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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
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Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603739N / Navy Logistic Productivity							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	42.313	3.728	3.089	2.995	-	2.995	3.357	3.300	3.225	3.289	Continuing	Continuing
2955: JEDMICS	40.614	2.840	2.191	2.391	-	2.391	2.172	2.165	2.210	2.254	Continuing	Continuing
3223: Logistics R&D	1.699	0.888	0.898	0.604	-	0.604	1.185	1.135	1.015	1.035	Continuing	Continuing

A. Mission Description and Budget Item Justification

Includes development and evaluation of incentive systems for improving the productivity of civilian and military personnel. Identifies barriers to increased productivity and evaluates the effect of removing them. Develops techniques for easing the introduction of new technology to the work place. Identifies and evaluates methods for improving the quality of work-life.

Excludes civilian and military manpower and their related costs and military construction costs which are included in appropriate Management and Support elements in this program.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	3.866	3.089	3.243	-	3.243
Current President's Budget	3.728	3.089	2.995	-	2.995
Total Adjustments	-0.138	0.000	-0.248	-	-0.248
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.138	0.000			
• Program Adjustments	0.000	0.000	-0.219	-	-0.219
• Rate/Misc Adjustments	0.000	0.000	-0.029	-	-0.029

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603739N / Navy Logistic Productivity				Project (Number/Name) 2955 / JEDMICS			
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
2955: JEDMICS	40.614	2.840	2.191	2.391	-	2.391	2.172	2.165	2.210	2.254	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

In FY85 Congress directed the Services and Defense Logistics Agency to permanently capture, manage and control engineering data in digital format so it would be available to support competitive spares re-procurement. The Joint Engineering Data Management Information & Control System (JEDMICS) program manages and controls 100,000,000 engineering images and has 13,000 authorized users responsible for over 77,000 user sessions per month. Over 1.2 million digital images are retrieved each month. New data and new users are added each month as DoD re-engineers its business processes to take advantage of digital data that is managed and controlled for corporate reuse. The JEDMICS system is deployed at 5 interoperable sites that service user locations worldwide. Data stored in JEDMICS is used for Logistics Support, Spares re-procurement, Weapons Systems procurement, Engineering, Maintenance, Distribution, Manufacturing, Air National Guard and Deployed Engineering Technical Services organizations. JEDMICS facilitates work process re-design since it brings the electronic drawings to the desktop, shop floor or flight line in real time eliminating walk, wait and slack time to retrieve drawings. Additionally, Administrative Lead Time, Repair Turn Around Time, Engineering Change Proposal processing time, demilitarization time, and all cycle times dependent on engineering data have decreased with the real time availability of digital engineering data. JEDMICS also facilitates Electronic Commerce since it produces digital technical data packages that can be forwarded along with an electronic order. Funds are for Commercial Off The Shelf (COTS) test, evaluation and integration. JEDMICS development efforts are required to integrate and test COTS upgrades.

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

	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: JEDMICS Development	2.788	2.141	2.339	0.000	2.339
Articles:	-	-	-	-	-
<p>Description: Conduct development efforts associated with JEDMICS software releases. Conduct COTS requirements definition, evaluation, integration and testing of annual baseline releases. Conduct technology insertion of the JEDMICS system that is required to protect the \$21B digital data asset managed in JEDMICS.</p> <p>These annual releases are necessary to incorporate changes that are essential to keeping the system running within the Navy's Enterprise. They include Service mandated Information Technology changes, storage capability increases for emerging engineering data formats, changes to accommodate commercial hardware and software end-of-life product obsolescence, and defenses for newly recognized Information Assurance vulnerabilities affecting the systems various software applications.</p> <p>FY 2016 Accomplishments: Develop and integrate JEDMICS Software Release 3.0.17.</p> <p>FY 2017 Plans:</p>					

