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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 / BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt							
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	17.647	44.727	99.998	51.040	-	51.040	70.389	72.683	72.915	74.265	Continuing	Continuing
2263: Information Warfare System	17.647	44.727	99.998	32.740	-	32.740	49.989	52.183	52.015	52.965	Continuing	Continuing
3426: Maritime Cyber	0.000	0.000	0.000	18.300	-	18.300	20.400	20.500	20.900	21.300	Continuing	Continuing

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

Research, assess, and develop information warfare capabilities.

<b>B. Program Change Summary (\$ 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>
Previous President's Budget	46.403	99.998	107.905	-	107.905
Current President's Budget	44.727	99.998	51.040	-	51.040
Total Adjustments	-1.676	0.000	-56.865	-	-56.865
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.676	0.000			
• Program Adjustments	0.000	0.000	-56.865	-	-56.865

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>				Project (Number/Name) 2263 / <i>Information Warfare System</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
2263: <i>Information Warfare System</i>	17.647	44.727	99.998	32.740	-	32.740	49.989	52.183	52.015	52.965	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

Information Operations (IO) Counter Measure Capability Research and Development: Develops software to account for antenna modeling, weather calculations, radio frequency modeling, signals mapping and terrain modeling for warfighter use in configuring optimal Electronic Attack (EA) from afloat.

Maritime Cryptologic Systems for the 21st Century Systems Development and Support: Develops and fields spiral Electronic Support, and cyber capabilities against U.S. Navy's prioritized signals, networks, and target sets. EA capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne and surface Information Operations (IO) platforms (Classic Troll, Banshee and Ships Signal Exploitation Equipment Increment E and Increment F) sponsored Pacific Sail (PACSAIL) research project. Signal Descriptor File (SDF) Configuration Management Authority (SCMA) is the technical lead for the development, testing and validation of electronic support and electronic attack techniques for Maritime Cryptologic Systems in support of Navy-wide Information Operations planning.

Research, Analysis and Research and Development Technical Support: Conducts vulnerability analysis and reverse engineering on emerging threats and targets and provides specialized technical, engineering and management capabilities to the program management office.

Computer Network Operations (CNO): Funds development and testing of computer networks for modeling, simulation, and tailoring of Cyber capabilities. Develops specific Cyber tools, techniques, and operators in support of Fleet Cyber Command and Commander, TENTH Fleet requirements. (Specific development details held at a higher classification level). Conducts vulnerability analyses and reverse engineering on improvised explosive devices (Specific details held at a higher classification level)

Twisted Web: A developmental capability that improves Fleet ability to safely operate in all ocean areas by reducing adversary capability to engage kinetically. Funds risk reduction and system engineering development for project initiation. (Specific details held at a higher classification level) Transferred to a classified line for FY18.

Mocking Jay: Develop cyber capabilities in the maritime domain. Project is an analytical and engineering effort which enables development of new operating (classified) systems and cyber weapons delivery. Funds additional development and testing of networks for vulnerability analysis, reverse engineering, simulation systems, and closed development networks. Additionally, funds Cyber Foundry, Cyber Infrastructure and the R&D Site to support the Navy's portion of USCYBERCOM planned Unified Platform and Cyber Mission Force. Details can be provided separately in an appropriate environment. Starting in FY18, Mocking Jay moved to from project 2263 Information Warfare System to projected 3426 Maritime Cyber.

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>					
	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<b>Title:</b> Electronic Warfare / Information Operations (IO) Countermeasure Capability Research & Development	15.478	22.408	19.443	0.000	19.443
<b>Articles:</b>	-	-	-	-	-
<b>Description:</b> Develops and uses modeling and simulation techniques to prototype and test emergent waveforms. Funds support additional site infrastructure updates for collection efforts, extend technical understanding, continue capability development, and deliver stand-alone Prototypes to test and integrate waveforms for countering adversary systems. In addition, conducts research operations to provide Strategic Indications and Warnings (I&W) and OPINTEL analysis (Details held at a higher classification level). IO Countermeasure Capability R&D processes used to develop, test, prototype, and integrate electronic attack wave forms are nearly identical to Maritime Cryptologic Systems (MCS-21), involve its own unique set of signal types .					
<b>FY 2016 Accomplishments:</b> *Conducted collection efforts of new and emerging signal types, in support of capability development (details held at a higher classification level) *Site (VAL) infrastructure updated to support additional evolving collection efforts, further technical understanding, and capability development (details held at a higher classification level) *Measures of Effectiveness (MOE) software development and Graphical User Interface (GUI) updates completed (details held at a higher classification level) *Provided technical information to increase effectiveness of Information Operations (IO) systems development/ planning and situational awareness. In addition, conducted dynamic research operations to provide Strategic Indications and Warnings (I&W) and OPINTEL analysis (Details held at a higher classification level) *Hosted Table Top Exercise (TTX) to identify requirements for CONOP development *Site infrastructure updates supports Antenna infrastructure and Sensitive Compartmented Information Facility (SCIF) construction and accreditation supporting R&D effort at Navy Cyber Warfare Development Group (NCWDG) - additionally enhanced existing R&D hardware/software systems and infrastructure - duration for this effort was: - Civil works began 4Q FY16					
<b>FY 2017 Plans:</b> *All FY17 activities are iterative in a dynamic and evolving signals environment *Developing and testing IO Countermeasures capabilities across various platforms *Developing specific waveforms to attack adversary systems *Developing and using modeling and simulations techniques to prototype and test emergent waveforms					

