.6 Hrs/Year. (2) Mean Time Between Maintenance (MTBM) is the mean time between maintenance, all corrective and preventive maintenance. MTBM = (Total Up Time)/(Total Number of Maintenance). MOP: A_o = MTBM / (MTBM+MDT) > 0.99. B. Reliability: Ability of a system to perform its mission without failure or degradation under a prescribed set of operating conditions. (1) Mean Time Between Failure (MTBF) is the mean time between unforeseen system failures which result in substantial loss in users' productivity, including being off-line unscheduled. MTBF = (Total Up Time)/(Total Number of Failures). MOP: MTBF > 3504 Hours (2) Mean Time To Repair (MTTR) is the mean time to perform the corrective maintenance to repair the failure. MTTR = (Total Down Time for corrective maintenance)/(Total Number of Failures). MOP: MTTR less than or equal to 16 Hours.		

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development				Project (Number/Name) 2904 / NAVSEA IT					
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Software Development	C/CPFF	NAVSEA : WNY, D.C.	109.929	10.007	Jul 2016	18.879	Dec 2016	31.733	Oct 2017	-		31.733	Continuing	Continuing	Continuing
Software Development	WR	NSLC : Mechanicsburg, PA	15.999	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Advance Planning Analysis	WR	SPAWAR : Arlington, VA	7.471	0.000		0.000		0.000		-		0.000	0.000	7.471	-
Advance Planning Analysis	TBD	NAVSEA : WNY, D.C.	0.000	6.820	May 2016	12.000	Dec 2016	32.500	Nov 2017	-		32.500	0.000	51.320	-
Advance Planning Analysis	TBD	NSWC PHD : Port Hueneme, CA	5.000	0.000		0.000		0.000		-		0.000	0.000	5.000	-
Subtotal			138.399	16.827		30.879		64.233		-		64.233	-	-	-
Remarks															
Program plans to execute all contract awards for software development of shipyard and national systems through the NAVSEA SEAPORT vehicle and other competitively awarded contracts.															
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			138.399	16.827		30.879		64.233		-		64.233	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy																	Date: May 2017																				
Appropriation/Budget Activity 1319 / 5										R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development								Project (Number/Name) 2904 / NAVSEA IT																			
PAGE ONE - Lean Systems Improvement										FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
ELECTRONIC TECHNICAL WORK DOCUMENTS (eTWD)										1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q

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PE 0605013N: *Information Technology Development*  
Navy

R-1 Line #151

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>
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<b>Project (Number/Name)</b> 2904 / NAVSEA IT	
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PAGE THREE - Migration, Consolidation & Enhancements	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
PLANNED MAINTENANCE SYSTEM (PMS): PMS UPGRADE																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity  
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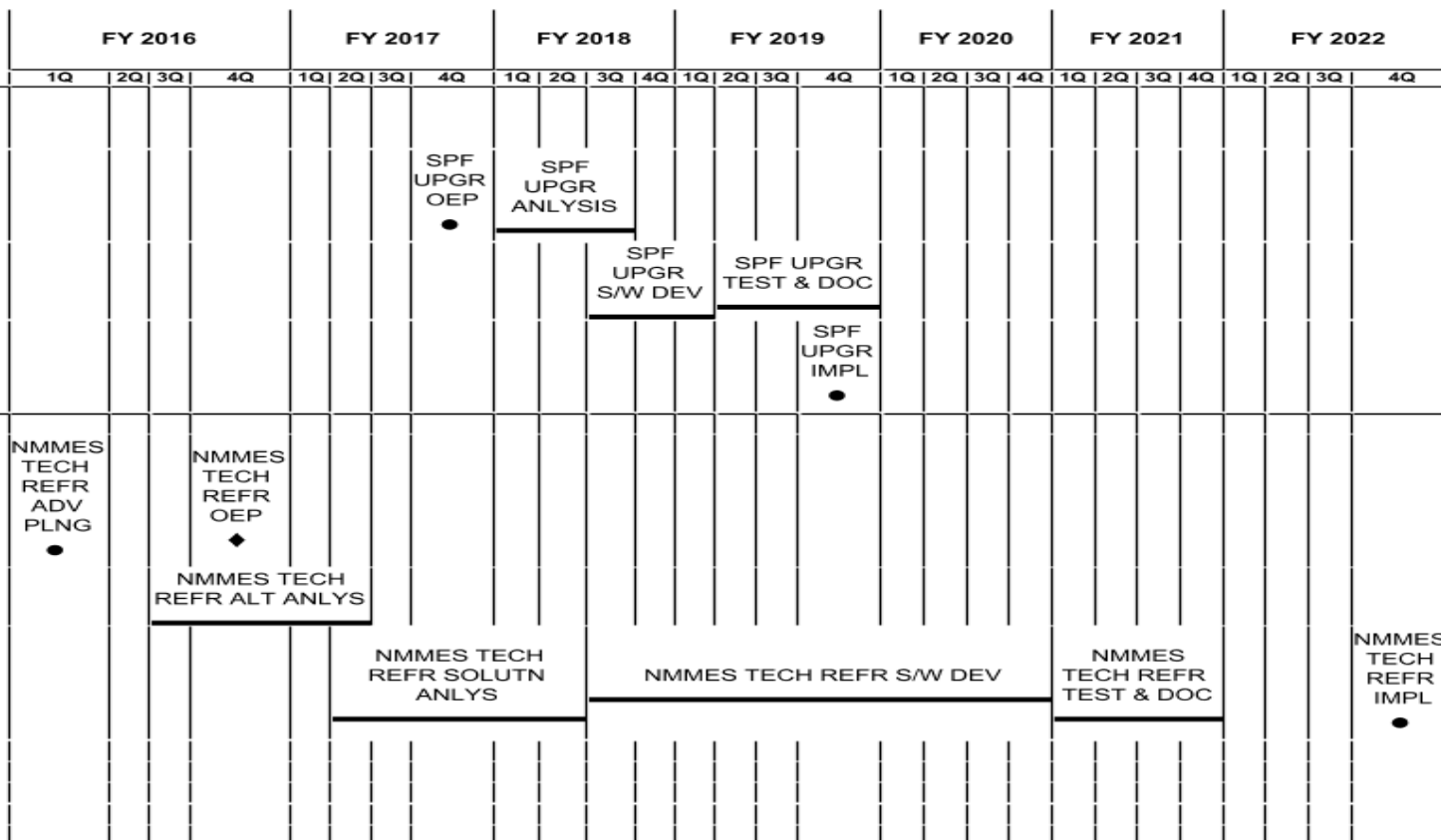
R-1 Program Element (Number/Name)  
PE 0605013N / Information Technology  
Development

Project (Number/Name)  
2904 / NAVSEA IT

PAGE FOUR - Migration,  
Consolidation & Enhancements  
CONTINUED

STRATEGIC  
PLANNING/FORECASTING (SPF):  
SPF UPGRADE

NMMES Technical Refresh



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**R-1 Program Element (Number/Name)**  
PE 0605013N / *Information Technology Development*

<b>Project (Number/Name)</b>	2904 / NAVSEA IT
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PAGE FIVE- Migration, Consolidation & Enhancements CONTINUED	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
FINANCIAL TECHNICAL UPGRADE								FINCL TECH UPGRD OEP ●																				
								FINCL TECH UPGRD ANLYSIS																				
											FINCL TECH UPGRD S/W DEV																	
												FINCL TECH UPGRD TEST & DOC ●																

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Navy

R-1 Line #151

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>
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<b>Project (Number/Name)</b>	2904 / NAVSEA IT
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PE 0605013N: *Information Technology Development*  
Navy

R-1 Line #151

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>
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<b>Project (Number/Name)</b>	2904 / NAVSEA IT
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PAGE SEVEN- Migration, Consolidation & Enhancements CONTINUED				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE)																																

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Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

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R-1 Program Element (Number/Name)

PE 0605013N / Information Technology  
Development

Project (Number/Name)

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## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>PAGE ONE - Lean Systems Improvement</b>				
ELECTRONIC TECHNICAL WORK DOCUMENTS (eTWD): eTWD Testing & Documentation	2	2017	4	2017
ELECTRONIC TECHNICAL WORK DOCUMENTS (eTWD): eTWD Software Development	2	2017	4	2017
ELECTRONIC TECHNICAL WORK DOCUMENTS (eTWD): AIM Changes	2	2017	2	2018
ELECTRONIC TECHNICAL WORK DOCUMENTS (eTWD): eTWD Implementation	4	2018	4	2018
PROJECT SEQUENCING & SCHEDULING (PSS) UPGRADE: PSS UPGRADE: PSS Upgrade Scheduling Improvement OEP Approval	4	2017	4	2017
PROJECT SEQUENCING & SCHEDULING (PSS) UPGRADE: PSS Upgrade Scheduling Improvement Analysis	4	2017	2	2018
PROJECT SEQUENCING & SCHEDULING (PSS) UPGRADE: PSS Upgrade Scheduling Improvement Software Development	2	2018	4	2018
PROJECT SEQUENCING & SCHEDULING (PSS) UPGRADE: PSS Upgrade Scheduling Improvement Testing & Documentation	4	2018	2	2019
PROJECT SEQUENCING & SCHEDULING (PSS) UPGRADE: PSS Upgrade Scheduling Improvement Implementation	3	2019	3	2019
<b>PAGE THREE - Migration, Consolidation &amp; Enhancements</b>				
PLANNED MAINTENANCE SYSTEM (PMS): PMS UPGRADE: PMS Upgrade OEP Approval	2	2017	2	2017
PLANNED MAINTENANCE SYSTEM (PMS): PMS UPGRADE: PMS Upgrade Analysis	2	2017	4	2017
PLANNED MAINTENANCE SYSTEM (PMS): PMS UPGRADE: PMS Upgrade Software Development	3	2017	4	2018

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
PLANNED MAINTENANCE SYSTEM (PMS): PMS UPGRADE: PMS Upgrade Testing & Documentation	4	2017	3	2018
PLANNED MAINTENANCE SYSTEM (PMS): PMS UPGRADE: PMS Upgrade Implementation	4	2018	4	2018
PAGE FOUR - Migration, Consolidation & Enhancements CONTINUED				
STRATEGIC PLANNING/FORECASTING (SPF): SPF UPGRADE: SPF UPGRADE OEP Approval	4	2017	4	2017
STRATEGIC PLANNING/FORECASTING (SPF): SPF UPGRADE: SPF UPGRADE Analysis	1	2018	3	2018
STRATEGIC PLANNING/FORECASTING (SPF): SPF UPGRADE: SPF UPGRADE Software Development	3	2018	1	2019
STRATEGIC PLANNING/FORECASTING (SPF): SPF UPGRADE: SPF UPGRADE Testing & Documentation	2	2019	4	2019
STRATEGIC PLANNING/FORECASTING (SPF): SPF UPGRADE: SPF UPGRADE Implementation	4	2019	4	2019
NMMES Technical Refresh: NMMES Technical Refresh Advanced Planning	1	2016	1	2016
NMMES Technical Refresh: NMMES Technical Refresh OEP Approval	4	2016	4	2016
NMMES Technical Refresh: NMMES Technical Refresh Alternative Analysis	3	2016	2	2017
NMMES Technical Refresh: NMMES Technical Refresh Solution Analysis	2	2017	2	2018
NMMES Technical Refresh: NMMES Technical Refresh Software Development	3	2018	4	2020
NMMES Technical Refresh: NMMES Technical Refresh Testing & Documentation	1	2021	4	2021
NMMES Technical Refresh: NMMES Technical Refresh Implementation	4	2022	4	2022
PAGE FIVE- Migration, Consolidation & Enhancements CONTINUED				
FINANCIAL TECHNICAL UPGRADE: Financial Tech Upgrade OEP Approval	4	2017	4	2017
FINANCIAL TECHNICAL UPGRADE: Financial Tech Upgrade Analysis	4	2017	2	2018
FINANCIAL TECHNICAL UPGRADE: Financial Tech Upgrade Software Development	2	2018	4	2018

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
FINANCIAL TECHNICAL UPGRADE: Financial Tech Upgrade Testing & Documentation	4	2018	2	2019
FINANCIAL TECHNICAL UPGRADE: Financial Tech Upgrade Implementation	3	2019	3	2019
PAGE SIX- Migration, Consolidation & Enhancements CONTINUED				
MATERIAL MANAGEMENT UPGRADE: Material Mgmt Upgrade OEP Approval	4	2017	4	2017
MATERIAL MANAGEMENT UPGRADE: Material Mgmt Upgrade Analysis	1	2018	2	2018
MATERIAL MANAGEMENT UPGRADE: Material Mgmt Upgrade Software Development	3	2018	2	2019
MATERIAL MANAGEMENT UPGRADE: Material Mgmt Upgrade Testing & Documentation	2	2019	4	2020
MATERIAL MANAGEMENT UPGRADE: Material Mgmt Upgrade Implementation	4	2020	4	2020
PAGE SEVEN- Migration, Consolidation & Enhancements CONTINUED				
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Database Optimization: OEP Approval	1	2018	1	2018
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Database Optimization: Analysis	4	2017	2	2018
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Database Optimization: Software Development	3	2018	1	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Database Optimization: Testing & Documentation	2	2019	3	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Database Optimization: Implementation	4	2019	4	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): SUPDESK Timekeeping: SUPDESK: OEP Approval	4	2017	4	2017
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): SUPDESK Timekeeping: SUPDESK: Analysis	1	2018	2	2018
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): SUPDESK Timekeeping: SUPDESK: Software Development	3	2018	1	2019

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2904 / NAVSEA IT	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): SUPDESK Timekeeping: SUPDESK: Testing & Documentation		1	2019	2	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): SUPDESK Timekeeping: SUPDESK: Implementation		3	2019	3	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Local Application Rationalization: Local APP/RAT: OEP Approval		4	2017	4	2017
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Local Application Rationalization: Local APP/RAT: Analysis		1	2018	3	2018
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Local Application Rationalization: Local APP/RAT: Software Development		4	2018	2	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Local Application Rationalization: Local APP/RAT: Testing & Documentation		2	2019	3	2019
NMMES MARITIME SYSTEMS ENVIRONMENT (MSE): Local Application Rationalization: Local APP/RAT: Implementation		4	2019	4	2019

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 2905. / <i>BUPERS IT</i>			
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
2905.: <i>BUPERS IT</i>	45.011	12.879	29.664	52.957	-	52.957	65.959	74.545	59.118	35.310	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

The large increase in the FY18 profile stems from the decision to invest in programs that directly align with the Sailor 2025 vision for modernization of the personnel system and transition to ready, relevant learning. The most significant increase stems from NSIPS, which in FY18 will complete its acquisition processes and award its first task order for Pay Modernization (PayMod), and also includes an add in support of the DoD Force of the Future for a Navy Active Component (AC)/Reserve Component (RC) Permeability Solution to; (1) extend the reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs. The remaining increase is due to the increase in LMS-DL transitioning the Collaborative Learning Environment Product from a limited prototype to full production capability.