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Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603739N / Navy Logistic Productivity		Project (Number/Name) 2955 / JEDMICS		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Develop and integrate JEDMICS Software Release 3.0.18. FY 2018 Base Plans: Develop and integrate JEDMICS Software Release 3.0.19. FY 2018 OCO Plans: N/A						
Title: JEDMICS Test Articles: Description: Conduct test and readiness reviews and functional performance tests on JEDMICS system. FY 2016 Accomplishments: Complete DT of JEDMICS Software Release 3.0.16. Initiate DT of JEDMICS Software Release 3.0.17. FY 2017 Plans: Complete DT of JEDMICS Software Release 3.0.17. Initiate DT of JEDMICS Software Release 3.0.18. FY 2018 Base Plans: Complete DT of JEDMICS Software Release 3.0.18. Initiate DT of JEDMICS Software Release 3.0.19. FY 2018 OCO Plans: N/A		0.027 -	0.026 -	0.026 -	0.000 -	0.026 -
Title: JEDMICS Evaluation & Review Articles: Description: Conduct technical evaluations and configuration control reviews of JEDMICS system. FY 2016 Accomplishments: Conduct technical evaluations and reviews for JEDMICS Software Release 3.0.18. FY 2017 Plans: Conduct technical evaluations and reviews for JEDMICS Software Release 3.0.19. FY 2018 Base Plans: Conduct technical evaluations and reviews for JEDMICS Software Release 3.0.20. FY 2018 OCO Plans:		0.025 -	0.024 -	0.026 -	0.000 -	0.026 -

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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	
N/A					
Accomplishments/Planned Programs Subtotals				2.840	2.191
				2.391	0.000
				2.391	
C. Other Program Funding Summary (\$ in Millions)					
N/A					
Remarks					
D. Acquisition Strategy					
Execution of sole-source negotiated requirements type contract for engineering, design, development and test efforts. Performance-based reviews conducted quarterly by the Project Management Office.					
E. Performance Metrics					
1. Complete testing, integration, & upgrade of three major embedded Commercial Off-the-Shelf products.					
2. Test & integrate system Information Assurance Vulnerability Management software patch upgrades four times.					
3. Complete development, testing, & integration of a minimum twenty corrected high-priority software problem reports.					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603739N / Navy Logistic Productivity				Project (Number/Name) 3223 / Logistics R&D			
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
3223: Logistics R&D	1.699	0.888	0.898	0.604	-	0.604	1.185	1.135	1.015	1.035	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Stable annual funding is required to facilitate implementation and execution of a robust, flexible Logistics R&D program that will provide the means for Naval Supply Systems Command (NAVSUP) to effectively pursue solutions to mission-related capability and technology gaps. The NAVSUP Logistics R&D program has an established infrastructure and business process for ensuring that R&D funds are applied to projects that address high priority enterprise needs established in accordance with OPNAV goals and the NAVSUP Commander's Guidance.

From a process perspective, Logistics R&D investments are governed by a NAVSUP enterprise-wide Executive Steering Group (ESG) chaired by the NAVSUP Vice Commander, and comprised of SES and Command leadership representatives. The ESG ratifies capability and technology gaps identified by all activities within the enterprise, and then assesses and prioritizes all proposed Logistics R&D initiatives in accordance with their potential for filling the established gap and generating return on investment.

The established Logistics R&D business management process has currently identified capability/technology gaps in the following general areas: 1) the need to develop formalized energy management techniques that focus on energy and resource conservation; increased energy efficiency of new and existing systems and facilities; and increased use of alternative energy products, 2) the need to modernize quality of life (QOL) services to improve overall services, offer additional desired features and reduce total ownership costs, 3) the need to assess clothing protection for the warfighter in areas of thermal/flame threats, protective footwear, and physical (hearing, vibration, etc.) clothing/accessories, 4) the need to develop logistics data access and information sharing through enhanced Graphical User Interfaces (GUI) and web-based data services, 5) the need to develop a capability that allows Integrated Logistics Support (ILS) repair and modernization tools, 6) the need to leverage breakthrough technologies to improve supply chain processing. This modest R&D investment will establish a NAVSUP Logistics R&D Program to explore additional technologies and significantly increase potential cost savings.