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>						
		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<p>*Modeling and Simulation Lab (Applied/projected level of effort)</p> <p>*Information Warfare (IW) / Information Operations (IO) / Electronic Attack (EA) capability development (Details held at a higher classification level)</p> <p>*Waveform Weapon Development</p> <p>*Develop and Test Capability in a maritime operational environment</p> <p>*Continue to conduct collection efforts in support of capability development</p> <p>*Additional Site infrastructure updates to support collection efforts, extend technical understanding, and continue capability development</p> <p>*Continue to provide technical information to increase effectiveness of Information Operations (IO) systems development/planning and situational awareness.</p> <p>*Continue to conduct search operations to provide strategic Indications and Warnings (I&amp;W) and OPINTEL analysis</p> <p>*Prime contract kickoff</p> <p>*Initial technology engineering and design, (Details held at a higher classification level)</p> <p>*Site infrastructure updates supports Antenna infrastructure and SCIF construction and accreditation supporting R&amp;D effort at NCWDG - Additionally enhance existing R&amp;D hardware/software systems and infrastructure for IO infrastructure capabilities - proposed duration for this effort is:</p> <p>- Civil works further development 1Q 17</p> <p>- Antenna and SCIF completion/accreditation end of 3Q 17</p> <p><b>FY 2018 Base Plans:</b></p> <p>*All FY18 activities are iterative in a dynamic and evolving signals environment</p> <p>*Additional Site infrastructure updates are to support search and survey efforts, and further technical understanding and capability development. Additionally, Develop and Test Capabilities in a maritime operational environment, and deliver stand-alone prototypes to test and integrate different systems. Funds supports additional hardware and software required to transition these capabilities to the fleet</p> <p>*Developing and testing IO Countermeasures capabilities across various platforms</p> <p>*Additional Site infrastructure updates to support collection efforts, further technical understanding, and capability development</p> <p>*Integrate Information Operations (IO) / Electronic Attack (EA) capability into fleet systems and platforms (Details held at a higher classification level)</p>						

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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>*Develop and Test Capabilities in a maritime operational environment (Details held at a higher classification level) *Continue to conduct search operations to provide strategic Indications and Warnings (I&amp;W) and OPINTEL analysis,</p> <p>*Deliver stand-alone prototypes to test and integrate waveforms for countering adversary systems</p> <p>*Conduct software updates and system maintenance on search and survey systems</p> <p>*Continue to provide technical information to increase effectiveness of Information Operations (IO) systems development/planning and situational awareness</p> <p>*Conduct surveys and planning for additional search and survey site</p> <p>*Modeling and Simulation Lab (Applied/projected level of effort) (Details held at a higher classification level)</p> <p><b>FY 2018 OCO Plans:</b> N/A</p>					
<p><b>Title:</b> Electronic Warfare Readiness/ Maritime Cryptologic Systems (MCS-21) Development</p> <p><b>Articles:</b></p> <p><b>Description:</b> Develops and fields spiral Electronic Support (ES), Electronic Attack (EA) and cyber capabilities against Fleet Forces Command prioritized signals, networks and target sets. Capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne and surface. Also, Information Operations platforms (Classic Troll, Banshee and Ships Signal Exploitation Equipment Increment E and F). Signal Descriptor File (SDF) Configuration Management Authority (SCMA) is the technical lead for the development, testing and validation of ES and EA techniques for Maritime Cryptologic Systems in support of Navy-wide Information Operations planning. (Details held at higher classification level). The MCS-21 processes used to develop, test, prototype, and integrate electronic attack wave forms are nearly identical to IO Countermeasure Capability R&amp;D, however, involve its own unique set of classified signal types.</p> <p>Please note, there are several similarities between MCS-21 development and IO countermeasure efforts. The process used to develop, test, prototype and integrate electronic attack wave forms regardless of the system or signal type are nearly identical. The difference is the IO countermeasure R&amp;D effort is developing capabilities for a different set of signal types (details classified) than the MCS-21 development. Additionally the MCS-21 development directly ties into Fleet program of record systems (i.e. introducing new wave forms to existing systems) , whereas the IO countermeasure effort is creating new wave forms for a new system.</p> <p><b>FY 2016 Accomplishments:</b></p>					
	3.366 -	3.035 -	3.000 -	0.000 -	3.000 -

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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>*All accomplishments are iterative in nature, however are performed on emerging and evolving target sets and signals</p> <p>*Upgraded and enhanced SDF remote capability</p> <p>*Upgraded SDF development and validation systems to maintain concurrency with systems on maritime platforms (software)</p> <p>*Developed IW/IO/EA capabilities and integrated into Fleet POR systems. (Details held at higher classification level)</p> <p>*Developed specific wave form (EA) Research and Analysis (Details held at higher classification level)</p> <p>*Tested SDF and EA capabilities to ensure compatibility with Fleet POR systems (Details held at higher classification level)</p> <p>*Developed Initial Capability for Remote SDF development</p> <p>*Developed ES (SDF) Research, Development and Analysis</p> <p>*Developed a capability to rapidly demodulate and decode FFC priority signals (Details held at higher classification level)</p> <p><b>FY 2017 Plans:</b></p> <p>*Develop and test IO Countermeasures capabilities across various platforms</p> <p>*Develop specific waveforms to attack adversary systems</p> <p>*Develop and use modeling and simulations techniques to prototype and test emergent waveforms.</p> <p>*Modeling and Simulation Lab (Applied/projected level of effort)</p> <p>*Develop IW/IO/EA (Details held at a higher classification level)</p> <p>*Waveform Weapon Development which includes a system to host electronic support and electronic attack capabilities MCS-21 Planning Optimization and Tasking Service (MPOTS) for lighthouses</p> <p>*Upgrade current SDF development and validation systems to maintain concurrency with systems on maritime platforms. *Develop back-up (COOP) for remote SDF capability</p> <p>*Increase development and testing of electronic attack capabilities across maritime platforms</p> <p>*Upgrade systems and infrastructure to support next generation electronic support and electronic attack capability development</p> <p>*Full Operating Capability for Remote SDF capability</p> <p>*As a result of enhanced development capabilities, the number of priority signals that can be demodulated and decoded has increased. (Details held at higher classification level)</p> <p><b>FY 2018 Base Plans:</b></p> <p>*Develop and test IO Countermeasures capabilities across various platforms</p>						