### BILLET BASED DISTRIBUTION (BBD)

BBD increase in FY18 is a Sailor 2025 initiative aimed at modernizing distribution and order writing systems. The effort begins functional work and follow-on development to collapse NROWS, NMCMPs, EAIS, and OAIS into a single distribution system.

The objective of BBD is to increase personnel readiness, improve fit and provide clear visibility to the impact on mission readiness at the billet level. BBD will facilitate maximizing the contributions of every member of the Navy workforce by delivering competency-based career paths.

### LEARNING MANAGEMENT SYSTEM - DISTANCE LEARNING (LMS-DL)

LMS-DL increase in FY18 is a Sailor 2025 initiative supporting ready relevant learning, with a focus to align Navy learning, create a career learning continuum, and leverage evolving technologies to expand learning solutions when and where the Sailor needs them. The collaborative learning environment (CLE) is a key component within the learning IT strategy that leverages Commercial-Off-the-Shelf products to integrate the CLE with intelligent tutors, a multi-purpose reconfigurable training system (MRTS), electronic classrooms (ECR), trainers and labs, interactive multimedia instruction (IMI), instructors, and a virtual environment. The increase in FY18 is to transition the pilot capability from FY17 into a production capability.

As part of Sailor 2025 holistic IT approach, ready & relevant learning requires the development of a Learning Management System that permits:

- (1) Mobile & flexible delivery of modular training to the sailor
- (2) Synchronization of work requirements with learning modules to ensure proper training is delivered at the right time

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>This funding will develop and deploy new technologies for modularized training in fleet concentration areas to support the continuum of learning. This includes:</p> <p>(1) Development, modification or replacement of the current LMS platform  (2) Integration of Manpower, Personnel, Training, and Education (MPTE) management tools to support end to end business processes (billet information, assignment, distribution, student management, learning management, personnel information, advancement) that will be impacted by changes to learning delivery and career profiles via Progressive Navy Enlisted Classifications (e.g. Total Force Manpower Management System, Navy Standard Integrated Personnel System, Learning Assessment System, Navy Training Management Planning System) .</p> <p>The Learning Management tools and supporting IT infrastructure must also be modified to support management of training into the Delayed Entry Program, the growing use of demonstration videos, social media, student and learning management for MPTE mobility efforts, gaming and simulation technology as it is brought on-line.</p> <p>LMS-DL will also introduce the Learning Continuum Pilot, a risk reduction effort that develops proof of concept alignment of sailor training requirements with learning content delivery.</p> <p>MY NAVY PORTAL (MNP)  MNP is building an integrated web portal that consolidates the Navy's Human Resource portals, knowledge, and applications into a single and simplified user experience. Through the use of a multi-phased development approach, MNP will provide an intuitive self-service single point of entry for Sailors to view and manage their personnel and career information. MNP provides Active and Reserve Sailors with personalized interactive experiences and allows access to relevant information including learning content, human resource applications, and career business processes.</p> <p>MNP Phase 2C continues to mature eleven Career Life Event (CLE) capabilities. Phase 2C continues requirements refinement work with key Fleet stakeholders and integrates or develops the identified CLEs.</p> <p>My Navy Portal may address previously deferred requirements from prior phases. Should MNP exceed schedule/delivery, planned follow-on phases or activities may be accelerated.</p> <p>ANALYSIS OF ALTERNATIVE/ECONOMIC ANALYSIS (AOA)  The Navy will conduct multiple AoAs to analyze viable alternatives in order to determine the most efficient and effective solution to address the modernization of elements of the Navy's Manpower, Personnel, Training and Education (MPTE) IT portfolio. AOA will assess operational effectiveness, suitability, and costs of non-tactical systems to meet emerging capability requirements.</p> <p>NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)  NSIPS increase in FY18 is aligned with the Sailor 2025 initiative to modernize personnel systems. The substantial increase is attributed to the planned start of the Pay Modernization (PayMod) program, and also includes an add in support of the DoD Force of the Future for a Navy AC/RC Permeability Solution to; (1) extend the</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs.</p> <p>NSIPS facilitates the Navy's portion of the largest Federal PeopleSoft Human Resources implementation, providing the Navy with a systematic modernization of our web-based pay and personnel system - both afloat and ashore. NSIPS collects, validates, processes and transfers the data necessary to ensure accurate and timely pay and maintenance of personnel records.</p> <p>Pay Modernization (Pay Mod) will integrate the PeopleSoft Global Payroll solution with Navy Standard Integrated Personnel System (NSIPS) to provide an integrated Personnel and Pay solution for the Navy. Pay Mod will improve efficiency by eliminating current Defense Joint Military Pay System (DJMS) workarounds, improve business intelligence by providing real-time access to pay data, and improve auditability by having authoritative data in an integrated personnel and pay capability. Pay Mod is a solution to make more efficient use of military member time and funding for pay of active and reserve personnel.</p> <p>Determining the retirement eligibility for Navy active duty service with both Active Component (AC) and Reserve Component (RC) time is complicated by the fact the computation has to be performed manually and requires consultation with numerous data sources. Current solutions make it difficult to account for who is on active duty at any point in time and time-in-grade calculations for Selected Reserve (SELRES) personnel. OPNAV N1 need the reports and data for budget execution as well as strength reporting to leadership and Congress. Limitations in both payroll processes and systems induce a lapse between orders to effect change in status. SELRES personnel gained to Active Duty Special Work (ADSW) incur a delay in pay stemming from issues with loss/gain timing in systems. SELRES personnel who re-enlist while on active duty orders are not retained when transitioning back to SELRES, and there is no retention of active duty Career History for Reserve personnel. The Navy AC/RC Permeability Solution will be included in the Manpower, Personnel, Training and Education (MPTE) Transformation effort to leverage data in the authoritative data environment, modernize personnel and pay systems, and provide modern commercial solutions to; (1) extend the reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs.</p> <p><b>NAVY MANPOWER REQUIREMENTS SYSTEM (NMRS)</b></p> <p>NMRS will modernize obsolete software and incorporate a wide array of enhancements (expanded capabilities based on sponsor's approved Functional Requirements Document) of new capabilities in support of Manpower Requirement efficiencies. Should NMRS deliver early, planned follow-on milestones may be accelerated.</p> <p>NMRS is a key tool which Navy manpower managers rely on to set, implement, and execute manpower requirements. Recommendations for improving data bases and the Navy's mobilization capacity rely on NMRS to make strength determinations.</p> <p>The planned effort also includes technical evaluation and integration of products produced by the Simulation Toolset for Analysis of Mission, Personnel and Systems (STAMPS) program.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p><b>RISK MANAGEMENT INFORMATION (RMI)</b>  The RMI program is a consolidation of DON risk management requirements into a single Program of Record (POR) to provide modern safety reporting and management capabilities for both active and reserve Navy and Marine Corps commands. RMI enables agile responses to business rule changes, automation of routine actions, improved data integrity, and facilitates self-service for organizations and individuals.</p> <p>RMI is being developed in three increments of capabilities: Streamlined Incident Reporting (SIR), Safety Program Management (SPM), and Analysis &amp; Dissemination (A&amp;D). A fourth requirement, Single Point of Entry (SPOE), will be accomplished as part of the development of the three RMI increments since each will be built on the same Commercial Off The Shelf (COTS) platform. Each of these capabilities will be acquired as individual Abbreviated Acquisition Programs using an incremental development approach for reengineered business processes, while consolidating five legacy systems [Web-Enabled Safety System (WESS), Enterprise Safety Application Management Systems (ESAMS), Portsmouth Occupational Accident and Illness Reporting System (POAIRS), Medical Mishap and Compensation (MMAC), and Injury Tracker (INJTRK)].</p> <p><b>AUTHORITATIVE DATA ENVIRONMENT (ADE)</b></p> <p>ADE increase in FY18 is a Sailor 2025 initiative aimed at transitioning the current project based ADE into a full enterprise solution that is based on modern IT service models and cloud hosting technology. This specific increase will advance data analytics and visualization capabilities, and add common platform services in a big data environment that is consistent with private industry. This acceleration toward a true Navy-wide personnel authoritative data environment is a transformational increase in capability for decision support and improving personnel readiness.</p> <p>As part of the Sailor 2025 strategy, the Chief of Naval Personnel has directed an acceleration of expansion and development of the ADE and improvements in making MPTE data more available to commanders, sailors, business owners and MPTE and fleet executive leadership. The ADE provides infrastructure, operations and sustainment of the Navy MPTE Authoritative Data Warehouse(ADW), enterprise service bus, and web support services.</p> <p>The capabilities delivered by this funding includes the following:</p> <ul style="list-style-type: none"> <li>(1) Completed "golden record" expansion increments <ul style="list-style-type: none"> <li>- Data quality</li> <li>- Governance</li> <li>- Security</li> <li>- Data standardization</li> </ul> </li> <li>(2) Increased capabilities for MPTE supply chain &amp; business operations <ul style="list-style-type: none"> <li>- Data discovery</li> <li>- Advanced visualization tools</li> <li>- Predictive analytics</li> </ul> </li> <li>(3) Enhanced architecture to support unstructured data and "big data" analytics</li> <li>(4) Improved support for future identity management &amp; access for mobile device capability</li> </ul>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>APPLICANT RELATIONSHIP MANAGEMENT (ARM)</p> <p>ARM provides automated support of the management of recruiting information. ARM enables all levels of recruiting to have real-time access to timely and accurate information. ARM provides managers with decision-making support by consolidating Navy Recruiting Command (NRC) legacy application systems. The complete ARM Systems Dev/Mod effort will incorporate biometrics and paperless implementation across all lines of business systems to gain additional efficiencies.</p> <p>Included in the ARM program is the Self Service Accessions Application (SSAA). Phase II of this effort will build the SSAA application into the ARM system. SSAA is a mobile device-based software application. SSAA supports a change in the NRC business processes from a recruiter-driven business model to an applicant self-service business model. This "app" will be used by applicants to collaborate with recruiters anytime &amp; anywhere to more efficiently and effectively navigate the recruiting process.</p> <p>Funding associated with Personnel TEMPO (PERSTEMPO) is being aligned to PE 060513N 2905 beginning in FY15. This aligns the funds with the organization required to execute PERSTEMPO strategy as directed by the CNO to the CNP. Two components are rolled together, modifying the ITEMPO system and further developing the Navy Deployment Health Location process. This strategy consists of Business Process Re-engineering (BPR) defined requirements (artifact is a Functional Requirements Document-FRD), modernization/risk reduction of existing system (ITEMPO) and a process that uses our corporate systems at DMDC Mechanicsburg.</p> <p>The desired effects of PERSTEMPO strategy are:</p> <ul style="list-style-type: none"> <li>- Generate efficiencies throughout the Fleet to meet statutory requirements and improve Fleet readiness.</li> <li>- Provide improved service to Sailors (improving retention).</li> <li>- Facilitate informed management decision making.</li> </ul> <p>Associated sub-projects:</p> <p>Individual TEMPO (ITEMPO): PERSTEMPO was implemented to comply with Sections 586 and 923 of the FY00 NDAA, now within 10 USCS 991. This is a non-acquisition category program. Each military service is to track and manage the number of deployed days and number of temporary duty days away from homeport for active and reserve personnel. Information is reported to DoD/DMDC, which is used to report to the Secretary of Defense. ITEMPO is the system used to comply with these directives. PERSTEMPO supports Navy management of stress on the force as requested by the CNO; Commander, U.S. Fleet Forces Command (N1); and the Commander, U.S. Pacific Fleet (N1). Enhancements will be performed on the primitive ITEMPO functional tools/metrics to make it actionable, current in technology, user friendly, and integrated into a variety of personnel and pay systems. Preparations are already underway to complete the FRD and perform a gap analysis within existing resources. This will support pay auditability/certainty when payment is authorized.</p> <p>DEPLOYMENT HEALTH LOCATION: Deployment Health Location is being implemented per DoD Instruction 6490.03, "Deployment Health," (DoD Instruction) August 11, 2006. This requires the Military Departments to plan, program, and implement a system to ensure daily location recording for all deployed personnel assigned, attached on temporary duty, or temporary additional duty to deployed units. The Services are required to report the daily location information electronically to DMDC at least weekly. Also, this will correct the finding by DoD Inspector General Report NO. DODIG 2012-112 of Jul 18, 2012.</p>		

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017				
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT				
Capability change for ITEMPO: The system has had no significant software change in more than 8 years. The report mechanisms are extremely antiquated.								
Capability change Deployment Health Location: Deployed Service members are potentially subject to occupational and environmental hazards that can include exposure to harmful levels of environmental contaminants, such as industrial toxic chemicals, chemical and biological warfare agents, or radiological and nuclear contaminants. These hazards may include contamination from the past use of a site, battle damage, stored stockpiles, military use of hazardous materials, or from other sources. Harmful levels include high-level exposures that result in immediate health effects and low-level exposures that could result in delayed or long-term health effects. Collecting deployment information will allow the Military Health System to identify populations at risk for occupational and environmental exposures that may need medical follow-up. Improving timeliness of treatment will have a positive effect on readiness and long-term wounded warrior care.								
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Billet Based Distribution (BBD)  Articles:				0.932	2.140	4.860	0.000	4.860
				-	-	-	-	-
FY 2016 Accomplishments: Completed the requirements analysis, design and software development of BBD Phase 1C Increment 1.								
FY 2017 Plans: Continue the testing and deployment of BBD Phase 1C Increment 1 and begin requirements analysis, design and development of BBD Phase 1C Increment 2. This activity may also address previously deferred requirements from Phase 1B. Should the program deliver early, planned follow-on phases may be accelerated or additional capability may be incorporated into the delivery.								
FY 2018 Base Plans: Complete testing and deployment of BBD Phase 1C. Begin requirements analysis, design and development of BBD Phase 2 Enlisted Optimization and Slating and Phase 2 Officer functionality.								
FY 2018 OCO Plans: N/A								
Title: Learning Management System - Distance Learning (LMS-DL)  Articles:				0.000	3.750	5.606	0.000	5.606
				-	-	-	-	-
FY 2016 Accomplishments: N/A								
FY 2017 Plans: Development of two pilot projects for assessing the technical changes needed to fully integrate Learning Continuum Requirements across MPTE IT systems.								