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

	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Quality of Life Services Modernization & Cost Reduction	0.000	0.000	0.297	0.000	0.297
Articles:	-	-	-	-	-
Description: NAVSUP Quality of Life (QOL) services include subsistence in kind (SIK) food service, retail, postal, laundry, vending, barber shop, household goods and disbursing/Navy Cash, are in many cases inefficient, costly to operate, and lack easy access to the comprehensive information required to make informed management decisions impacting execution of routine supporting business processes. QOL services aims to leverage new technology which will improve support information systems, security, health, etc., and reduce total ownership costs. NAVSUP owns the Food Service Program for the Navy as part of logistics and quality of life					

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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
<p>programs and is responsible for managing the overall policy including training, food safety, and implementation of "Go for Green" program for the Navy. "Go for Green" is a DoD program that promotes healthful food and beverage choices in order to optimize the performance, readiness, and health of our service members. Future funding may include projects such as new platforms being developed to focus on human performance, physical training and nutrition applications that will be integrated with the "Go for Green" DoD effort. Additional automated food service management modules with touch screen technology to use for menu development, assign work tasks, recipe conversion, temperature and times logs for food service documentation preparation. These platforms will be capable of providing step-by-step, two and three dimensional animation, interactive training in these areas: food service sanitation procedures, food science, food service administration, galley operations and safety, and equipment operations.</p> <p>FY 2016 Accomplishments: N/A</p> <p>FY 2017 Plans: N/A</p> <p>FY 2018 Base Plans: Enhancing data integration of substance, retail, postal, laundry, vending, barbershop, household, goods to offer additional desired features (such as those which would improve supporting information systems, security, health, etc., and reduce total ownership costs.</p> <p>FY 2018 OCO Plans: N/A</p>						
<p>Title: Readiness through Logistics Solutions</p> <p>Articles:</p> <p>Description: Supply chain improvements are required to support logistics efficiency and Fleet readiness through logistics solutions technological improvements. Develop technological capabilities that improve Naval Logistics in part or in its record (from manufacture, storage, delivery, use, maintenance, and disposal).</p> <p>FY 2016 Accomplishments: N/A</p> <p>FY 2017 Plans: Navy's non-self deploying combat forces use the 20+ year old U.S. Army system, Transportation Coordinators Automated Information for Movement System (TC-AIMS II), to document and initiate logistics shipments. TC-</p>		0.000 -	0.600 -	0.127 -	0.000 -	0.127 -

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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
AIMS is rapidly approaching technological obsolescence. A joint (Navy, Marine Corps, and Coast Guard) effort was pursued and a Business Case Analysis software requirements and Independent Government Cost Estimate identified USTRANSCOM's ICODES system (Integrated Computerized Deployment System) as the most logical exiting system to insert and develop with the Sea Service Deployment Module (SSDM) functionality. SSDM will consolidate and improve visibility of naval mobility shipments worldwide. The Navy will then be compliant with DoD's mandate for transportation systems to include Transportation Tracking Number (TTN), which is not resident in TC-AIMS II. The TTN is a Joint Staff requirement directly tied to OPSEC, OPLANS, and In-Transit Visibility. FY 2018 Base Plans: Finalize Sea Service Deployment Module (SSDM) functionality. FY 2018 OCO Plans: N/A						
Title: Logistics Data Access and Information Sharing Articles:		0.199	0.000	0.000	0.000	0.000
Description: Numerous electronic information technology (IT) systems exist that contain logistics data and information. Very often that data/information can be difficult to: 1) access by individual users, 2) share between other IT systems, and 3) secure from cyber threats that continue to grow and rapidly proliferate. The lack of access, sharing, and security results in inefficient processes, manual work-arounds, and increased security risk, which impedes performance and increases cost. NAVSUP must ensure accelerated supply systems decision making via seamless secure access to information through user friendly administrative, financial, and logistics web-based capabilities. FY 2016 Accomplishments: Capability to facilitate improved access; use of logistics data by both individual users and between IT systems; cyber security communications capabilities in the information environment. Capability includes, but is not limited to, enhanced Graphical User Interfaces (GUI) and web-based data services and other community-based software tools and technologies that can enable broader exposure and sharing of logistics data based on customer requirements for data representation, metadata, format and delivery. Capability consists of decision-making and full spectrum cyber operations, such as, system architecture, tactical cloud, integration and data interoperability. FY 2017 Plans:		-	-	-	-	-