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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>*Develop specific waveforms to attack adversary systems. *Develop and use modeling and simulations techniques to prototype and test emergent waveforms *Modeling and Simulation Lab (Applied/projected level of effort) *Information Warfare (IW) / Information Operations (IO) Electronic Attack (EA) capability development (Details held at a higher classification level) *Waveform Weapon Development *Integrate MPOTS 3.x with CLASSIC REACH *Upgrade current SDF development and validation systems to maintain concurrency with systems on maritime platforms (software upgrade) *Increase development and testing of electronic attack capabilities across maritime platforms *Upgrade systems and infrastructure to support next generation electronic support and electronic attack capability development. As a result of enhanced development capabilities, the number of priority signals that can be demodulated and decoded has increased (Details held at higher classification level)  <b>FY 2018 OCO Plans:</b> N/A</div>						
<div><b>Title:</b> Electronic Warfare/Research, Analysis and R&amp;D Technical Support  <b>Articles:</b>  <b>Description:</b> Conducts vulnerability analysis and reverse engineering on emerging threats and targets and provides specialized technical, engineering and management capabilities to the program management office. Funding is required for development and use of modeling and simulations techniques to prototype and test emergent waveforms (Details held at higher classification level).  <b>FY 2016 Accomplishments:</b> *A communications vulnerability study was conducted (Specific details held at a higher classification level) *Microprocessor reverse engineered work, Radio Detection and Ranging (RADAR) vulnerability research &amp; support *Maritime Network Lab research and proof of concept *Weak Signal study *Industrial Internet of Things study (Details held at higher classification level)  <b>FY 2017 Plans:</b> *Developing specific waveforms to attack adversary systems</div>		4.335 -	5.255 -	5.497 -	0.000 -	5.497 -

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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>*Develop and use modeling and simulations techniques to prototype and test emergent waveforms</div> <div>*Modeling and Simulation Lab (Applied/projected level of effort)</div> <div>Information Warfare(IW),Information Operations (IO) Electronic Attack (EA) capability development, Waveform Weapon Development</div> <div>*Technical and intelligence related studies and contractor engineering, technical and management capabilities</div> <div>*Research and Analysis (Details held at higher classification level)</div> <div>*Defense Cyber Operations (DCO) study</div> <div>*Cellular vulnerability study</div> <div>*RADAR vulnerability research and support</div> <div>*Maritime Network Lab research and proof of concept</div> <div>*Weak Signal study</div> <div>*Two studies related to emergent DCO and/or OCO topics. (Details held at higher classification level).</div> <div>FY 2018 Base Plans:</div> <div>*Developing specific waveforms to attack adversary systems</div> <div>*Develop and use modeling and simulations techniques to prototype and test emergent waveforms</div> <div>*Modeling and Simulation Lab (Applied/projected level of effort)</div> <div>Information Warfare(IW),Information Operations (IO) Electronic Attack (EA) capability development, Waveform Weapon Development</div> <div>*Technical and intelligence related studies and contractor engineering, technical and management capabilities</div> <div>*Research and Analysis (Details held at higher classification level)</div> <div>*DCO study</div> <div>*Cellular vulnerability study</div> <div>*RADAR vulnerability research and support</div> <div>*Maritime Network Lab research and proof of concept</div> <div>*Weak Signal study</div> <div>*Two studies related to emergent DCO and/or OCO topics (Details held at higher classification level)</div> <div>FY 2018 OCO Plans:</div> <div>N/A</div>						
Title: Electronic Warfare/Computer Network Operations (CNO)		4.646	4.769	4.800	0.000	4.800
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><b>Description:</b> Funds development and testing of computer networks for modeling, simulation, and tailoring of Cyber capabilities. Develop specific Cyber tools, techniques, and operators in support of Fleet Cyber Command and Commander, TENTH Fleet requirements. Conduct vulnerability analysis and reverse engineering on improvised explosive devices. Increased, analytical and engineering effort to develop cyber capabilities in the maritime domain, Funds additional development and testing of computer networks for vulnerability analysis, reverse engineering and simulation systems, and closed development networks (Details held at a higher classification level).</p> <p><b>FY 2016 Accomplishments:</b></p> <p>*Modernization and security enhancements for existing capabilities</p> <p>*Technical support</p> <p>*Portfolio of studies and development efforts focused on providing access (Specific details held at a higher classification level)</p> <p>*Phased tech refresh for development network, and development specific software requirements (Details held at a higher classification level)</p> <p><b>FY 2017 Plans:</b></p> <p>*Develop new capabilities, modernization and security enhancements of existing capabilities</p> <p>*Developing system software upgrades and tech support</p> <p>*Portfolio of studies and development efforts focused on providing access (Specific details held at a higher classification level)</p> <p>*Phased tech refresh for development network, and development specific software requirements (Details held at a higher classification level)</p> <p><b>FY 2018 Base Plans:</b></p> <p>*Develop new capabilities, modernization and security enhancements of existing capabilities</p> <p>*Developing system software upgrades and tech support</p> <p>*Portfolio of studies and development efforts focused on providing access (Specific details held at a higher classification level)</p> <p>*Phased tech refresh for development network, and development specific software requirements (Details held at a higher classification level)</p> <p><b>FY 2018 OCO Plans:</b></p>						