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
1. Conduct Learning Continuum Phase I LMS Pilot to integrate the LMS with virtual classroom technology, Learning Assessment System, CeTARS, and the electronic training jacket. The Learning Continuum Phase I LMS Pilot will also evaluate technical options for adding Resume Capture for new training media that requires student tracking (e.g. mobile applications, videos & simulations).					
2. Perform Risk Reduction Pilot on migrating AtlasPro LMS to NSIPS PeopleSoft LMS and test end to end business process scenarios to identify technical changes required to interfacing systems.					
FY 2018 Base Plans:					
1. Completion of pilot project review and assessments					
2. Design, design review, testing, production readiness, and deployment of Career Profile functionality					
3. Procure and standup Collaborative Learning Environment (CLE) for enterprise based on pilot results					
FY 2018 OCO Plans:					
N/A					
Title: My Navy Portal (MNP)					
Articles:	3.654	3.269	4.290	0.000	4.290
FY 2016 Accomplishments:					
1. Commenced MNP Phase 2C Development					
- Designed Portlets Supporting Prioritization of Sailor Career Life Event (CLE) Tasks					
- Connected CLEs to other Capabilities & Interfaces					
- Provided Seamless HR Support Mechanism for Sailors					
- Used HR Support Mechanism to Reduce Time Sailors Spend Performing Administrative Tasks					
2. Visually displayed Authoritative Data Environment (ADE) information to compose a Sailor's Record. Each CLE sprint includes a development, testing and release phase to provide Sailors with incremental capability. The first set of CLEs include the following:					
- Personnel Records					
- Enlisted and Officer Advancement					
- Training and Readiness					
- Physical Fitness					
- Certifications and Qualifications					
- Pay					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<div>- Leave</div> <div>- Travel</div> <div>- "New to the Navy"</div> <div>- Retention</div> <div>FY 2017 Plans:</div> <div>Continue to accelerate and broaden the development of CLE capabilities for sailors to manage their career based on CNP's Sailor 2025 initiative. Accomplish the following tasks:</div> <div>1. Development of MNP mobile applications</div> <div>2. Update MNP mobile applications required to meet dynamic user and stakeholder needs (develop and/or integrate proposed portlet/app)</div> <div>3. Accelerate MNP Phase 2C development in other CLE areas, and potentially begin the next phase of MNP to deliver operational capability to sailors sooner</div> <div>4. Increase development and integration of identified CLE portlets</div> <div>5. Finalize platform for MNP preferred ashore hosting solution</div> <div>Additionally MNP may address previously deferred requirements from prior program deliveries and phases. Should the program deliver early, planned follow-on phases may be accelerated.</div> <div>FY 2018 Base Plans:</div> <div>1. Continue the development and integration of portal CLE portlet capabilities for Sailors to manage their careers in an intuitive self-service web environment.</div> <div>2. Provide on-going training and support to identified MNP content and page administrators who must be trained on the new capability being developed for each incremental release of new MNP capability.</div> <div>3. Integrate with MPTE applications and capabilities. MNP functional users and sponsors continue to shift their priorities for MNP integration with outside systems. Those outside system integrations require new MNP development/modernization code builds to enable MNP to successfully partner with them.</div> <div>4. Support development of a cloud MNP hosting solution. MNP requires new development/modernization of its underlying architecture to function properly once migrated to the cloud hosting platform.</div> <div>FY 2018 OCO Plans:</div> <div>N/A</div>						
Title: Total Force Manpower Management System (TFMMS)		1.367	0.000	0.000	0.000	0.000
Articles:		-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<b>FY 2016 Accomplishments:</b> Tested and deployed Iteration 2					
<b>FY 2017 Plans:</b> N/A					
<b>FY 2018 Base Plans:</b> N/A					
<b>FY 2018 OCO Plans:</b> N/A					
<b>Title:</b> Analysis of Alternative Economic Analysis (AOA EA)		0.000	0.800	0.700	0.000
<b>Articles:</b>		-	-	-	-
<b>FY 2016 Accomplishments:</b> N/A					
<b>FY 2017 Plans:</b> 1. Analysis of Alternative (AoA) of material solutions for emerging business IT requirements 2. Begin AoA for Personnel Accountability Processes 3. Begin personnel manpower analysis for 2025 Sailor toolkit 4. Complete AoA of the viability of converting MPT&E IT systems to cloud services					
<b>FY 2018 Base Plans:</b> 1. Complete AoA for cloud transition Courses Of Action (COA) 2. Complete AoA for personnel accountability processes 3. Complete AoA for personnel manpower analysis for Sailor 2025 4. Non-AoA studies and analyses encompassing the MPT&E enterprise.					
<b>FY 2018 OCO Plans:</b> N/A					
<b>Title:</b> Navy Manpower Requirements System (NMRS)		0.000	3.378	2.000	0.000
<b>Articles:</b>		-	-	-	-
<b>FY 2016 Accomplishments:</b>					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A						
<b>FY 2017 Plans:</b> 1. Award Contract, Post Award Conference, and kick off project 2. Complete SFR/SRR 3. Complete PDR						
<b>FY 2018 Base Plans:</b> 1. Complete design phase 2. Conduct development phase 3. Complete CDR 4. Initiate system testing						
NMRS will begin design and development of the new capabilities of the Fleet Manpower Requirements Document (FMRD) that will improve the Navy's ability to forecast/determine/implement manpower requests for the Navy. Additionally, NMRS will integrate enhanced functionality from the Simulation Toolset for Analysis of Mission, Personnel and Systems (STAMPS) S&T effort, merging the new product into a single cohesive manpower system within TFMMS. Testing will ensure that the developed design for the enhanced NMRS/ Manpower system meets all requirements.						
<b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> Navy Standard Integrated Personnel System (NSIPS)		3.702	4.450	23.845	0.000	23.845
<b>Articles:</b>		-	-	-	-	-
<b>FY 2016 Accomplishments:</b> 1. Completed application testing for Iteration 1 functionality (Review/Approval Process) 2. Deployed Iteration 1 to the NSIPS production environment 3. Completed Critical Design Review (CDR) for Iteration 2 functionality (Separations Process) 4. Completed application testing for Iteration 2 functionality (Separations Process) 5. Deployed Iteration 2 to the NSIPS production environment 6. Completed Critical Design Review (CDR) for Iteration 3 functionality (Forms/Reports) 7. Completed application testing for Iteration 3 functionality (Forms/Reports) 8. Deployed Iteration 3 to the NSIPS production environment 9. Paid Navy share of Tri-Service PeopleSoft license						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
10. Awarded task order for prioritized and/or deferred software changes in the areas below requiring development / modernization: - Selection Board Preparation - Personnel Appraisal - Personnel Accountability  <b>FY 2017 Plans:</b> 1. Bi-Service PeopleSoft license acquisition 2. Continue the implementation of the strategy in completing deferred software changes related to retirements, separations, selection board preparation, personnel appraisal, and personnel accountability that require development and modernization; and implement improved modernized personnel processes  Award contract, perform requirements analysis and system design for all increments.  <b>FY 2018 Base Plans:</b> NSIPS increase in FY18 is aligned with the Sailor 2025 initiative to modernize personnel systems. The substantial increase is attributed to the planned start of the Pay Modernization (PayMod) program, and also includes an add in support of the DoD Force of the Future for a Navy AC/RC Permeability Solution to; (1) extend the reach for soliciting candidates for Navy jobs, (2) streamline the internal processes and supporting technologies to ensure timely payment for personnel who transition between AC, RC, Government civilian or contractor jobs, and (3) improve the Navy's ability to support Component Commanders with rapid requirements posting and talent acquisition for emergent needs.  1. Bi-Service PeopleSoft license acquisition 2. Continuation of FY17 effort to implement strategy in completing deferred software changes related to retirements, separations, selection board preparation, personnel appraisal, and personnel accountability that require development and modernization; and implement improved modernized personnel processes 3. In FY18, PAYMOD will complete its acquisition processes and award its first Task Order to develop increment 1, which focuses on creating a PeopleSoft Global Payroll baseline and implementing the initial modernized military pay capabilities.						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
4. Complete fit/gap analysis of the permeability functional requirements to personnel, pay, and authoritative data environment requirements. Solicit and award contract or task order and complete the System Requirements Review/System Functional Review (SRR/SFR).						
FY 2018 OCO Plans: N/A						
Title: Risk Management Information (RMI)  Articles:		1.960 -	2.761 -	1.100 -	0.000 -	1.100 -
FY 2016 Accomplishments: 1. Completed Phase I Design and Testing for Analysis & Dissemination (A&D) 2. Completed Test Readiness and Production Readiness Reviews for Streamline Incident Reporting (SIR). Full deployment begins in FY16 for SIR.						
FY 2017 Plans: 1. Complete contract award, design, systems requirement reviews, and preliminary design reviews for Safety Program Management (SPM). 2. Complete testing, post implementation, and begin full deployment for Phase I Analysis and Dissemination (A&D). Complete award and design of Phase II of A&D.						
FY 2018 Base Plans: 1. Complete design and implement Safety Program Management (SPM) configuration and interfaces. 2. Complete Phase I Analysis and Dissemination (A&D) to include configuration of SPM reports and metrics 3. Begin implementation of Phase II A&D.						
FY 2018 OCO Plans: N/A						
Title: Authoritative Data Environment (ADE)  Articles:		0.000 -	4.700 -	9.800 -	0.000 -	9.800 -
FY 2016 Accomplishments: N/A						
FY 2017 Plans: 1. Selection and Implementation of the technology platform for Production Deployment						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development	Project (Number/Name) 2905. / BUPERS IT				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
2. Commence People Common Operational Picture (COP) Phase I - Supply Chain Management & MPTE Analytic, Visualization and Information Services - Design - Configuration - Integration - Testing - Deployment  FY17 will fund the design, configuration, integration and testing of Phase I of the ADE program: Supply Chain Management & MPTE Analytic, Visualization and Information Services. Funding will also be for the deployment of the ADE Phase I prototype. This is a new start in FY17.  <b>FY 2018 Base Plans:</b> 1. FY18 funds will be used for Phase 2 engineering design, development, testing and supporting infrastructure to incorporate additional MPTE data warehouse programs into the ADE baseline, expanding on the current Enterprise Service Bus (ESB) and application programming interface (API) tools. 2. FY18 will also procure data migration services to affect the moves of source data into the new enterprise baseline instance.  <b>FY 2018 OCO Plans:</b> N/A						
Title: Applicant Relationship Management (ARM)  <b>Articles:</b>		0.000 -	4.416 -	0.556 -	0.000 -	0.556 -
FY 2016 Accomplishments: N/A  FY 2017 Plans: 1. Conduct software requirement analyses leading up to Acceptance Test Readiness Review (ATRR) 2. Collect additional requirements volatility data resulting from ongoing requirement analyses 3. Implement modifications / upgrades resulting from requirements volatility data 4. Support officer and enlisted active and reserve Delayed Entry Program (DEP) enlistment & accession processing 5. Utilize workflow management to perform paperless processing 6. Create medical waiver workflow for officer and enlisted applicants within one system						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
7. Provide alerts, notifications, and email for increased efficiency 8. Create improved architecture for linking to United States Military Entrance Processing Command. <b>FY 2018 Base Plans:</b> 1. Conduct software requirement analyses leading up to Production Readiness Review (PRR) 2. Conduct regression testing for proper integration with earlier development efforts 3. Create improved audit management capability for increased efficiency 4. Provide enhanced user and data management capabilities to efficiently integrate Self Service Accessions Application (SSAA) <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> Recruiting Information System (NRIS)  <b>Articles:</b>  <b>Description:</b> The Recruiting Information System (NRIS) creates a holistic approach to Navy Accessions by integrating Recruiter and Applicant information in real-time and to appropriate Manpower, Personnel, Training, and Education DoD business systems. Combined with Mobile Recruiter Initiative (MRI), the NRIS family of web enabled systems extends the recruiting force point-of-presence and key business processes to the field; facilitates real-time data sharing and paperless processing across the Accessions supply chain; and drives down the total number of transactions required to transition from street to fleet.  NRIS supports the active and reserve component, enlisted and officer accessions processes and includes system interfaces that eliminate multiple data entry and reduces errors. Interface partners include CeTARS (book school seats and initial strength gain), MIRS/eSOA (schedule applicants for physicals and testing at MEPS) and NSIPS (start the initial personnel record).  NRIS encompasses PRIDE Modernization-I, WebRTools, CIRIMS and NASIS; and will include PRIDE Modernization-II and ARM when deployed in FY15. The NRIS architecture provides the recruiting force with an agile, flexible, secure, and data-centric IT operating environment, the key building block for business transformation and supports the command's RF2030 strategy.  <b>FY 2016 Accomplishments:</b>		0.240 -	0.000 -	0.200 -	0.000 -	0.200 -

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Complete NRIS Development and deploy NRIS final capability. <b>FY 2017 Plans:</b> N/A <b>FY 2018 Base Plans:</b> Start/complete modification of PRIDE MOD II and ARM interface with Career Waypoint. <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> Personnel TEMPO (PERSTEMPO)  <b>Articles:</b>  <b>Description:</b> The PERSTEMPO program consists of two components: Modifying the ITEMPO system and further developing the Navy Deployment Health Location process. This strategy consists of Business Process Re-engineering (BPR) defined requirements, modernization/risk reduction of existing system (ITEMPO) and a process that uses our corporate systems at DMDC Mechanicsburg.  ITEMPO: PERSTEMPO was implemented to comply with Sections 586 and 923 of the FY00 NDAA, now within 10 USCS 991. This is a non-acquisition category program. Each military service is to track and manage the number of deployed days and number of temporary duty days away from homeport for active and reserve personnel. This information is reported to DoD/DMDC, which is used to report to the Secretary of Defense. ITEMPO is the system used to comply with these directives. PERSTEMPO supports Navy management of stress on the force as requested by the CNO; Commander, U.S. Fleet Forces Command (N1); and the Commander, U.S. Pacific Fleet (N1). Enhancements will be performed on the primitive ITEMPO functional tools/ metrics to make it actionable, current in technology, user friendly, and integrated into a variety of personnel and pay systems. Preparations are already underway to complete the FRD and perform a gap analysis within existing resources. This will support pay auditability/certainty when payment is authorized.  DEPLOYMENT HEALTH LOCATION: Deployment Health Location is being implemented per DoD Instruction 6490.03, "Deployment Health," (DoD Instruction) August 11, 2006. This requires the Military Departments to plan, program, and implement a system to ensure daily location recording for all deployed personnel assigned, attached, on temporary duty, or temporary additional duty to deployed units. The Services are required to report		1.024 -	0.000 -	0.000 -	0.000 -	0.000 -