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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
N/A						
FY 2018 Base Plans:						
N/A						
FY 2018 OCO Plans:						
N/A						
Title: Supply Chain Optimization/Breakthrough Technologies to Improve Supply Chain Processing		0.250	0.000	0.180	0.000	0.180
Articles:		-	-	-	-	-
Description: As a result of the continuous change within the naval logistics community, a broad spectrum of innovations in business processes, tools, infrastructure, and technology are required for maintaining and improving operational performance, efficiency, and effectiveness. This gap is expressly broad in order to allow any of the five capability gaps listed below to meet criteria for funding as determined by LogIC.						
FY 2016 Accomplishments:						
Efforts of interest will continue to focus on assessing opportunities for use of Additive Manufacturing (AM) technology in order to fulfillment through timely insertions of AM technology into naval platforms and installations. AM enables the increase of supply availability and reduces inventory cost to the Navy Supply System. Applied Research Laboratories will be integrating Information Technology (IT) strategies for delivering AM capability within the supply chain to include Logistics IT systems in Navy Enterprise Resource Planning (ERP) and data associated strategies. They identify key points of cyber security vulnerability and potential mitigation strategies that occur with AM.						
FY 2017 Plans:						
N/A						
FY 2018 Base Plans:						
Efforts will continue to focus on assessing opportunities for use of AM technology in order fulfillment through timely insertion of AM technology into naval platforms and installations.						
FY 2018 OCO Plans:						
N/A						
Title: Clothing Protection for the Warfighter		0.439	0.298	0.000	0.000	0.000
Articles:		-	-	-	-	-

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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
<p>Description: Uniforms/protective clothing do not provide comfortable and/or adequate protection for the Warfighter in threat areas such as, thermal/flame, adverse environmental conditions (e.g., heat, cold, rain/snow, water immersion), hazardous chemicals, and physical trauma (hearing, vibration, blunt force, etc.). Further, the physical properties of current uniform items need improvement in the areas of color retention (e.g., reduce fading) and comfort (e.g., reduce weight and optimize moisture management while minimizing care).</p> <p>FY 2016 Accomplishments: A capability to assess commercial off- the-shelf (COTS) items, identify/develop laboratory test methods to determine applicability of COTS items and address quality assurance measures to allow upgrades to uniform/ protective clothing capabilities in a cost effective manner. Enhanced capabilities are required in the areas of thermal/flame threats, protective footwear as well as environmental and physical protection. Enhanced capabilities are required that provide improved color retention, improved comfort, improved coolness and improved anti-wrinkle qualities. A capability to correlate current material technologies and manufacturing processes with potential advanced techniques is required to mitigate costly/antiquated uniforms and manufacturing costs, work uniform category specifically. A capability to jointly incorporate current anthropometric data (USA, USMC and USN) into the fit and sizing of common work/combat uniforms; focus would be to standardize patterns and size tariffs, resulting in a streamlined uniform issue process which would allow the warfighter to purchase off the rack uniforms without costly alterations and enhance uniform size forecasting; resulting in having the "needed" sizes in stock.</p> <p>FY 2017 Plans: Identify challenges to effectively manage durability and safety aspects of common work/combat uniforms for the warfighter. Eliminate risk of potential hazardous such as fire, weather, and general wear/tear to maximize readiness and strength in Fleet uniforms.</p> <p>FY 2018 Base Plans: N/A</p> <p>FY 2018 OCO Plans: N/A</p>					
Accomplishments/Planned Programs Subtotals	0.888	0.898	0.604	0.000	0.604
C. Other Program Funding Summary (\$ in Millions)					
N/A					

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C. Other Program Funding Summary (\$ in Millions)		
<u>Remarks</u>		
<u>D. Acquisition Strategy</u> NAVSUP R&D executed through firm fixed price negotiated contracts and NAVSUP support. Performance-based reviews conducted quarterly by the Project Management Office.		
<u>E. Performance Metrics</u> Development of capability and technology gaps initiatives are monitored quarterly by the NAVSUP R&D Program Management Office.		