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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						
Title: Twisted Web		6.279	40.154	0.000	0.000	0.000
Articles:		-	-	-	-	-
Description: This is a classified ACAT III program to deliver cyber capability. We are close to an ACAT II and after the culmination of Phase I on OCT 21, 2016, we can reassess our program organization. The project delivers critical counter Intelligence, Surveillance, and Reconnaissance (ISR) protection to the Fleet. This funding will support a developmental capability that improves Fleet ability to safely operate in all ocean areas by reducing adversary capability to engage kinetically. Funds risk reduction and system engineering development for project initiation. (Details available at classified level).						
FY 2016 Accomplishments:						
*The funding was used to support Risk Reduction Efforts ahead of project kickoff						
*Technical Studies were conducted in order to provide potential solutions for the capability production phase.						
*A Statement of Work (SOW) was utilized in development which is critical for the execution of the capability production phase						
*A basis of estimates was developed to better understand the costs of the potential solutions for the capability production phase						
*In addition, there is a continuous evaluation of Fleet capabilities and operations that affect system specifications						
*Modeling and Simulation techniques were used to characterize the operating environment(Details available at classified level)						
FY 2017 Plans:						
*A Prime contractor will be chosen and there will be a contract kickoff meeting for the capability production phase.						
*The initial technology engineering and design phase for the foundation for system development						
*Extensive and Critical software development to ensure system operations						
*Site Cyber infrastructure development begins in order to prepare for installation efforts in support of RDT&E,N.						
*Continue evaluation of Fleet capabilities and operations which affect system specifications						
*Modeling and simulation techniques to evaluate expected system performance and characterize operating environment(Details available at classified level)						
*Get closer to an ACAT II and after the culmination of Phase I (OCT 21, 2016)						

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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
*Reassess program organization ACAT status  <b>FY 2018 Base Plans:</b> FY18 Funding transfer to a Classified line  <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> TFCA  <b>Articles:</b>  <b>Description:</b> Description: Task Force Cyber Awakening (TFCA) as directed by the CNO, provides cyber security investments to expand Operation Rolling Tide (ORT) approach to address near term and executable vulnerabilities across Platform IT (PIT) capabilities. These projects and capabilities include the studies and analysis to support PIT improvements to ensure systems are optimally configured to enhance Navy's ability to maneuver in this expanding environment.  <b>FY 2016 Accomplishments:</b> * New project kicked off * Completed initial studies and Analysis for vulnerability assessment * Completed initial plans for PIT improvements and system configurations  <b>FY 2017 Plans:</b> Starting in FY17, funding for this effort was transferred to Operations and Maintenance, Navy (O&M,N).  <b>FY 2018 Base Plans:</b> N/A  <b>FY 2018 OCO Plans:</b> N/A		3.000 -	0.000 -	0.000 -	0.000 -	0.000 -
<b>Title:</b> Mocking Jay  <b>Articles:</b>  <b>Description:</b> Analytical and engineering effort to develop cyber capabilities in the maritime domain. Produces Cyber capabilities to meet Navy requirements. Increased funding provides physical space for the Cyber Research & Development team. Enables development of new operating (classified) systems and cyber weapons		7.623 -	24.377 -	0.000 -	0.000 -	0.000 -

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<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>delivery. Provides Navy contribution to the USCYBERCOM planned Unified Platform and Cyber Mission Force(Details held at a higher classification level).</p> <p><b><i>FY 2016 Accomplishments:</i></b>            *MOCKINGJAY was a new project that started in FY16            *Developed intelligence analysis to determine specific technical vulnerabilities for Computer Network Operations            *Initiated development and testing of computer networks for modeling, simulation, demonstration and tailoring of Cyber capabilities            *Expanded new cadre of Cyber operators, capable of multi-mission Cyber development(Details held at a higher classification level)</p> <p><b><i>FY 2017 Plans:</i></b>            *Further development of intelligence analysis to determine specific technical vulnerabilities for Computer Network Operations            *Fund the technical research, target development and testing of computer networks for modeling, simulation, demonstration and tailoring of Cyber capabilities            *Provides physical space to accommodate intelligence analysts, engineers, and Cyber developers            *Fund specialized information technology and exploitation capability in order to create a premier Navy Cyberspace development capability            *Fund the Cyber Infrastructure to support technical Research &amp; Development of the Navy portion of the USCYBERCOM planned Unified Platform (Details held at a higher classification level)</p> <p><b><i>FY 2018 Base Plans:</i></b>            FY18 funding for MOCKING JAY realigning from project 2263 Information Warfare Systems to project 3426 Maritime Cyber.</p> <p><b><i>FY 2018 OCO Plans:</i></b>            N/A</p>						
<b>Accomplishments/Planned Programs Subtotals</b>		44.727	99.998	32.740	0.000	32.740
<b>C. Other Program Funding Summary (\$ in Millions)</b>						
N/A						
<b>Remarks</b>						

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### D. Acquisition Strategy

These Projects are designated both ACAT III and non-ACAT and operate under streamlined acquisition. The non-ACAT designation supports a streamlined acquisition process using the Advanced Concept Technology Demonstration documentation of the Defense Acquisition Guidance.

### E. Performance Metrics

Measures include quality and impact of new ideas and approaches, the success of the technology application in satisfying Combatant Commanders and Fleet requirements, and successful cost effective transition of the capability into operational systems. The goal of these investments is to provide to Commanders non-kinetic options to influence adversaries and prevent escalation of crises. Due to the nature and classification of these efforts, qualitative measures are used. It is the intent through the development of modeling and simulation scenarios and capabilities to develop quantitative metrics. The success of this depends heavily on the insight obtained via various intelligence community efforts.