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017	
<b>Appropriation/Budget Activity</b> 1319 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>				<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>			
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>											
						<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	
<p>the daily location information electronically to DMDC at least on a weekly basis. Also, this will correct the finding by DoD Inspector General Report NO. DODIG 2012-112 of Jul 18, 2012.</p> <p><b><i>FY 2016 Accomplishments:</i></b>            - Complete modifications on the ITEMPO and Deployment Health Location development sub-projects, based on approved FRDs.            - Complete advanced updates and enhancements (likely) to ITEMPO, allowing to transition the system to make it actionable, current in technology, user friendly, and integrated into a variety of personnel and pay systems.</p> <p><b><i>FY 2017 Plans:</i></b>            NA</p> <p><b><i>FY 2018 Base Plans:</i></b>            N/A</p> <p><b><i>FY 2018 OCO Plans:</i></b>            N/A</p>											
<b>Accomplishments/Planned Programs Subtotals</b>						12.879	29.664	52.957	0.000	52.957	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• 8106: <i>Command Support Equipment</i>	0.573	0.536	2.755	-	2.755	2.007	2.005	0.596	1.830	0.000	22.426
• 8161: <i>Enterprise Information Technology</i>	3.177	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.177
<b>Remarks</b> BLI 8106 funds for NSIPS. BLI 8161 funds for RMI.											
<b>D. Acquisition Strategy</b> As a general rule IT development programs use an agile software development methodology therefore milestones, tasks and phases are often conducted in parallel vice sequentially.  BILLET BASED DISTRIBUTION (BBD)											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>The required services will be procured through a Cost Plus Fixed Fee (CPFF) 8a contract and a competitive, multiple award, small business Indefinite Delivery / Indefinite Quantity (ID/IQ) contract task order.</p> <p>LEARNING MANAGEMENT SYSTEM - DISTANCE LEARNING (LMS-DL) Use existing GWAC or competitive contract for any new product sourcing, use existing Tri-Service PeopleSoft license, Indefinite Delivery/Indefinite Quantity contract vehicles within PMW 240 for additional design and integration services.</p> <p>NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)  Navy Standard Integrated Personnel System (NSIPS) will incrementally implement Navy's personnel and pay modernization strategy using a variety of IDIQ contract task orders. These task orders will use commercial off the shelf (COTS) software (PeopleSoft Global Payroll and PeopleSoft General Ledger) to extend the Navy Standard Integrated Personnel System (NSIPS), based on PeopleSoft Human Capital Management.</p> <p>MY NAVY PORTAL (MNP) The required services will be procured through a competitive small business Indefinite Delivery / Indefinite Quantity (ID/IQ) Cost Plus Fixed Fee (CPFF) 8a contract.</p> <p>NAVY MANPOWER REQUIREMENTS SYSTEM (NMRS) The required services will be procured through a Cost Plus Fixed Fee (CPFF) task order awarded on a competitive, multiple award, small business Indefinite Delivery / Indefinite Quantity (ID/IQ) contract.</p> <p>RISK MANAGEMENT INFORMATION (RMI) There are existing Commercial-Off-the-Shelf (COTS) software and services that, with customization, can fill the Navy's documentation requirements and generate safety reporting of the United States Naval forces. These services will be procured through an 8A CPFF contract.</p> <p>The Navy plans to leverage Contractor developed safety-related products by using a modular contracting approach to implement and combine capabilities from the following systems.</p> <p>(a) Streamlined Incident Reporting (SIR) (b) Single Point of Entry (SPOE) (c) Safety Program Management (SPM); (d) Analysis &amp; Dissemination (A&amp;D)</p> <p>AUTHORITATIVE DATA ENVIRONMENT (ADE)</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>The required services will be procured through multiple Cost Plus Fixed Fee (CPFF) task orders awarded on a competitive, multiple award, small business Indefinite Delivery / Indefinite Quantity (ID/IQ) contract for PMW 240 enterprise services, and also on a competitive, single award, large business Indefinite Delivery / Indefinite Quantity (ID/IQ) contract for tasking related to personnel and pay modernization.</p> <p>APPLICANT RELATIONSHIP MANAGEMENT (ARM) CPFF contract using GOTS software solution.</p> <p>(U) PERSTEMPO: Expect to use existing systems and build applications in those environments. Specifically for ITEMPO related costing, system resources are already existing within other system budget lines, and the OMN structure has been increased from FY2016 through the FYDP to sustain these changes. For Deployment Health Location, best system will be determined to host these attributes once the FRD is completed. For software development, the existing contract vehicles will be used, managing the work through separate sub contract line items (SLINs). Existing test resources will be used for testing software modifications.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>BILLET BASED DISTRIBUTION (BBD) Concurrent Users: 250 Users Screen Refresh: 6-20 Seconds System Recoverability: &lt;=4 Hrs System Interoperability: 95% System Availability: &gt;=95%</p> <p>LEARNING MANAGEMENT SYSTEM - DISTANCE LEARNING (LMS-DL) Capturing end user screen refresh latency as compared to current system benchmarks for on-line courses. Identifying all integration points, failure modes and data flows required for the additional technology and approach Identifying supply chain, instructional, and student management business process changes needed to employ the technology Assessing server utilization and physical architecture projections (#s and types of hardware/SW/network appliances) needed for full scale use of the technology.</p> <p>ANALYSIS OF ALTERNATIVE/ECONOMIC ANALYSIS (AOA) Produce assessments for 95% of required AoAs.</p> <p>NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS) The system shall allow role-based access to SSN and/or masked SSN in accordance with Personally Identifiable Information (PII) instructions 100% of the time. The system shall have a retrieval or generation of data entry/navigation screen within 4 seconds for 90% of transactions. System maintainability - Failures or unplanned outages shall be restored within 4 hours. The system shall have sufficient capacity to handle anticipated user demand based on increased functionality and accessibility for at least 12,000 simultaneous users. Data consistency - The system shall produce consistent reports when a query is duplicated using identical user-selected parameters, to include the specific timestamp of the query. System will be within 99% accuracy in replicating the report content.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>Data accuracy - The system shall generate forms and accurately populate them with authoritative source data with greater than 99% accuracy between the data auto-populated forms and the data contained within the system.</p> <p>MY NAVY PORTAL (MNP) MNP will meet acquisition program and system engineering and technical review milestones for development with no outstanding severity 1-3 defects prior to production release. The portal will manage at least 50,000 concurrent actions per hour and 200,000 concurrent users per hour.</p> <p>NAVY MANPOWER REQUIREMENTS SYSTEM (NMRS) Security- No identified / open findings without documentation of implemented mitigations and a remediation plan. No residual CAT I findings, or risk aggregation to CAT I. Concurrent Users - A minimum of 35 concurrent users without degradation of system performance. Transactions - 98% of transactions completed successfully System Reliability - Edit failures transmitted data that are not detected automatically and require field level manual intervention to correct in less than 2% of all transactions. System Availability - Available 95% of the time. Reporting - System must generate, populate, and display simple reports within ten seconds and complex reports within two minutes. Queries - System must have the ability to execute simple queries within ten seconds and complex queries within fifteen seconds. Screen Refresh - System shall have the ability to perform a screen refresh invoked by the user within fifteen seconds of submission. Navigation - System shall have the ability to navigate between hierarchy levels while utilizing the map within ten seconds of each instance of level change.</p> <p>RISK MANAGEMENT INFORMATION (RMI) Safety Incident Reporting Functionality - The system shall provide the ability to utilize RMI mishap, near mishap, and hazard initial notification, report drafting, report submission, report endorsement, and mishap recommendation / action item response and tracking functionality for at least 95% of Navy and Marine Corps operational ground forces, shore commands, surface forces, aviation forces, and submarine forces Incident Data Capture - The system shall capture safety incident report data 100% of the time. Security - The system shall protect flagged Safety Privilege, Personally Identifiable Information (PII), and Protected Health Information (PHI), and allow only role-based access in accordance with law, regulation and policy (LRP) instructions. 100% of flagged Safety Privilege, PII, and PHI data shall be protected from unauthorized roles and tacit export. Registered Users - The system shall support user account access for Navy and Marine Corps members and safety support users for all safety user types = (administrative, power, occasional, and infrequent) Concurrent Active Users - The system shall have sufficient capacity to support concurrent active users or greater than 20% of all safety users. Response Time - Data requests/queries, reports, building of custom views, etc. shall not significantly impact transaction processing time. All items will be processed within 1 second or less for 90% of requests and 3 seconds or less for 10% of single record requests.</p> <p>AUTHORITATIVE DATA ENVIRONMENT (ADE)</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>
<p>The system shall provide an audit trail for all system transactions.</p> <p>The system shall transfer data payloads of up to 1 megabyte (MB) among services.</p> <p>The system shall transfer data transactions of up to 1 MB among applications.</p> <p>The system shall allow any authorized application or system to insert data.</p> <p>The system shall provide CAC-enabled login for identity management.</p> <p>APPLICANT RELATIONSHIP MANAGEMENT (ARM)</p> <p>The system shall have the ability to perform simple queries and present data to the user within five seconds upon submission.</p> <p>ARM shall have no architectural limitations that would preclude a minimum of 5,000 concurrent users.</p> <p>The system response time will support an experienced classifier making at least ten classifications per hour.</p> <p>The ARM system shall auto save information entered by a recruiter while the information is being entered without degradation of system responsiveness.</p> <p>(U) 2905 PERSTEMPO: Meet program system engineering and technical review milestones for development with no outstanding severity 1-3 defects for production release.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 2905. / <i>BUPERS IT</i>					
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
BBD Phase 1c Increment 1 and 2, Phasde 2	C/CPFF	SSC, INC : New Orleans, LA	8.613	0.932	Dec 2015	2.140	Dec 2016	4.860	Dec 2017	-		4.860	Continuing	Continuing	Continuing
LMS-DL Pilot and Career Profile Management	C/CPFF	TBD : Pensacola, FL	1.801	0.000		3.750	Jun 2017	5.606	Jun 2018	-		5.606	Continuing	Continuing	Continuing
MNP Phase 2A/B/C Design, Development, Test & Deployment	C/CPFF	Katmai : Arlington, VA	6.501	3.654	Nov 2015	3.269	Nov 2016	4.290	Jul 2018	-		4.290	Continuing	Continuing	Continuing
TFMMS Design, Development, Test & Deployment (2 Increments)	C/CPFF	A3IS : Palm Coast, FL	5.252	1.367	Feb 2016	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
PRIDE MOD II Design, Development, Test & Deployment	C/CPFF	CGI, Fed : Washington, DC	2.185	0.000		0.000		0.000		-		0.000	0.000	2.185	1.370
AOA Design, Development, Test & Deployment	C/CPFF	TBD : New Orleans, LA	0.992	0.000		0.800	Mar 2017	0.700	Mar 2018	-		0.700	Continuing	Continuing	Continuing
NSIPS PERSMOD Deferred SCRs Design, Development, Test & Deployment	C/CPFF	CSRA : Washington, DC	8.537	1.279	Jan 2016	0.867	Jan 2017	20.262	Jan 2018	-		20.262	Continuing	Continuing	Continuing
NMRS Design, Development, Test & Deployment	C/CPFF	TBD : New Orleans, LA	0.000	0.000		3.378	May 2017	2.000	May 2018	-		2.000	Continuing	Continuing	Continuing
RMI SIR/SPOE/SPM/A&D Design, Development, Test & Deployment	C/CPFF	Syneren : Arlington, VA	3.930	1.960	Jun 2016	2.761	Jun 2017	1.100	Jul 2018	-		1.100	Continuing	Continuing	Continuing
ADE - BI / Visualization / Analytics Products	C/CPFF	CSRA : Washington, D.C.	0.000	0.000		3.500	Jul 2017	5.500	Jul 2018	-		5.500	Continuing	Continuing	Continuing
ADE - System Integration	C/CPFF	CSRA : Washington, D.C.	0.000	0.000		1.200	May 2017	4.300	May 2018	-		4.300	Continuing	Continuing	Continuing
ARM Phase 1-3 Design, Development, Test & Deployment	C/CPFF	HP : Orlando, FL	0.000	0.000	Dec 2015	4.416	Dec 2016	0.556	Dec 2017	-		0.556	0.000	4.972	2.221

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development				Project (Number/Name) 2905. / BUPERS IT					
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
PERSTEMPO System Design, Engineering, and Development	C/CPFF	FLC Philadelphia : Philadelphia, PA	0.000	1.024	Sep 2016	0.000		0.000		-		0.000	0.000	1.024	-
Recruiting Information System (NRIS)	C/CPFF	CGI Federal, Inc : Fairfax, VA	0.000	0.240	Oct 2015	0.000		0.200	Jan 2018	-		0.200	0.000	0.440	-
Subtotal			37.811	10.456		26.081		49.374		-		49.374	-	-	-
Remarks															
Programs are all either abbreviated acquisition programs or non-designated projects and do not require Independent Operational Test Evaluation (IOTE). Testing is performed in accordance with approved test plans by the business owners.															
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
NSIPS Bi-Service License	C/CPFF	Oracle : Redwood City, CA	7.200	2.423	Dec 2015	3.583	Dec 2016	3.583	Dec 2017	-		3.583	Continuing	Continuing	Continuing
Subtotal			7.200	2.423		3.583		3.583		-		3.583	-	-	-
Remarks															
NSIPS pays the Navy's share of the Bi-Service PeopleSoft license.															
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			45.011	12.879		29.664		52.957		-		52.957	-	-	-
Remarks															

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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 2905.L39</b>																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Virtual Classroom Product Licenses																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL System Integrator Task Order Award																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL System Requirement Review / System Functional Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Preliminary Design Review / Critical Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Application Test Readiness Review / PRR																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Evaluation																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Test Readiness Review and Pilot Operations																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Tech Assessment Report																												

## UNCLASSIFIED

Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Design																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Preliminary Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Development																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Critical Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Testing																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Production Readiness Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Deployment																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Design																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Preliminary Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized																												

## UNCLASSIFIED

Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
Learning Delivery & Management Development																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Critical Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Testing																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Production Readiness Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Deployment																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Design																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Preliminary Design Review																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Development																												
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Critical Design Review																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy																				Date: May 2017																	
Appropriation/Budget Activity										R-1 Program Element (Number/Name)										Project (Number/Name)																	
1319 / 5										PE 0605013N / Information Technology Development										2905. / BUPERS IT																	
										FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
										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
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Testing																																					
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Production Readiness Review																																					
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Deployment																																					
Total Force Manpower Management System (TFMMS)																																					
TFMMS Iteration 2 Critical Design Review																																					
TFMMS Iteration 2 Testing																																					
TFMMS Iteration 2 Production Readiness Review																																					
TFMMS Iteration 2 Deployment																																					
Analysis of Alternative Economic Analysis (AOA EA)																																					
Personnel Manpower Analysis for Sailor 2025 Tool Kit																																					
AOA for MPT&E Cloud Services																																					
AOA EA - Personnel Accountability Process Supply Chain Analytics																																					
MY NAVY PORTAL (MNP)																																					
MNP Phase 2B Acceptance Testing																																					
MNP Phase 2B Production																																					
MNP Phase 2C System Requirement Review																																					
MNP Phase 2C Preliminary Design Review																																					

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
MNP Phase 2C Initial Development																												
MNP Phase 2C Critical Design Review																												
MNP Phase 2C Acceptance Testing																												
MNP Phase 2C Production																												
MNP Mobile Applications Updates																												
MNP Phase 2C Intermediate Development																												
MNP Develop & Integrate Identified CLE Portlets																												
MNP Finalize Platform for MNP Preferred Hosting Solution																												
MNP Phase 2C Final Development																												
MNP Gather Feedback & Incorporate																												
MNP Develop & Integrate Additional CLE Portlets																												
MNP Develop, Test & Release Portlets																												
MNP Develop, Test & Release Additional Portlets																												
<b>BILLET BASED DISTRIBUTION (BBD)</b>																												
BBD Phase 1c Increment 1 Detailed Requirements Analysis																												
BBD Phase 1c Increment 1 Preliminary Design Review																												
BBD Phase 1c Increment 1 Development																												
BBD Phase 1c Increment 1 Critical Design Review																												
BBD Phase 1c Increment 1 Application Test Readiness Review																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy																				Date: May 2017								
Appropriation/Budget Activity 1319 / 5										R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development								Project (Number/Name) 2905. / BUPERS IT										
	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
BBD Phase 1c Increment 1 User Acceptance Functional Testing																												
BBD Phase 1c Increment 1 Production Readiness Review/Production Rollout																												
BBD Phase 1c Increment 2 Detailed Requirements Analysis																												
BBD Phase 1c Increment 2 Preliminary Design Review																												
BBD Phase 1c Increment 2 Development																												
BBD Phase 2 Enlisted Optimization and Slating Critical Design Review																												
BBD Phase 2 Enlisted Optimization and Slating Application Test Readiness Review																												
BBD Phase 2 Enlisted Optimization and Slating User Acceptance Functional Testing																												
BBD Phase 2 Enlisted Optimization and Slating Production Readiness Review/ Production Rollout																												
BBD Phase 2 Officer Functionality Detailed Requirements Analysis																												
BBD Phase 2 Officer Functionality Preliminary Design Review																												
BBD Phase 2 Officer Functionality Development																												
BBD Phase 2 Officer Functionality Critical Design Review																												
BBD Phase 2 Officer Functionality Application Test Readiness Review																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
BBD Phase 2 Officer Functionality User Acceptance Functional Testing																												
BBD Phase 2 Officer Functionality Production Readiness Review/Production Rollout																												
<b>NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)</b>																												
NSIPS Application Test Readiness Review - Iteration 1																												
NSIPS Tri-Service License Renewal FY16																												
NSIPS Task Order Award for Deferred Software Changes																												
NSIPS Application Functional Testing / Application System Integration Testing - Iteration 1																												
NSIPS Full Deployment - Iteration 1																												
NSIPS Critical Design Review - Iteration 2																												
NSIPS Application Test Readiness Review - Iteration 2																												
NSIPS Application Functional Testing / Application System Integration Testing - Iteration 2																												
NSIPS Tri-Service License Renewal FY17																												
NSIPS Full Deployment - Iteration 2																												
NSIPS Critical Design Review - Iteration 3																												
NSIPS Application Test Readiness Review - Iteration 3																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
NSIPS Application Functional Testing / Application System Integration Testing - Iteration 3																												
NSIPS Full Deployment - Iteration 3																												
NSIPS - Acquisition Authority Decision Milestone B																												
NSIPS Contract Award for Deferred SW changes																												
NSIPS PERS MOD System Requirements Review/System Functional Review,																												
NSIPS PERS MOD Preliminary Design Review																												
NSIPS PERS MOD Critical Design Review																												
NSIPS PERS MOD Application Test Readiness Review																												
NSIPS PERS MOD PRR																												
NSIPS PeopleSoft License Renewal FY18																												
NSIPS PeopleSoft License Renewal FY19																												
NSIPS PeopleSoft License Renewal FY20																												
NSIPS PeopleSoft License Renewal FY21																												
PAY MOD Increment 1 Preliminary Design Review																												
PAY MOD Increment 1 Development																												
PAY MOD Increment 1 Critical Design Review																												
PAY MOD Increment 1 Testing																												
PAY MOD Increment 1 Production Readiness Review																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
PAY MOD Increment 1 Deployment																												
PAY MOD Increment 2 Preliminary Design Review																												
PAY MOD Increment 2 Development																												
PAY MOD Increment 2 Critical Design Review																												
PAY MOD Increment 2 Testing																												
PAY MOD Increment 2 Production Readiness Review																												
PAY MOD Increment 2 Deployment																												
PAY MOD Increment 3 Preliminary Design Review																												
PAY MOD Increment 3 Development																												
PAY MOD Increment 3 Critical Design Review																												
PAY MOD Increment 3 Testing																												
PAY MOD Increment 3 Production Readiness Review																												
PAY MOD Increment 3 Deployment																												
AC/RC PERMEABILITY SOLUTION - Requirements Complete																												
AC/RC PERMEABILITY SOLUTION - RFQ Package																												
AC/RC PERMEABILITY SOLUTION - Task Order Award																												
PH1 AC/RC PERMEABILITY SOLUTION - Systems Requirements Review																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
PH1 AC/RC PERMEABILITY SOLUTION - Design																												
PH1 AC/RC PERMEABILITY SOLUTION - Preliminary Design Review																												
PH1 AC/RC PERMEABILITY SOLUTION - Critical Design Review Iteration One																												
PH1 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase One																												
PH1 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing																												
PH1 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase																												
PH2 AC/RC PERMEABILITY SOLUTION - Critical Design Review Phase Two																												
PH2 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase Two																												
PH2 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing Nov 19																												
PH2 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase Two Jan 20																												
PH3 AC/RC PERMEABILITY SOLUTION - Critical Design Review Phase Three April 20																												
PH3 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase Three Jul 20																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
PH3 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing Sep 20																												
PH3 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase Three Nov 20																												
PH4 AC/RC PERMEABILITY SOLUTION - Critical Design Review Phase Four Jan 21																												
PH4 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase Four Apr 21																												
PH4 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing Jul 21																												
PH4 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase Three Sept 21																												
<b>Risk Management Information (RMI)</b>																												
RMI Streamlined Incident Reporting Test Readiness Review																												
RMI Streamlined Incident Reporting Production Readiness Review																												
RMI Streamlined Incident Reporting Limited Deployment																												
RMI Streamlined Incident Reporting Full Deployment																												
RMI Safety Program Management Award																												
RMI Safety Program Management Design																												
RMI Safety Program Management System Requirements Review																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy																				Date: May 2017																	
Appropriation/Budget Activity 1319 / 5										R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development										Project (Number/Name) 2905. / BUPERS IT																	
										FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
										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
RMI Safety Program Management Preliminary Design Review																																					
RMI Safety Program Management Critical Design Review																																					
RMI Safety Program Management Acceptance Test Readiness Review																																					
RMI Safety Program Management Test Readiness Review																																					
RMI Safety Program Management Post Implementation Review																																					
RMI Safety Program Management Full Deployment																																					
RMI Analysis and Dissemination Phase I Design																																					
RMI Analysis and Dissemination Phase I Preliminary Design Review																																					
RMI Analysis and Dissemination Phase I Critical Design Review																																					
RMI Analysis and Dissemination Phase I Acceptance Test Readiness Review																																					
RMI Analysis and Dissemination Phase I Test Readiness Review																																					
RMI Analysis and Dissemination Phase I Acceptance Post Implementation Review																																					
RMI Analysis and Dissemination Phase I Full Deployment																																					
RMI Analysis and Dissemination Phase II Award																																					

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology  
Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
RMI Analysis and Dissemination Phase II Design																												
RMI Analysis and Dissemination Phase II Preliminary Design Review																												
RMI Analysis and Dissemination Phase II Critical Design Review																												
RMI Analysis and Dissemination Phase II Acceptance Test Readiness Review																												
RMI Analysis and Dissemination Phase II Test Readiness Review																												
RMI Analysis and Dissemination Phase II Acceptance Post Implementation Review																												
RMI Analysis and Dissemination Phase II Full Deployment																												
<b>Authoritative Data Environment (ADE)</b>																												
ADE Phase 1 Data Marts BI / Visualization / Analytics Products Contract Award																												
ADE Phase 1 Data Marts System Integrator Task Order Award																												
ADE Phase 1 Data Marts System Requirement Review / System Functional Review																												
ADE Phase 1 Data Marts Preliminary Design Review / Critical Design Review																												
ADE Phase 1 Data Marts Application Test Readiness Review / Production Readiness Review																												
ADE Phase 1 Data Marts Deployment																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
ADE Phase 2 Enterprise ADE Baseline SRR/SFR																												
ADE Phase 2 Enterprise ADE Baseline PDR																												
ADE Phase 2 Enterprise ADE Baseline CDR																												
ADE Phase 2 Enterprise ADE Baseline PRR																												
ADE Phase 2 Enterprise ADE Baseline IOC																												
ADE Phase 2 Enterprise ADE Baseline P3I Release 1																												
ADE Phase 3 Reports Contract Award - Deployment																												
ADE Phase 4 Contract Award - Deployment																												
ADE Phase 5 Contract Award - Deployment																												
<b>Applicant Relationship Management (ARM)</b>																												
ARM Phase 1 Post Award Conference																												
ARM Phase 1 Systems Requirements Review																												
ARM Phase 1 Requirements Review																												
ARM Phase 1 Initial Planning																												
ARM Phase 1 Design / Preliminary Design Review																												
ARM Phase 1 Development # 1																												
ARM Phase 1 Code Release																												
ARM Phase 2 Development # 2																												
ARM Phase 2 Incremental Test # 2																												
ARM Phase 2 Code Release # 2																												
ARM Phase 2 Development # 3																												
ARM Phase 2 Critical Design Review																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
ARM Phase 2 Incremental Test # 3																												
ARM Phase 2 Code Release # 3																												
ARM Phase 2 Development # 4																												
ARM Phase 2 Test Readiness Review																												
ARM Phase 2 Incremental Test # 4																												
ARM Phase 2 Production Readiness Review																												
ARM Phase 2 Code Release (1-5) Into Production																												
ARM Phase 3 Development # 5 / Defect Resolution																												
ARM Phase 3 Incremental Test # 5																												
ARM Phase 3 Code Release # 5																												
<b>Navy Manpower Requirements System (NMRS)</b>																												
NMRS Contract Award / Project Kick-Off																												
NMRS Requirements Analysis																												
NMRS Preliminary Design Review																												
NMRS Development																												
NMRS Critical Design Review																												
NMRS Acceptance Testing																												
NMRS Operational Testing																												
NMRS Deployment																												
PERSTEMPO-ITEMPO (P-I): FRD: PERSTEMPO-ITEMPO (P-I): FRD																												
PERSTEMPO-ITEMPO (P-I): FRD: PERS 1																												
PERSTEMPO-ITEMPO (P-I): FRD: PERS 2																												

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
PERSTEMPO-ITEMPO (P-I): FRD: PERS 3	■																											
PERSTEMPO-ITEMPO (P-I): FRD: PERS4				■																								
PP-I Critical Design Review: PP-I Critical Design Review	■	■	■	■																								
PP-I Critical Design Review: PP1 Crit 1	■																											
PP-I Critical Design Review: PP1 Crit 2			■	■																								
PP-I Critical Design Review: PP1 Crit 3	■																											
PP-I Critical Design Review: PP1 Crit 4			■	■																								
P-I: User Acceptance Testing: P-I: User Acceptance Testing			■	■																								
P-I: User Acceptance Testing: P-1 User 1			■	■																								
P-I: User Acceptance Testing: P-1 User 2				■																								
P-I: User Acceptance Testing: P-1 User 3			■	■																								
P-I: User Acceptance Testing: P-1 User 4				■																								
P-I: Release Review Board/Production Rollout: P-I: Release Review Board/ Production Rollout				■																								
P-I: Release Review Board/Production Rollout: P-1 Rel 1				■																								
P-I: Release Review Board/Production Rollout: P-1 Rel 2				■																								
P-I: Release Review Board/Production Rollout: P-1 Rel 3				■																								
P-I: Release Review Board/Production Rollout: P-1 Rel 4				■																								
PERSTEMPO-Deployment Health Location (P-DHL): FRD: PERSTEMPO-Deployment Health Location (P-DHL): FRD	■	■	■	■																								

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

1319 / 5

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

PE 0605013N / Information Technology  
Development

## Project (Number/Name)

2905. / BUPERS IT

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
PERSTEMPO-Deployment Health Location (P-DHL): FRD: Pers 1	■																											
PERSTEMPO-Deployment Health Location (P-DHL): FRD: Pers 2				■																								
P-DHL: Critical Design Review: P-DHL: Critical Design Review	■	■	■	■																								
P-DHL: Critical Design Review: P-DHL 1	■																											
P-DHL: Critical Design Review: P-DHL 2			■	■																								
P-DHL: User Acceptance Testing: P-DHL: User Acceptance Testing			■	■																								
P-DHL: User Acceptance Testing: DHL U 1			■	■																								
P-DHL: User Acceptance Testing: DHL U 2				■																								
P-DHL: Release Review Board/Production Rollout: P-DHL: Release Review Board/Production Rollout				■																								
P-DHL: Release Review Board/Production Rollout: DHL R 1				■																								
P-DHL: Release Review Board/Production Rollout: DHL R 2				■																								
P-DHL: Release Review Board/Production Rollout: Schedule Detail													■	■	■	■												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy</b>			<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 2905. / <i>BUPERS IT</i>	

**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 2905.L39</b>				
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Virtual Classroom Product Licenses	3	2017	3	2017
Learning Management System - Distributed Learning (LMS-DL): LMS-DL System Integrator Task Order Award	3	2017	3	2017
Learning Management System - Distributed Learning (LMS-DL): LMS-DL System Requirement Review / System Functional Review	3	2017	3	2017
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Preliminary Design Review / Critical Design Review	3	2017	3	2017
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Application Test Readiness Review / PRR	3	2017	4	2017
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Evaluation	4	2017	2	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Design Review	3	2017	3	2017
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Test Readiness Review and Pilot Operations	3	2017	2	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Pilot Tech Assessment Report	2	2018	2	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Design	1	2018	2	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Preliminary Design Review	2	2018	2	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Development	2	2018	3	2018

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Critical Design Review	3	2018	3	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Testing	3	2018	3	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Production Readiness Review	4	2018	4	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Career Profile Management Deployment	4	2018	4	2018
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Design	1	2019	2	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Preliminary Design Review	2	2019	2	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Development	2	2019	3	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Critical Design Review	3	2019	3	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Testing	3	2019	3	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Production Readiness Review	4	2019	4	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Decentralized Learning Delivery & Management Deployment	4	2019	4	2019
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Design	1	2020	2	2020
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Preliminary Design Review	2	2020	2	2020
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Development	2	2020	3	2020