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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
Primary Hardware Development	Various	Classified-1 : Classified	2.200	11.610	Nov 2015	22.346	Oct 2016	5.697	Nov 2017	-		5.697	Continuing	Continuing	Continuing
System Engineering	SS/CPFF	Applied Research Laboratory : University Park, PA	3.589	4.296	Dec 2015	8.932	Dec 2016	3.952	Dec 2017	-		3.952	0.000	20.769	-
Systems Engineering	WR	NRL : Washington, DC	3.084	8.620	Oct 2015	10.360	Oct 2016	3.725	Oct 2017	-		3.725	0.000	25.789	-
Ancillary Hardware Development	Various	Classified : Classified	0.000	0.000		5.000	Nov 2016	2.367	Dec 2017	-		2.367	0.000	7.367	-
Training Development (Classified)	Reqn	Classified : Classified	0.500	0.000		0.910	Oct 2016	0.950	Oct 2017	-		0.950	0.000	2.360	-
Training Development (CDL)	Reqn	NAVICP : Philadelphia, PA	0.061	0.098	Oct 2015	0.099	Oct 2016	0.099	Oct 2017	-		0.099	0.000	0.357	-
Subtotal			9.434	24.624		47.647		16.790		-		16.790	-	-	-
Remarks Training Development: Contract Method is Government Purchase Card (GPC).															
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
Development Support	SS/CPFF	ARGON-1 : Fairfax, VA	0.234	0.370	Dec 2015	0.570	Dec 2016	0.575	Dec 2017	-		0.575	0.000	1.749	-
Software Development	SS/CPFF	L3 Communications : New York, NY	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Development Support	WR	SSC PAC : San Diego, VA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Software Development	SS/CPFF	ARGON-2 : Fairfax, VA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Development Support	WR	NRL-1 : Washington, DC	1.169	3.920	Oct 2015	4.520	Oct 2016	3.130	Nov 2017	-		3.130	0.000	12.739	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>				Project (Number/Name) 2263 / <i>Information Warfare System</i>					
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
Development Support	Various	Classified-1 : Classified	1.050	2.440	Oct 2015	32.290	Oct 2016	5.505	Nov 2017	-		5.505	0.000	41.285	-
Studies & Analysis	WR	NRL-2 : Washington, DC	1.654	0.340	Nov 2015	0.000		0.000		-		0.000	0.000	1.994	-
Software Development	SS/CPFF	ARL : University Park, PA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Software Development	Various	Classified-2 : Classified	0.000	2.420	Jan 2016	4.100	Jan 2017	1.468	Jan 2018	-		1.468	0.000	7.988	-
Development Support	Various	Classified : Classified	0.750	0.000		0.000		0.000		-		0.000	0.000	0.750	-
Integrated Logistics Support (ILS)	Reqn	NAVICP : Philadelphia, PA	0.046	0.074	Oct 2015	0.075	Dec 2016	0.075	Dec 2017	-		0.075	0.000	0.270	-
Technical Data (Software Programs & Ref Materials)	Reqn	NPWC : Chesapeake, VA	0.025	0.040	Nov 2015	0.040	Nov 2016	0.050	Nov 2017	-		0.050	0.000	0.155	-
Studies & Analysis	MIPR	Classified : Classified	0.000	0.628	Nov 2015	0.000		0.000		-		0.000	0.000	0.628	-
Comm'l Drivers Licenses (CDL)	Reqn	Classified : Classified	0.009	0.041	Jan 2016	0.000	Jan 2017	0.045	Jan 2018	-		0.045	0.000	0.095	-
Subtotal			4.937	10.273		41.595		10.848		-		10.848	0.000	67.653	-
Remarks															
CDL, ILS & Tech Data: Contract Method is Government Purchase Card (GPC).															
CDLs are required for Command Personnel to drive Command Vehicles supporting the installation of mission hardware.															
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
Developmental Test & Evaluation	WR	NAWC : China Lake, CA	0.226	0.360	Dec 2015	2.870	Dec 2016	1.880	Dec 2017	-		1.880	0.000	5.336	-
Subtotal			0.226	0.360		2.870		1.880		-		1.880	0.000	5.336	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>				Project (Number/Name) 2263 / <i>Information Warfare System</i>					
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 Services	Various	Classified-2 : Classified	0.480	0.850	Nov 2015	0.950	Dec 2016	0.498	Dec 2017	-		0.498	0.000	2.778	-
Engineering & Development Services	Various	Classified-4 : Classified	0.000	0.000		3.256	Dec 2016	1.278	Dec 2017	-		1.278	0.000	4.534	-
Program Management Services	Various	Classified : Classified	1.610	3.294	Dec 2015	2.164	Dec 2016	0.714	Dec 2017	-		0.714	0.000	7.782	-
Contractor Engineering Services	Various	Classified : Classified	0.480	0.840	Nov 2015	0.770	Nov 2016	0.374	Nov 2017	-		0.374	0.000	2.464	-
Program Analysis Services (Classified)	Various	Classified : Classified	0.480	4.486	Dec 2015	0.746	Dec 2016	0.358	Dec 2017	-		0.358	0.000	6.070	-
Subtotal			3.050	9.470		7.886		3.222		-		3.222	0.000	23.628	-
			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			17.647	44.727		99.998		32.740		-		32.740	-	-	-
Remarks															



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

Date: May 2017

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)

PE 0204575N / Elect Warfare Readiness

Supt

Project (Number/Name)