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Critical Design Review	3	2020	3	2020
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Testing	3	2020	3	2020
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Production Readiness Review	4	2020	4	2020
Learning Management System - Distributed Learning (LMS-DL): LMS-DL Advancement Changes Deployment	4	2020	4	2020
Total Force Manpower Management System (TFMMS)				
TFMMS Iteration 2 Critical Design Review	3	2016	3	2016
TFMMS Iteration 2 Testing	4	2016	4	2016
TFMMS Iteration 2 Production Readiness Review	4	2016	4	2016
TFMMS Iteration 2 Deployment	4	2016	4	2016
Analysis of Alternative Economic Analysis (AOA EA)				
Personnel Manpower Analysis for Sailor 2025 Tool Kit	1	2017	1	2019
AOA for MPT&E Cloud Services	1	2017	4	2018
AOA EA - Personnel Accountability Process Supply Chain Analytics	1	2017	4	2018
MY NAVY PORTAL (MNP)				
MNP Phase 2B Acceptance Testing	1	2016	1	2016
MNP Phase 2B Production	2	2016	2	2016
MNP Phase 2C System Requirement Review	2	2016	2	2016
MNP Phase 2C Preliminary Design Review	3	2016	3	2016
MNP Phase 2C Initial Development	3	2016	2	2019
MNP Phase 2C Critical Design Review	3	2016	3	2016
MNP Phase 2C Acceptance Testing	2	2019	4	2019
MNP Phase 2C Production	4	2019	4	2021

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
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	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
MNP Mobile Applications Updates	1	2017	4	2017
MNP Phase 2C Intermediate Development	2	2017	3	2018
MNP Develop & Integrate Identified CLE Portlets	2	2017	4	2017
MNP Finalize Platform for MNP Preferred Hosting Solution	2	2017	3	2017
MNP Phase 2C Final Development	3	2018	4	2019
MNP Gather Feedback & Incorporate	3	2017	2	2018
MNP Develop & Integrate Additional CLE Portlets	3	2018	4	2019
MNP Develop, Test & Release Portlets	4	2019	4	2020
MNP Develop, Test & Release Additional Portlets	4	2020	4	2021
BILLET BASED DISTRIBUTION (BBD)				
BBD Phase 1c Increment 1 Detailed Requirements Analysis	1	2016	1	2016
BBD Phase 1c Increment 1 Preliminary Design Review	2	2016	2	2016
BBD Phase 1c Increment 1 Development	2	2016	4	2016
BBD Phase 1c Increment 1 Critical Design Review	4	2016	4	2016
BBD Phase 1c Increment 1 Application Test Readiness Review	3	2017	2	2018
BBD Phase 1c Increment 1 User Acceptance Functional Testing	1	2017	2	2017
BBD Phase 1c Increment 1 Production Readiness Review/Production Rollout	2	2018	2	2018
BBD Phase 1c Increment 2 Detailed Requirements Analysis	1	2017	1	2017
BBD Phase 1c Increment 2 Preliminary Design Review	2	2017	2	2017
BBD Phase 1c Increment 2 Development	2	2017	4	2018
BBD Phase 2 Enlisted Optimization and Slating Critical Design Review	4	2018	4	2018
BBD Phase 2 Enlisted Optimization and Slating Application Test Readiness Review	1	2019	1	2019
BBD Phase 2 Enlisted Optimization and Slating User Acceptance Functional Testing	1	2019	3	2019
BBD Phase 2 Enlisted Optimization and Slating Production Readiness Review/ Production Rollout	4	2019	4	2019
BBD Phase 2 Officer Functionality Detailed Requirements Analysis	2	2018	3	2018

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Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

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

PE 0605013N / Information Technology  
Development

## Project (Number/Name)

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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
BBD Phase 2 Officer Functionality Preliminary Design Review	3	2018	3	2018
BBD Phase 2 Officer Functionality Development	3	2018	4	2018
BBD Phase 2 Officer Functionality Critical Design Review	4	2018	4	2018
BBD Phase 2 Officer Functionality Application Test Readiness Review	1	2019	1	2019
BBD Phase 2 Officer Functionality User Acceptance Functional Testing	1	2019	3	2019
BBD Phase 2 Officer Functionality Production Readiness Review/Production Rollout	4	2019	4	2019
<b>NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)</b>				
NSIPS Application Test Readiness Review - Iteration 1	1	2016	1	2016
NSIPS Tri-Service License Renewal FY16	1	2016	1	2016
NSIPS Task Order Award for Deferred Software Changes	2	2016	2	2016
NSIPS Application Functional Testing / Application System Integration Testing - Iteration 1	1	2016	2	2016
NSIPS Full Deployment - Iteration 1	2	2016	2	2016
NSIPS Critical Design Review - Iteration 2	2	2016	2	2016
NSIPS Application Test Readiness Review - Iteration 2	2	2016	2	2016
NSIPS Application Functional Testing / Application System Integration Testing - Iteration 2	2	2016	3	2016
NSIPS Tri-Service License Renewal FY17	1	2017	1	2017
NSIPS Full Deployment - Iteration 2	3	2016	3	2016
NSIPS Critical Design Review - Iteration 3	3	2016	3	2016
NSIPS Application Test Readiness Review - Iteration 3	3	2016	3	2016
NSIPS Application Functional Testing / Application System Integration Testing - Iteration 3	3	2016	3	2016
NSIPS Full Deployment - Iteration 3	4	2016	4	2016
NSIPS - Acquisition Authority Decision Milestone B	1	2017	1	2017
NSIPS Contract Award for Deferred SW changes	2	2017	2	2017

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Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy

Date: May 2017

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
NSIPS PERS MOD System Requirements Review/System Functional Review,	3	2017	3	2017
NSIPS PERS MOD Preliminary Design Review	4	2017	1	2018
NSIPS PERS MOD Critical Design Review	2	2018	2	2018
NSIPS PERS MOD Application Test Readiness Review	3	2018	3	2018
NSIPS PERS MOD PRR	4	2018	4	2018
NSIPS PeopleSoft License Renewal FY18	1	2018	1	2018
NSIPS PeopleSoft License Renewal FY19	1	2019	1	2019
NSIPS PeopleSoft License Renewal FY20	1	2020	1	2020
NSIPS PeopleSoft License Renewal FY21	1	2021	1	2021
PAY MOD Increment 1 Preliminary Design Review	2	2018	2	2018
PAY MOD Increment 1 Development	2	2018	3	2019
PAY MOD Increment 1 Critical Design Review	3	2019	3	2019
PAY MOD Increment 1 Testing	3	2019	1	2020
PAY MOD Increment 1 Production Readiness Review	1	2020	1	2020
PAY MOD Increment 1 Deployment	2	2020	2	2020
PAY MOD Increment 2 Preliminary Design Review	2	2019	2	2019
PAY MOD Increment 2 Development	2	2019	3	2020
PAY MOD Increment 2 Critical Design Review	3	2020	3	2020
PAY MOD Increment 2 Testing	3	2020	1	2021
PAY MOD Increment 2 Production Readiness Review	1	2021	1	2021
PAY MOD Increment 2 Deployment	2	2021	2	2021
PAY MOD Increment 3 Preliminary Design Review	2	2020	2	2020
PAY MOD Increment 3 Development	2	2020	3	2021
PAY MOD Increment 3 Critical Design Review	3	2021	3	2021
PAY MOD Increment 3 Testing	3	2021	1	2022

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy				Date: May 2017	
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		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
PAY MOD Increment 3 Production Readiness Review		1	2022	1	2022
PAY MOD Increment 3 Deployment		2	2022	2	2022
AC/RC PERMEABILITY SOLUTION - Requirements Complete		1	2017	3	2017
AC/RC PERMEABILITY SOLUTION - RFQ Package		3	2017	4	2017
AC/RC PERMEABILITY SOLUTION - Task Order Award		1	2018	1	2018
PH1 AC/RC PERMEABILITY SOLUTION - Systems Requirements Review		2	2018	2	2018
PH1 AC/RC PERMEABILITY SOLUTION - Design		2	2018	3	2018
PH1 AC/RC PERMEABILITY SOLUTION - Preliminary Design Review		3	2018	3	2018
PH1 AC/RC PERMEABILITY SOLUTION - Critical Design Review Iteration One		1	2019	1	2019
PH1 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase One		2	2019	2	2019
PH1 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing		2	2019	2	2019
PH1 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase		3	2019	3	2019
PH2 AC/RC PERMEABILITY SOLUTION - Critical Design Review Phase Two		3	2019	3	2019
PH2 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase Two		4	2019	4	2019
PH2 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing Nov 19		1	2020	1	2020
PH2 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase Two Jan 20		2	2020	2	2020
PH3 AC/RC PERMEABILITY SOLUTION - Critical Design Review Phase Three April 20		3	2020	3	2020
PH3 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase Three Jul 20		4	2020	4	2020
PH3 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing Sep 20		4	2020	4	2020
PH3 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase Three Nov 20		1	2021	1	2021

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
PH4 AC/RC PERMEABILITY SOLUTION - Critical Design Review Phase Four Jan 21	2	2021	2	2021
PH4 AC/RC PERMEABILITY SOLUTION - Application Test Readiness Review Phase Four Apr 21	3	2021	3	2021
PH4 AC/RC PERMEABILITY SOLUTION - Application Functional Testing /System Int. Testing Jul 21	4	2021	4	2021
PH4 AC/RC PERMEABILITY SOLUTION - Full Deployment Phase Three Sept 21	4	2021	4	2021
Risk Management Information (RMI)				
RMI Streamlined Incident Reporting Test Readiness Review	1	2016	1	2016
RMI Streamlined Incident Reporting Production Readiness Review	2	2016	2	2016
RMI Streamlined Incident Reporting Limited Deployment	2	2016	2	2016
RMI Streamlined Incident Reporting Full Deployment	4	2016	4	2016
RMI Safety Program Management Award	1	2017	1	2017
RMI Safety Program Management Design	2	2017	2	2017
RMI Safety Program Management System Requirements Review	4	2017	4	2017
RMI Safety Program Management Preliminary Design Review	3	2017	3	2017
RMI Safety Program Management Critical Design Review	4	2017	4	2017
RMI Safety Program Management Acceptance Test Readiness Review	2	2018	2	2018
RMI Safety Program Management Test Readiness Review	4	2018	4	2018
RMI Safety Program Management Post Implementation Review	1	2019	1	2019
RMI Safety Program Management Full Deployment	1	2019	1	2019
RMI Analysis and Dissemination Phase I Design	1	2016	1	2016
RMI Analysis and Dissemination Phase I Preliminary Design Review	2	2016	2	2016
RMI Analysis and Dissemination Phase I Critical Design Review	3	2016	3	2016
RMI Analysis and Dissemination Phase I Acceptance Test Readiness Review	3	2016	3	2016
RMI Analysis and Dissemination Phase I Test Readiness Review	1	2017	1	2017
RMI Analysis and Dissemination Phase I Acceptance Post Implementation Review	2	2017	2	2017

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
RMI Analysis and Dissemination Phase I Full Deployment	2	2017	1	2018
RMI Analysis and Dissemination Phase II Award	1	2017	1	2017
RMI Analysis and Dissemination Phase II Design	1	2017	1	2017
RMI Analysis and Dissemination Phase II Preliminary Design Review	2	2017	2	2017
RMI Analysis and Dissemination Phase II Critical Design Review	4	2017	1	2018
RMI Analysis and Dissemination Phase II Acceptance Test Readiness Review	1	2018	1	2018
RMI Analysis and Dissemination Phase II Test Readiness Review	3	2018	3	2018
RMI Analysis and Dissemination Phase II Acceptance Post Implementation Review	4	2018	4	2018
RMI Analysis and Dissemination Phase II Full Deployment	4	2018	4	2018
Authoritative Data Environment (ADE)				
ADE Phase 1 Data Marts BI / Visualization / Analytics Products Contract Award	3	2017	3	2017
ADE Phase 1 Data Marts System Integrator Task Order Award	3	2017	3	2017
ADE Phase 1 Data Marts System Requirement Review / System Functional Review	3	2017	3	2017
ADE Phase 1 Data Marts Preliminary Design Review / Critical Design Review	3	2017	3	2017
ADE Phase 1 Data Marts Application Test Readiness Review / Production Readiness Review	3	2017	4	2017
ADE Phase 1 Data Marts Deployment	4	2017	1	2018
ADE Phase 2 Enterprise ADE Baseline SRR/SFR	1	2018	1	2018
ADE Phase 2 Enterprise ADE Baseline PDR	2	2018	2	2018
ADE Phase 2 Enterprise ADE Baseline CDR	2	2018	3	2018
ADE Phase 2 Enterprise ADE Baseline PRR	3	2018	3	2018
ADE Phase 2 Enterprise ADE Baseline IOC	3	2018	3	2018
ADE Phase 2 Enterprise ADE Baseline P3I Release 1	3	2018	4	2018
ADE Phase 3 Reports Contract Award - Deployment	1	2019	4	2019
ADE Phase 4 Contract Award - Deployment	1	2020	4	2020
ADE Phase 5 Contract Award - Deployment	1	2021	4	2021

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017	
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	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Applicant Relationship Management (ARM)				
ARM Phase 1 Post Award Conference	2	2017	2	2017
ARM Phase 1 Systems Requirements Review	2	2017	2	2017
ARM Phase 1 Requirements Review	2	2017	2	2017
ARM Phase 1 Initial Planning	2	2017	3	2017
ARM Phase 1 Design / Preliminary Design Review	3	2017	3	2017
ARM Phase 1 Development # 1	3	2017	4	2017
ARM Phase 1 Code Release	4	2017	4	2017
ARM Phase 2 Development # 2	3	2017	1	2018
ARM Phase 2 Incremental Test # 2	1	2018	1	2018
ARM Phase 2 Code Release # 2	1	2018	1	2018
ARM Phase 2 Development # 3	1	2018	3	2018
ARM Phase 2 Critical Design Review	1	2018	1	2018
ARM Phase 2 Incremental Test # 3	3	2018	3	2018
ARM Phase 2 Code Release # 3	3	2018	3	2018
ARM Phase 2 Development # 4	3	2018	1	2019
ARM Phase 2 Test Readiness Review	1	2019	1	2019
ARM Phase 2 Incremental Test # 4	1	2019	1	2019
ARM Phase 2 Production Readiness Review	1	2019	1	2019
ARM Phase 2 Code Release (1-5) Into Production	1	2019	1	2019
ARM Phase 3 Development # 5 / Defect Resolution	1	2019	1	2019
ARM Phase 3 Incremental Test # 5	1	2019	1	2019
ARM Phase 3 Code Release # 5	1	2019	1	2019
Navy Manpower Requirements System (NMRS)				
NMRS Contract Award / Project Kick-Off	3	2017	3	2017

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Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy

Date: May 2017

## Appropriation/Budget Activity

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

PE 0605013N / Information Technology Development

## Project (Number/Name)

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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
NMRS Requirements Analysis	3	2017	3	2017
NMRS Preliminary Design Review	3	2017	3	2017
NMRS Development	1	2018	4	2018
NMRS Critical Design Review	3	2018	4	2018
NMRS Acceptance Testing	4	2018	1	2019
NMRS Operational Testing	1	2019	2	2019
NMRS Deployment	1	2019	4	2019
PERSTEMPO-ITEMPO (P-I): FRD: PERSTEMPO-ITEMPO (P-I): FRD	1	2016	4	2016
PERSTEMPO-ITEMPO (P-I): FRD: PERS 1	1	2016	1	2016
PERSTEMPO-ITEMPO (P-I): FRD: PERS 2	4	2016	4	2016
PERSTEMPO-ITEMPO (P-I): FRD: PERS 3	1	2016	1	2016
PERSTEMPO-ITEMPO (P-I): FRD: PERS4	4	2016	4	2016
PP-I Critical Design Review: PP-I Critical Design Review	1	2016	3	2016
PP-I Critical Design Review: PP1 Crit 1	1	2016	1	2016
PP-I Critical Design Review: PP1 Crit 2	3	2016	3	2016
PP-I Critical Design Review: PP1 Crit 3	1	2016	1	2016
PP-I Critical Design Review: PP1 Crit 4	3	2016	3	2016
P-I: User Acceptance Testing: P-I: User Acceptance Testing	3	2016	4	2016
P-I: User Acceptance Testing: P-1 User 1	3	2016	3	2016
P-I: User Acceptance Testing: P-1 User 2	4	2016	4	2016
P-I: User Acceptance Testing: P-1 User 3	3	2016	3	2016
P-I: User Acceptance Testing: P-1 User 4	4	2016	4	2016
P-I: Release Review Board/Production Rollout: P-I: Release Review Board/Production Rollout	4	2016	4	2016
P-I: Release Review Board/Production Rollout: P-1 Rel 1	4	2016	4	2016
P-I: Release Review Board/Production Rollout: P-1 Rel 2	4	2016	4	2016

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 2905. / BUPERS IT	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
P-I: Release Review Board/Production Rollout: P-1 Rel 3		4	2016	4	2016
P-I: Release Review Board/Production Rollout: P-1 Rel 4		4	2016	4	2016
PERSTEMPO-Deployment Health Location (P-DHL): FRD: PERSTEMPO-Deployment Health Location (P-DHL): FRD		1	2016	4	2016
PERSTEMPO-Deployment Health Location (P-DHL): FRD: Pers 1		1	2016	1	2016
PERSTEMPO-Deployment Health Location (P-DHL): FRD: Pers 2		4	2016	4	2016
P-DHL: Critical Design Review: P-DHL: Critical Design Review		1	2016	3	2016
P-DHL: Critical Design Review: P-DHL 1		1	2016	1	2016
P-DHL: Critical Design Review: P-DHL 2		3	2016	3	2016
P-DHL: User Acceptance Testing: P-DHL: User Acceptance Testing		3	2016	4	2016
P-DHL: User Acceptance Testing: DHL U 1		3	2016	3	2016
P-DHL: User Acceptance Testing: DHL U 2		4	2016	4	2016
P-DHL: Release Review Board/Production Rollout: P-DHL: Release Review Board/ Production Rollout		4	2016	4	2016
P-DHL: Release Review Board/Production Rollout: DHL R 1		4	2016	4	2016
P-DHL: Release Review Board/Production Rollout: DHL R 2		4	2016	4	2016
P-DHL: Release Review Board/Production Rollout: Schedule Detail		2	2018	4	2018

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 3167 / <i>Joint Technical Data Integration (JTDI)</i>			
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
3167: <i>Joint Technical Data Integration (JTDI)</i>	24.122	6.093	5.514	2.533	-	2.533	4.748	4.534	4.034	4.113	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

Joint Technical Data Integration (JTDI) Program - JTDI funding supports the evaluation, testing and integration to develop a JTDI Commercial Off-The-Shelf (COTS) solution for installation on Carrier and Amphibious Assault class ships and up to 104 Navy/Marine Corp aviation activities. JTDI is a digital technical data access, delivery and local Organizational & Intermediate level library management toolset and telemaintenance collaboration process enabler. It improves accuracy and timeliness of technical manual and other technical data delivery and minimizes the Fleet's library management burden. JTDI reduces maintenance work hours with a savings Return on Investment of 2.5:1. It facilitates the transition of the Joint Distance Support and Response Advanced Concept Technology Demonstration for telemaintenance and provides for process efficiencies to support ongoing Aviation Fleet Technical Representative reductions.

Marine Aviation Logistics Enterprise Information Technology (MAL-EIT) - MAL-EIT funding supports the evaluation, development, testing and integration of software and hardware solutions across all US Marine Corps Aviation activities to be used in the planning and execution of geographically distributed, expeditionary Aviation Logistics (AVLOG) chains in support of deployed USMC Air Combat Element operations. The MAL-EIT Program is one of four programs contained within the Marine Aviation Logistics Support Program (MALSP) modernization program known as MALSP II. Legacy MALSP is nearly 25 years old and grossly inadequate in IT capability to meet the informational, planning, and C2 needs of a dynamic, geographically distributed nodal AVLOG system. MAL-EIT is a Defense Business System Abbreviated Acquisition Program that will develop and deliver the required IT capability necessary to eliminate the IT related gaps existing in the legacy MALSP. MAL-EIT is a family of IT solutions to be developed and delivered in three increments. These increments are depicted below:

Expeditionary Pack Up Kit (EPUK): Provides Expeditionary Supply Operations to include business administration, inventory, and customer service operations.

Next Generation Buffer Management System: Provides buffer management in a time domain, and buffer sizing analysis.

Logistics Planning Tool and Optimizer Tool: Provides capability to develop tailored Remote Expeditionary Support Packages, consumption forecasts, and Nodal Logistics Lay down designs.

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

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Title:</b> Joint Technical Data Integration (JTDI)	1.434	1.343	0.952	0.000	0.952
<b>Articles:</b>	-	-	-	-	-
<b>FY 2016 Accomplishments:</b>					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 3167 / Joint Technical Data Integration (JTDI)		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Conduct development efforts associated with a major release of fully deployed commercial off the shelf (COTS) intensive Joint Technical Data Integration (JTDI) system. Conduct COTS requirements definition, evaluation, integration, and testing of annual baseline releases. Conduct technology insertion of the JTDI system. <b>FY 2017 Plans:</b> Conduct development efforts associated with a major release of fully deployed COTS intensive JTDI system. Conduct COTS requirements definition, evaluation, integration, and testing of annual baseline releases. Conduct technology insertion of the JTDI system. <b>FY 2018 Base Plans:</b> Conduct development efforts associated with a major release of fully deployed COTS intensive JTDI system. Conduct COTS requirements definition, evaluation, integration, and testing of annual baseline releases. Conduct technology insertion of the JTDI system. <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> Marine Aviation Logistics Enterprise Information Technology (MAL-EIT) <b>Articles:</b> <b>FY 2016 Accomplishments:</b> Begin software development of Logistics Planning Tool/MAL-EIT 3.0 solution. Conduct test and evaluation of hardware requirements and network connectivity via satellite communication prior to deployment to the fleet based on a yearly release/maintenance cycle. <b>FY 2017 Plans:</b> Continue software development/prototyping and test and evaluation of Logistics Planning Tool/MAL-EIT 3.0 solution for deployment to the fleet in FY19. <b>FY 2018 Base Plans:</b> Complete software development and test and evaluation of Logistics Planning Tool/MAL-EIT 3.0 solution for deployment to the fleet in FY19. <b>FY 2018 OCO Plans:</b> N/A		4.659 -	4.171 -	1.581 -	0.000 -	1.581 -
Accomplishments/Planned Programs Subtotals		6.093	5.514	2.533	0.000	2.533

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development				Project (Number/Name) 3167 / Joint Technical Data Integration (JTDI)			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
			<u>FY 2018</u>	<u>FY 2018</u>	<u>FY 2018</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Complete</u>	<u>Total Cost</u>
• OPN/4268/JTDI: Joint Technical Data Integration (JTDI) Other Aviation Support Equipment	0.859	0.784	2.134	-	2.134	2.343	2.365	2.408	2.453	Continuing	Continuing
• OPN/4268/MALSP II: Marine Aviation Logistics Support Program (MALSP II) Aviation Support	0.213	1.934	0.200	-	0.200	0.220	0.237	0.240	0.245	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
Joint Technical Data Integration (JTDI) Program - The management approach includes the Program Management Office residing in NAVAIR with Milestone Decision Authority delegated to the NAVAIR Command Information Officer (CIO). The evolutionary development approach will be used to execute requirements. Contracting for the prime integrator will be via competitively awarded indefinite delivery - indefinite quantity contracts.											
Marine Aviation Logistics Enterprise Information Technology (MAL-EIT) Program - The management approach includes the Program Management Office residing within NAVAIR 6.0 and Milestone Decision Authority delegated to NAVAIR 6.7. The evolutionary development approach will be used to execute requirements. Contracting for the prime integrator will be via competitively awarded cost plus fixed fee contracts.											
<b>E. Performance Metrics</b>											
Joint Technical Data Integration (JTDI) and Marine Aviation Logistics Enterprise Information Technology (MAL-EIT)- Successfully achieve government testing of annual software release.											

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 3185 / <i>Joint Airlift Information System (JALIS)</i>			
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
3185: <i>Joint Airlift Information System (JALIS)</i>	1.370	0.328	0.329	0.348	-	0.348	0.357	0.364	0.371	0.378	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

JALIS is an operational scheduling and aircraft management system that facilitates real-time data analysis. JALIS is a critical element in the management of DoD air logistics assets. JALIS allows:

- (1) DoD Service Personnel to submit airlift requirements for DoD Personnel and cargo
- (2) Air Logistics Flying Units to communicate their aircraft availability in a real-time graphic display
- (3) Designated Scheduling Organizations to compare airlift requirements with available aircraft
- (4) Designated Scheduling Organizations to create mission assignments

JALIS informs applicable users of mission details and modifications by using a combination of system displays and email updates. JALIS is geographically distributed and has a user base in excess of 4,000 members. JALIS facilitates the movement of thousands of DoD Personnel and tons of cargo annually in support of the following:

- (1) Navy Unique Fleet Essential Airlift
- (2) Army's Operational Support Airlift Agency (OSAA)
- (3) United States Transportation Command (USTRANSCOM)
- (4) United States Marine Corps (USMC)

The Joint Chiefs of Staff mandates JALIS as the official DoD Airlift scheduling system for Operational Support Airlift (OSA). JALIS meets the requirement for multi-service coordinated Air Logistics scheduling as directed by Chairman, Joint Chiefs of Staff. The Navy is designated as lead agency for sponsoring and funding the JALIS program.

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

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Title:</b> Joint Air Logistic Information System (JALIS)	0.328	0.329	0.348	0.000	0.348
<b>Articles:</b>	-	-	-	-	-
<b>FY 2016 Accomplishments:</b>					
- Developed improved aircraft management tools					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy				<b>Date:</b> May 2017	
<b>Appropriation/Budget Activity</b> 1319 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>		<b>Project (Number/Name)</b> 3185 / <i>Joint Airlift Information System (JALIS)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>					
	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<p>- Developed capability to schedule lifts on with aircraft transfers</p> <p><b>FY 2017 Plans:</b></p> <p>- Provide changes and enhancements as directed by the JALIS configuration control board</p> <p>- Integrate user functions between JALIS and JALIS Dashboard</p> <p><b>FY 2018 Base Plans:</b></p> <p>1. Provide changes and enhancements as directed by the JALIS configuration control board</p> <p>2. Integrate user functions between JALIS and JALIS Dashboard</p> <p><b>FY 2018 OCO Plans:</b></p> <p>N/A</p>					
<b>Accomplishments/Planned Programs Subtotals</b>		0.328	0.329	0.348	0.000
<b>C. Other Program Funding Summary (\$ in Millions)</b>					
N/A					
<b>Remarks</b>					
<b>D. Acquisition Strategy</b>					
As a general rule, IT development programs use an agile software development methodology therefore milestones, tasks and phases are often conducted in parallel vice sequentially.					
Contract activities will focus on developing the following capabilities:					
<p>(1) Improved functionality for flight scheduling</p> <p>(2) Improved coordination between JALIS scheduling organizations</p> <p>(3) Integration of JALIS and JALIS Dashboard functions</p>					
<b>E. Performance Metrics</b>					
Performance metrics for JALIS include:					
<p>(1) Completion of system change request requirements enabling production of articles as itemized in Section B.</p> <p>(2) Increase operational efficiency</p> <p>(a) Reduce time to train scheduling personnel by 15%</p>					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>	Project (Number/Name) 3185 / <i>Joint Airlift Information System (JALIS)</i>
(b) Reduce time to search for scheduling solutions 10% (c) Reduce time to train new JALIS users by 20%		

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>				Project (Number/Name) 9406 / <i>Maintenance Data Warehouse</i>			
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
9406: <i>Maintenance Data Warehouse</i>	27.188	11.002	10.171	4.461	-	4.461	7.635	7.224	6.353	6.479	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

Aviation Data Warehouse/NAVAIR Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE) - The development of the DECKPLATE program is the next generation data warehouse for aircraft maintenance, flight, and usage data. It provides a web-based interface to a single source of information currently being stored in multiple Naval Aviation Logistics Data Analysis systems. Through the use of analysis, query, and reporting tools the user has the capabilities to effectively obtain readiness data in a near real-time environment, as well as providing historical data for long range planning, trend analysis and records analysis, records reconstruction, and compliance with technical directives. DECKPLATE supports the mission of the warfighter who requires a single source of near real-time aviation data in which to base critical readiness decisions. This requires collecting data from authoritative sources into a data warehouse. Because the warfighter only needs to access one database, the time consuming task of collecting various pieces of data from various sources will be reduced and ultimately eliminated. This improves data quality because it reduces the possibility of two systems providing identical data elements, but slightly different data. Data availability is improved through continuous near real-time feeds from the data sources, giving the warfighter the most current information to base decisions. In addition, this also accomplishes a reduction in legacy systems mandated by Office of the Chief of Naval Operations. DECKPLATE manages total inventory for two major categories of assets, Aircraft and Engine/Propulsion Systems/Modules (EPSMs). DECKPLATE is comprised of the Aircraft Inventory and Readiness Reporting (DECK-AIRRS) and the Engine Transaction Reporting (DECK-ETR) subsystems which provide the complete lifecycle for aircraft and Engine/ Propulsion System/Modules (EPSMs). Both DECK-ETR and DECK-AIRRS are undergoing a FISCAM assessment (FY16) and audit (FY17) and are undergoing review for designation as the Accountable Property System of Record (APSR) for aircraft and uninstalled engines.