2263 / Information Warfare System

Information Warfare System	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Acquisition Milestones					Milestone B								IOC							FOC					
Systems Engineering				CDD/RFP	SRR	PDR			CDR				ATO												
Development Work																									
Waveforms				FIOC Del.				TRTD																	
				FIOC Del.				Classified				Classified			Classified					Classified			Classified		
Unique Access (UA)	Classified		CNO POC		Classified				Classified			Classified			Classified							Classified			
TESTING																									
Prototypes								FAT-TRDT-CNO UA				Classified			Classified					Classified			Classified		
																							Classified		
Maritime Cryptological System (MCS-21) Integration	MSC-21 FAT, OP Testing				Classified				Classified				Classified				Classified					Classified			
DELIVERIES																									
Information Operations Capabilities (IOC)				Modeling & Simulation Lab																					
				MSC-21 IOC Spiral Enhancements				Classified				Classified			Classified					Classified			Classified		
Cyber Network Operations (CNO) Capabilities				Spiral Enhancement																					
				CNO Spiral Enhancements - FOC				Classified				Classified											Classified		
Maritime Cryptological System (MSC-21)																									

2018DON - 0204575N - 2263

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>	Project (Number/Name) 2263 / <i>Information Warfare System</i>
<div><div>2022 4Q</div><div></div><div></div><div>Classified</div><div>Classified</div><div></div><div></div><div>Classified</div><div></div><div>Classified</div><div></div><div>Classified</div></div>		

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy</b>			<b>Date: May 2017</b>
<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0204575N / <i>Elect Warfare Readiness Supt</i>	<b>Project (Number/Name)</b> 2263 / <i>Information Warfare System</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><i>Information Warfare System</i></b>				
Acquisition Milestones: Milestone B	2	2017	2	2017
Acquisition Milestones: IOC - Initial Operational Capability	3	2019	3	2019
Acquisition Milestones: FOC - Full Operational Capability	4	2020	4	2020
Systems Engineering: CDD/RFP APPROVAL (Capability Development Document / Request for Proposal)	4	2016	4	2016
Systems Engineering: SRR - SRR - System Requirements Review	2	2017	2	2017
Systems Engineering: PDR - Preliminary Design Review	3	2017	3	2017
Systems Engineering: CDR - Critical Design Review	1	2018	1	2018
Systems Engineering: ATO - Authorization to Operate	3	2019	3	2019
Development Work: Waveforms: 1-Waveforms	4	2016	4	2016
Development Work: Waveforms: 2-Waveforms	4	2016	4	2016
Development Work: Waveforms: 3 - Waveforms - Target Research & Technical Development (TRTD)	4	2017	4	2017
Development Work: Waveforms: 4- Waveforms - Classified	4	2017	4	2017
Development Work: Waveforms: 5 - Waveforms - Classified	4	2018	4	2018
Development Work: Waveforms: 6 - Waveforms - Classified	4	2019	4	2019
Development Work: Waveforms: 7 - Waveforms - Classified	4	2020	4	2020
Development Work: Waveforms: 8 - Waveforms - Classified	4	2021	4	2021
Development Work: Waveforms: 9 - Waveforms - Classified	4	2022	4	2022
Development Work: Unique Access (UA): 1 - Unique Access - Cyber Network Operations (CNO) - Proof of Concept (POC)	3	2016	3	2016
Development Work: Unique Access (UA): 2 - Unique Access - Classified	2	2016	2	2016

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<b>Exhibit R-4A, RDT&amp;E Schedule Details: FY 2018 Navy</b>				<b>Date: May 2017</b>	
<b>Appropriation/Budget Activity</b> 1319 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0204575N / <i>Elect Warfare Readiness Supt</i>		<b>Project (Number/Name)</b> 2263 / <i>Information Warfare System</i>	
		<b>Start</b>		<b>End</b>	
<b>Events by Sub Project</b>		<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
Development Work: Unique Access (UA): 3 - Unique Access - Classified		2	2017	2	2017
Development Work: Unique Access (UA): 4 - Unique Access - Classified		2	2018	2	2018
Development Work: Unique Access (UA): 5 - Unique Access		2	2019	3	2019
Development Work: Unique Access (UA): 6 - Unique Access		2	2020	3	2020
Development Work: Unique Access (UA): 7 - Unique Access		2	2021	3	2021
Development Work: Unique Access (UA): Intelligence Analysys & Determination of Vulnerabilities		1	2016	4	2016
Development Work: Unique Access (UA): Infrastructure Develop-MD-1		4	2016	4	2016
Development Work: Unique Access (UA): Lab Develop-MC-2		1	2016	3	2016
Development Work: Unique Access (UA): Systems Spec Refinement - TW		1	2016	4	2016
Development Work: Unique Access (UA): Systems Engineering - TW		3	2016	3	2017
Development Work: Unique Access (UA): Supposrt Systems Engineering - TW		1	2017	3	2017
Development Work: Unique Access (UA): Primary Compound Acquisition and Installation - TW		4	2017	4	2018
Development Work: Unique Access (UA): Secondary Compound Acquisition and Installation - TW		2	2018	2	2019
Development Work: Unique Access (UA): Subsystem Enhancement & Integration - TW		4	2017	2	2018
Development Work: Unique Access (UA): 1- Subsystem Enhancement & Intregation - TW		4	2019	3	2020
Development Work: Unique Access (UA): 2- Subsystem Enhancement & Intregation - TW		4	2021	4	2021
Development Work: Unique Access (UA): 3- Subsystem Enhancement & Intregation - TW		4	2022	4	2022
Development Work: Unique Access (UA): 8 - Unique Access		4	2021	4	2021
Development Work: Unique Access (UA): 9 - Unique Access		4	2022	4	2022
TESTING: Prototypes: 1-Prototypes		4	2016	4	2016
TESTING: Prototypes: 2-Prototypes		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 / 7	R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>		Project (Number/Name) 2263 / <i>Information Warfare System</i>	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
TESTING: Prototypes: 3 - Prototypes - Factory Acceptance Testing (FAT), TRTD, CNO Unique Access	4	2017	4	2017
TESTING: Prototypes: 4 - Prototypes - Classified	4	2018	4	2018
TESTING: Prototypes: 5 - Prototypes - Classified	4	2019	4	2019
TESTING: Prototypes: 6 - Prototypes - Classified	4	2020	4	2020
TESTING: Prototypes: 7 - Prototypes - Classified	4	2021	4	2021
TESTING: Prototypes: 8 - Prototypes - Classified	4	2021	4	2021
TESTING: Maritime Cryptological System (MCS-21) Integration: 1 - MCS-21 Integration Factory Acceptance Testing (FAT), Operational Testing	2	2016	3	2016
TESTING: Maritime Cryptological System (MCS-21) Integration: 2 - MCS-21 Integration - Classified	2	2016	3	2016
TESTING: Maritime Cryptological System (MCS-21) Integration: 3 - MCS-21 Integration - Classified	2	2017	3	2017
TESTING: Maritime Cryptological System (MCS-21) Integration: 4 - MCS-21 Integration - Classified	2	2018	3	2018
TESTING: Maritime Cryptological System (MCS-21) Integration: 5 - MCS-21 Integration - Classified	2	2019	3	2019
TESTING: Maritime Cryptological System (MCS-21) Integration: 6 - MCS-21 Integration	2	2020	3	2020
TESTING: Maritime Cryptological System (MCS-21) Integration: 7 - MCS-21 Integration	4	2021	4	2021
TESTING: Maritime Cryptological System (MCS-21) Integration: 8 - MCS-21 Integration	4	2022	4	2022
DELIVERIES: Information Operations Capabilities (IOC): Information Operations Capabilities (IOC) Modeling & Simulation Lab	4	2016	4	2016
DELIVERIES: Information Operations Capabilities (IOC): 1 - MCS-21 IOC - Spiral Enhancements	4	2016	4	2016
DELIVERIES: Information Operations Capabilities (IOC): 2 - MCS-21 IOC - Classified	4	2017	4	2017