Condition Based Maintenance Plus (CBM+) - Funding supports the automated analysis and decision making processes, for the CBM+ Initiative which provides Naval Aviation Enterprise with common enabling capabilities which deliver timely data-driven decisional information to optimize aircraft availability and materiel readiness by incorporating health and usage leading indicators into the failure mode mitigation process, enabling the Warfighter to more efficiently meet mission requirements. The CBM+ Initiative increases readiness by streamlining maintenance processes, provide the sustainment base with timely, actionable logistics data not previously available, and enable engineers and acquisition professionals to support system improvements based on CBM+ acquired data results. CBM+ provides the enabling solutions needed to extend the life of current and new acquisition aircraft, realizing savings from reductions in field (organizational and intermediate) maintenance actions, reduced functional check flight hours, mishap mitigation, and reduced parts usage.

Integrated Logistics Support Management System (ILSMS) - This is a new start program. Funding supports the development of the ILSMS program is the next generation analytical tool set for Unit, Aircraft, Engines, Component Readiness and Cost metrics. It will be a web-based tool that will provide the user with validated and aggregated data. ILSMS provides analysts with the means to pull data on type/model/series (TMS) readiness, run detailed component analysis, manage aircraft life by bureau number, request lists of TMSs' top degraders, model the impacts of degraded components on readiness and cost, generate production scenarios, and manage the incorporation of technical directives. ILSMS institutionalizes a data analysis process that is repeatable and establishes a common understanding of readiness and

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 9406 / Maintenance Data Warehouse		
cost degraders among its users. This is also the foundation for working with provider organizations to establish metrics, actionable mitigation plans and milestones. Integrated Logistics Support Management System (ILSMS) will give its users a one stop shop to proactively identify readiness and cost degraders quickly with a consistent methodology across all TMS thus providing a standardized tool to assist programs in reducing total ownership costs.						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Aviation Data Warehouse/NAVAIR Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE)		2.549	2.556	1.487	0.000	1.487
Articles:		-	-	-	-	-
FY 2016 Accomplishments: Continue transition of ALS functionality into DECKPLATE and continue transition of OEM and depot functionality. Additionally, an increase in funding in FY15 and FY16 for support of ILSMS which will develop a web-based business intelligence tool to allow all users to access and utilize the same data on a nearly real-time basis thus allowing queries across multiple type/model/series to identify systemic issues. Increase funding in FY15 and FY16 for ALS which is a DECKPLATE component that provides a central repository for aircraft maintenance information into DECKPLATE.						
FY 2017 Plans: Continue the transition of ALS functionality into DECKPLATE so as to establish a central repository for aircraft maintenance and component information into DECKPLATE. Perform modifications to the DECKPLATE system to include Financial Improvement Audit Readiness data elements and Key Supporting Documentation to meet audit standards for Accountable Property System of Record (APSR) systems and meet additional Risk Management Framework (RMF) system controls..						
FY 2018 Base Plans: Complete the transition of ALS functionality into DECKPLATE so as to establish a central repository for aircraft maintenance and component information into DECKPLATE. Perform modifications to the DECKPLATE system to include Financial Improvement Audit Readiness data elements and Key Supporting Documentation to meet audit standards for Accountable Property System of Record (APSR) systems and meet additional Risk Management Framework (RMF) system controls..						
FY 2018 OCO Plans: N/A						
Title: Condition Based Maintenance Plus (CBM+)		5.478	7.615	2.974	0.000	2.974
Articles:		-	-	-	-	-
FY 2016 Accomplishments:						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017			
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development		Project (Number/Name) 9406 / Maintenance Data Warehouse		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>Complete AIR 4.3.3 one time platform reassessment of all life limited components, and migrate CH-53E Regime Recognition Capability to production system of record (a component of NAVAIR's Aviation Logistics Environment). Perform required enhancements to integrated component tracking capability, and begin extending this capability to H-53, H-60, H-1 and V-22 platforms. Begin standup of CBM+ SDR in production, and continue evolving other required CBM+ enablers identified by Systems Integration Process physical architecture and design outputs. Continue execution of CBM+ Engineering Analysis Tool consolidation and reuse plan, and finalize NAVAIR Enterprise CBM+ BCA. Perform final assessment of CBM+ Proof of Concept efforts (down selection decisions), and begin standup of Enterprise common CBM+ enabled RCM implementations (beyond NAVAIR Rotorcraft community). Finalize standardized CBM+ Business Process and execute resource plan.</p> <p><b>FY 2017 Plans:</b> Complete NAVAIR Structures one-time platform reassessment of all SH-60R/S life limited components, and expand Regime Recognition Capability to include H-1 platform. Begin expansion of CBM+ Standard Data Repository (based on the Hadoop Distributed File System) in production to accommodate and make accessible all BIT/Parametric/Mechanical/Diagnostics data across NAVAIR smart weapon system platforms, and continue evolving other required CBM+ enablers identified by Systems Integration Process physical architecture and design outputs. Continue enhancements to the Enterprise Common CBM+ Environment (Ozone Widget Framework) and the integration of the environment's best-of-breed analytical tools, per the CBM+ Engineering Analysis Tool consolidation and reuse plan, with the large scale Distributed File System storage and analytics infrastructure. Further enable NAVAIR's Core Data Science IPT with massively large scale advanced Statistical Analysis capabilities (COTS and GOTS), while enabling select Organizational Level Maintenance activities with the wireless infrastructure, connectivity, and integrated technologies to improve the on-weapon system maintenance process. Continue the execution of CBM+ pilots and Proof of Concept efforts for identifying affordable/supportable Business Processes, Common IT Solutions, and data/tool integration to streamline the RCM process and expedite decision support using smart aircraft (HUMS) and other data sources within the Enterprise CBM+ Environment.</p> <p><b>FY 2018 Base Plans:</b> Continue expansion of CBM+ Standard Data Repository (based on the Hadoop Distributed File System) in production to accommodate and make accessible all BIT/Parametric/Mechanical/Diagnostics data across NAVAIR smart weapon system platforms, and continue evolving other required CBM+ enablers identified by Systems Integration Process physical architecture and design outputs. Continue enhancements to the Enterprise Common CBM+ Environment (Ozone Widget Framework) and the integration of the environment's best-of-breed analytical tools, per the CBM+ Engineering Analysis Tool consolidation and reuse plan, with the</p>						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy									Date: May 2017				
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0605013N / Information Technology Development				Project (Number/Name) 9406 / Maintenance Data Warehouse					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
large scale Distributed File System storage and analytics infrastructure. Further enable NAVAIR's Core Data Science IPT with massively large scale advanced Statistical Analysis capabilities (COTS and GOTS), while enabling select Organizational Level Maintenance activities with the wireless infrastructure, connectivity, and integrated technologies to improve the on-weapon system maintenance process. Continue the execution of CBM+ pilots and Proof of Concept efforts for identifying affordable/supportable Business Processes, Common IT Solutions, and data/tool integration to streamline the RCM process and expedite decision support using smart aircraft (HUMS) and other data sources within the Enterprise CBM+ Environment.  FY 2018 OCO Plans: N/A													
Title: Integrated Logistics Support Management System (ILSMS)  FY 2016 Accomplishments: Release ILSMS Version 3 Enterprise Analytical Module through web enabled Business Intelligence Solution  FY 2017 Plans: N/A  FY 2018 Base Plans: N/A  FY 2018 OCO Plans: N/A									2.975 -	0.000 -	0.000 -	0.000 -	0.000 -
Accomplishments/Planned Programs Subtotals									11.002	10.171	4.461	0.000	4.461
C. Other Program Funding Summary (\$ in Millions)													
Line Item	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		
• OPN/4268/DECKPLATE: Other Aviation Support Equipment	3.325	1.794	1.870	-	1.870	2.051	2.084	2.118	2.156	Continuing	Continuing		
• OPN/4268/CBM: Other Aviation Support Equipment	0.222	0.198	0.199	-	0.199	0.217	0.286	0.291	0.298	Continuing	Continuing		
Remarks													

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 9406 / <i>Maintenance Data Warehouse</i>
<p><b>D. Acquisition Strategy</b></p> <p>Aviation Data Warehouse/NAVAIR Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE) - Development services will be awarded using a competitively awarded contract under the Seaport Contract System containing a matrix of tasks and required levels of performance. Follow on Contract will utilize the same competitive system. The Services provided under the contract support acquisition will not encompass tasks inherently Governmental in nature. The Statement of Work will include a matrix that establishes the minimum acceptable performance standards.</p> <p>Condition Based Maintenance Plus (CBM+) - Development services will be provided using a competitively awarded contracts coordinated via NAVAIR's Aviation Logistics Environment (ALE) Program Management and supporting Contract Business Office, and will contain a matrix of tasks and required levels of performance. Follow on Contracts will utilize the same competitive system. The Services provided under the contract support acquisition will not encompass tasks inherently Governmental in nature, and Statements of Work will include a matrix that establishes the minimum acceptable performance standards.</p> <p>Integrated Logistics Support Management System (ILSMS) - Development services will be awarded using a competitively awarded contract containing a matrix of tasks and required levels of performance. Follow on Contracts will utilize the same competitive system. The Services provided under the contract support acquisition will not encompass tasks inherently Governmental in nature. The Statement of Work will include a matrix that establishes the minimum acceptable performance standards.</p> <p><b>E. Performance Metrics</b></p> <p>The following performance metrics apply to Aviation Data Warehouse/NAVAIR Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE), Condition Based Maintenance (CBM+) and Integrated Logistics Support Management System (ILSMS):</p> <ol style="list-style-type: none"> <li>1. Metric - During the life of the contract verify conformance with agency specific information processing standards and functional requirements. Prior to delivery of enhanced software, demonstrate the operational capability of the system software. Standard - Functionality of the software to meet required systems architecture and processing capabilities. Max Deviation Allowed - All requirements mandated by law or regulation must be 100% compliant. Quality Assurance - Independent Verification and Validation (IV&amp;V) for testing new releases of software to determine that previous functionality is maintained. Customer satisfaction as measured through limited validated customer complaints, feedback, and surveys.</li> <li>2. Metric - Interfaces must maintain compatibility among system components in the operational environment. Standard - Service Levels for software: Throughput in terms of processing response time, number of transactions processed per second; volume of data processed over time. Compatibility with particular hardware and software within the existing processing environment. Functionality of software to meet required systems architecture and processing capabilities. Max Deviation Allowed - None. Quality Assurance - Customer satisfaction as measured through limited validated customer complaints, feedback and surveys. Operational monitoring by use of system statistics and logs. IV&amp;V for testing new software, including verifying results to determine that requirements and specifications are met.</li> <li>3. Metric - Documentation for deliverables must match the agency specific system processing and operational procedures. Standard - Documentation meets agency specific formats for accuracy and completeness. Max Deviation Allowed - None. Quality Assurance - IV&amp;V for determining that documentation delivered by the contractor matches the system processing and operational procedures.</li> <li>4. Metric - Meet delivery dates/milestones. Period of Performance will be 12 months from the date of award. Standard - Delivery dates are met, or exceeded. Max Deviation Allowed - None. Quality Assurance - 100% inspection.</li> </ol>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy		<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>	<b>Project (Number/Name)</b> 9406 / <i>Maintenance Data Warehouse</i>
<p>5. Metric - Security. Standard - Meet all Government and agency specific requirements. Max Deviation Allowed - None. Quality Assurance - 100% inspection to ensure that all Government and Agency specific requirements have been met. Independent verification of security procedures defined by agency (could be performed by a third party, or another agency according to current security regulations and measures).</p> <p>6. Metric - Enhancement to software shall not adversely affect system performance. Standard - Standards affecting system performance include but are not limited to: response time for resolving problems; central processing unit busy; response time; memory utilization; storage utilization. Max Deviation Allowed - Base line functionality is met at 100%. Non critical functionality is met at 95%. Quality Assurance - Operational monitoring by use of system statistics and logs.</p> <p>7. Metric - New releases of software must maintain previously provided functionality, while providing enhanced capabilities, or systems corrections. Standard - Software adds value and improves existing functionality without negatively impacting the existing operational environment. Max Deviation Allowed - Base line functionality is met at 100%. Non critical functionality is met at 95%. Quality Assurance - Independent Verification and Validation for testing new releases of software to determine that previous functionality is improved. Customer satisfaction is measured through validated customer complaints and surveys.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Navy										<b>Date:</b> May 2017		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0605013N / <i>Information Technology Development</i>				<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
9999: <i>Congressional Adds</i>	0.000	3.862	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	3.862
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**Note**  
Congressional Add

**A. Mission Description and Budget Item Justification**  
Congressional Add (Project C286): The enterprise Product Lifecycle Management (ePLM) Integrated Decision Environment (IDE) will serve as a central knowledge repository for process and product evolution and history. It will promote integration, data exchange, and analysis among all business users and information systems that will interact with any Weapon System Configuration Item (CI) during its lifecycle. ePLM IDE enables product support providers and the warfighter to maintain weapon systems in the most ready condition at the lowest lifecycle cost by linking readiness and cost impacts with every decision. The ePLM IDE will effectively address each weapon system program requirement for an IDE as stated in the Defense Acquisition Guidebook.

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Congressional Add:</b> Information Technology Development Increase	3.862	0.000
<b>FY 2016 Accomplishments:</b> FY16 - ePLM: Enhancement of ePLM IDE capability which includes expanded product data management capability, enhancement of predictive analytics, and enhancement and integration of SBIR Phase 3 Technologies. Further integration of the capabilities necessary to deliver an enterprise based decision support solution and continued integration of additional software capabilities, development of human capital solutions and refinement of the acquisition processes and sustainment approaches. FY16 funds supported two PEO IWS 2.0 program implementations into the ePLM IDE tool.		
<b>FY 2017 Plans:</b> N/A		
<b>Congressional Adds Subtotals</b>	3.862	0.000

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

**Remarks**

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605013N / <i>Information Technology Development</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>
<b>D. Acquisition Strategy</b> FY17 - ePLM: NSWC-PHD will lead the integration of FY15 and FY16 SBIR-developed technologies through the utilization of two FY16 planned Phase 3 SBIR contracts (Missile Defense Agency (MDA), Q4 FY16 award, \$49M ceiling). SBIR technologies will be enhanced and integrated into the ePLM tool suite and will result in execution of a competitive, full acquisition strategy.		
<b>E. Performance Metrics</b> N/A		