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt		Project (Number/Name) 2263 / Information Warfare System	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
DELIVERIES: Information Operations Capabilities (IOC): 3 - MCS-21 IOC - Classified		4	2018	4	2018
DELIVERIES: Information Operations Capabilities (IOC): 4 - MCS-21 IOC - Classified		4	2019	4	2019
DELIVERIES: Information Operations Capabilities (IOC): 5 - MCS-21 IOC - Classified		4	2020	4	2020
DELIVERIES: Information Operations Capabilities (IOC): 6 - MCS-21 IOC - Classified		4	2021	4	2021
DELIVERIES: Information Operations Capabilities (IOC): 7 - MCS-21 IOC - Classified		4	2022	4	2022
DELIVERIES: Information Operations Capabilities (IOC): 1 - TW - Component Acceptance		2	2017	3	2017
DELIVERIES: Information Operations Capabilities (IOC): 2 - TW - Component Acceptance		3	2018	4	2018
DELIVERIES: Information Operations Capabilities (IOC): 3 - TW Component Acceptance		4	2019	1	2020
DELIVERIES: Information Operations Capabilities (IOC): 1 - TW - Integrated System Evaluation		2	2019	3	2019
DELIVERIES: Information Operations Capabilities (IOC): 2 - TW - Integrated System Evaluation		3	2020	2	2021
DELIVERIES: Information Operations Capabilities (IOC): MC - Testing CNO for Model Simulation - 1		4	2016	1	2018
DELIVERIES: Information Operations Capabilities (IOC): MC - Intelligence Analysis of Tech Vulnerables - 2		2	2016	1	2019
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 1-CNO Capabilities - Spiral Enhancements		4	2016	4	2016
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 2-CNO Capabilities - Spiral Enhancements / Full Operational Capability (FOC)		4	2016	4	2016
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 3 -CNO Capabilities - Classified		4	2017	4	2017
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 4 - CNO Capabilities - Classified		4	2018	4	2018
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 5 - CNO Capabilities		4	2019	4	2019

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>		Project (Number/Name) 2263 / <i>Information Warfare System</i>	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 6 - CNO Capabilities		4	2021	4	2021
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 7- CNO Capabilities		4	2022	4	2022
DELIVERIES: Cyber Network Operations (CNO) Capabilities: TW - Function Classified - 1		1	2018	4	2019
DELIVERIES: Cyber Network Operations (CNO) Capabilities: TW - Function Classified - 2		4	2019	2	2020
DELIVERIES: Cyber Network Operations (CNO) Capabilities: TW - Function Classified - 3		4	2020	4	2020
DELIVERIES: Cyber Network Operations (CNO) Capabilities: TW - Function Classified - 4		4	2021	4	2021
DELIVERIES: Cyber Network Operations (CNO) Capabilities: TW - Function Classified - 5		4	2022	4	2022
DELIVERIES: Maritime Cryptological System (MSC-21): 6 - CNO Capabilities		4	2020	4	2020
DELIVERIES: Maritime Cryptological System (MSC-21): MCS-21 Product Line - Full Operational Capability (FOC)		1	2016	4	2018

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>				Project (Number/Name) 3426 / <i>Maritime Cyber</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
3426: <i>Maritime Cyber</i>	0.000	0.000	0.000	18.300	-	18.300	20.400	20.500	20.900	21.300	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Mocking Jay: Funds were realigned from project code 2263 Information Warfare Systems to 3426 Maritime Cyber to reflect additional development and testing of networks for vulnerability analysis, reverse engineering, simulation systems, and closed development networks. Additionally, this project funds Cyber Foundry, Cyber Infrastructure and the Research and Development Site to support the Navy's portion of USCYBERCOM planned Unified Platform and Cyber Mission Force. Details held at a higher classification.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<b>Title:</b> Mocking Jay  <b>Articles:</b>								0.000	0.000	18.300	0.000	18.300
								-	-	-	-	-
<b>Description:</b> Analytical and engineering effort to develop cyber capabilities in the maritime domain. Produces Cyber capabilities to meet Navy cyber requirements. Increased funding provides physical space for Cyber Research & Development team. Enables development of new operating systems to ensure access and cyber weapons delivery. Provides Navy contribution to the USCYBERCOM planned Unified Platform and Cyber Mission Force(Details held at a higher classification level). Funds realigned from project code 2263.  <b>FY 2016 Accomplishments:</b> N/A  <b>FY 2017 Plans:</b> N/A  <b>FY 2018 Base Plans:</b> Starting in FY18, Mocking Jay moved from project code 2263 Information Warfare Systems to project code 3426 Maritime Cyber.  *Further development of intelligence analysis to determine specific technical vulnerabilities for Computer Network Operations *Further fund specialized information technology and exploitation capabilities in order to create a premier Navy Cyberspace development capability *Further fund the Cyber Infrastructure to support technical Research & Development of the Navy portion of the												



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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 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0204575N / <i>Elect Warfare Readiness Supt</i>		<b>Project (Number/Name)</b> 3426 / <i>Maritime Cyber</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>
USCYBERCOM planned Unified Platform (Details held at a higher classification level)					
<b>FY 2018 OCO Plans:</b> N/A					
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	0.000	18.300	0.000
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A					
<b>Remarks</b>					
<b>D. Acquisition Strategy</b> This is part of a designated Acquisition Category 3 (ACAT III) and non-ACAT and operate under streamlined acquisition. The non-ACAT designation supports a streamlined acquisition process using the Advanced Concept Technology Demonstration documentation of the Defense Acquisition Guidance.					
<b>E. Performance Metrics</b> Measures include quality and impact of new ideas and approaches, the success of the technology and Cyber application in satisfying Combatant Commanders and Fleet requirements, and successful cost effective transition of the capability into operational systems. The goal of these investments is to provide to Commanders non-kinetic options to influence adversaries and prevent escalation of crises. Due to the nature and classification of these efforts, qualitative measures are used. It is the intent through the development of modeling and simulation scenarios and capabilities to develop quantitative metrics. The success of this depends heavily on the insight obtained via various intelligence community efforts.					

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>				Project (Number/Name) 3426 / <i>Maritime Cyber</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
Primary Hardware Development	Various	Classified : Classified	0.000	0.000		0.000		3.300	Nov 2017	-		3.300	Continuing	Continuing	Continuing
System Engineering	SS/CPFF	Applied Research Laboratory : University Park, PA	0.000	0.000		0.000		5.000	Dec 2017	-		5.000	0.000	5.000	-
System Engineering	WR	Naval Research Laboratory : Washington, DC	0.000	0.000		0.000		5.000	Oct 2017	-		5.000	0.000	5.000	-
Subtotal			0.000	0.000		0.000		13.300		-		13.300	-	-	-
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
Development Support	WR	Naval Research Laboratory : Washington, DC	0.000	0.000		0.000		2.000	Nov 2017	-		2.000	0.000	2.000	-
Development Support	Various	Classified : Classified	0.000	0.000		0.000		2.000	Nov 2017	-		2.000	0.000	2.000	-
Subtotal			0.000	0.000		0.000		4.000		-		4.000	0.000	4.000	-
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
Need Item Text	C/BA	Not Specified : Not Specified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Subtotal			0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy													Date: May 2017		
Appropriation/Budget Activity 1319 / 7						R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt					Project (Number/Name) 3426 / Maritime Cyber				
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
Engineering and Development Services	Various	Classified-4 : Classified	0.000	0.000		0.000		0.500	Dec 2017	-		0.500	0.000	0.500	-
Program Management Services	Various	Classified : Classified	0.000	0.000		0.000		0.500	Dec 2017	-		0.500	0.000	0.500	-
Subtotal			0.000	0.000		0.000		1.000		-		1.000	0.000	1.000	-
			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			0.000	0.000		0.000		18.300		-		18.300	-	-	-
Remarks															

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

**Date:** May 2017

**Appropriation/Budget Activity**  
1319 / 7

**R-1 Program Element (Number/Name)**  
PE 0204575N / *Elect Warfare Readiness Supt*

**Project (Number/Name)**  
3426 / *Maritime Cyber*

Maritime Cyber	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
Unique Access (UA)																												
Testing																												
Prototype																												
Deliveries																												
Maritime Cyber																												

2018PB - 0204575N - 3426

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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 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0204575N / <i>Elect Warfare Readiness Supt</i>	<b>Project (Number/Name)</b> 3426 / <i>Maritime Cyber</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><i>Maritime Cyber</i></b>				
Unique Access (UA): 4 - Unique Access	2	2018	3	2018
Unique Access (UA): 5 - Unique Access	2	2019	3	2019
Unique Access (UA): 6 - Unique Access	2	2020	3	2020
Unique Access (UA): 7 - Unique Access	2	2021	3	2021
Unique Access (UA): 8 - Unique Access	4	2021	4	2021
Unique Access (UA): 9 - Unique Access	4	2022	4	2022
Testing: Prototype: 4 - Prototype - Classified	4	2018	4	2018
Testing: Prototype: 5 - Prototype - Classified	4	2019	4	2019
Testing: Prototype: 6 - Prototype - Classified	4	2020	4	2020
Testing: Prototype: 7 - Prototype - Classified	4	2021	4	2021
Testing: Prototype: 8 - Prototype - Classified	4	2022	4	2022
Deliveries: Maritime Cyber: 4 - MJ	2	2019	2	2019
Deliveries: Maritime Cyber: 5 - MJ	2	2020	2	2020
Deliveries: Maritime Cyber: 6 - MJ	2	2021	2	2021
Deliveries: Maritime Cyber: 7 - MJ	2	2022	2	2022