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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy **Date:** February 2018

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development</i>					R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	46.403	79.410	51.040	66.889	-	66.889	68.893	68.891	72.055	73.386	Continuing	Continuing
2263: <i>Information Warfare System</i>	46.403	79.410	32.740	47.049	-	47.049	49.116	48.705	51.448	52.357	Continuing	Continuing
3426: <i>Maritime Cyber</i>	0.000	0.000	18.300	19.840	-	19.840	19.777	20.186	20.607	21.029	Continuing	Continuing

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 Navy requirements (details held at a higher classification level). Conducts vulnerability analyses and reverse engineering on improvised explosive devices (details held at a higher classification level).

Mocking Jay: Funds were realigned from project code 2263 Information Warfare Systems to 3426 Maritime Cyber to reflect 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 Forces. Details held at a higher classification.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy				Date: February 2018	
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			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	99.998	51.040	70.389	-	70.389
Current President's Budget	79.410	51.040	66.889	-	66.889
Total Adjustments	-20.588	0.000	-3.500	-	-3.500
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.706	0.000			
• SBIR/STTR Transfer	-3.176	0.000			
• Program Adjustments	0.000	0.000	-2.722	-	-2.722
• Rate/Misc Adjustments	0.000	0.000	-0.778	-	-0.778
• Congressional Directed Reductions Adjustments	-16.706	-	-	-	-
Change Summary Explanation					
The FY 2019 funding request was reduced by (\$0.152) million to reflect the Department of Navy's effort to support the Office of Management and Budget directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.					
The FY 2019 funding request was reduced by \$1.486 million to account for the availability of prior year execution balances.					

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
2263: <i>Information Warfare System</i>	46.403	79.410	32.740	47.049	-	47.049	49.116	48.705	51.448	52.357	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 Navy requirements (details held at a higher classification level). Conducts vulnerability analyses and reverse engineering on improvised explosive devices (details held at a higher classification level).

Increase between FY18 and FY19 is due to antenna refurbishment in Maryland and at an OCONUS site. Site is classified. Additionally, increase will do the following: 1) support ship integration, modeling to support operational implementation, technical review in support of transition to SPAWAR, and operational evaluation of a "speed to fleet" Computer Network Operation and Electronic Warfare projects. 2) Management and engineering services for mission essential systems engineering and security tasks in support of operational shipboard testing. 3) Regain traction to further develop Electronic Warfare to meet emergent technical threats; enhance cyber research and development; and development/deployment Radio Frequency (RF). 4) Enhance validation of Signal Descriptor (SDF) file collection and results in complete ship self-defense warning indications and signal collections for the war-fighter.

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

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Electronic Warfare / Information and Computer Network Operations (IO & CNO) and Countermeasure Capability Research & Development	54.672	32.740	47.049	0.000	47.049
Articles:	-	-	-	-	-

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Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt		Project (Number/Name) 2263 / Information Warfare System				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<p>Description: 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 Operational Intelligence analysis (details held at a higher classification level). Information Operations (IO) Countermeasure Capability Research and Development (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.</p> <p>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 MCS-21 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&D, however, involve its own unique set of classified signal types.</p> <p>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).</p> <p>FY 2018 Plans:</p> <p>*All FY18 activities are iterative in a dynamic and evolving signals environment</p> <p>*Additional Site infrastructure updates are to support search, collection, 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 support additional hardware and software required to transition these capabilities to the fleet</p> <p>*Integrate Information Operations (IO)/Electronic Attack (EA) capability into fleet systems and platforms (details held at a higher classification level)</p>								

UNCLASSIFIED

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Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt		Project (Number/Name) 2263 / Information Warfare System	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<div>*Develop and test IO Countermeasures capabilities across various platforms</div> <div>*Develop and test Capabilities in a maritime operational environment (details held at a higher classification level)</div> <div>*Conduct search operations to provide strategic Indications and Warnings (I&W) and Operational Intelligence (OPINTEL) analysis</div> <div>*Deliver stand-alone prototypes to test and integrate waveforms for countering adversary systems</div> <div>*Conduct software updates and system maintenance on search and survey systems</div> <div>*Provide technical information to increase effectiveness of IO systems development/planning and situational awareness</div> <div>*Conduct surveys and planning for additional search and survey site</div> <div>*Modeling and Simulation Lab (applied/projected level of effort) (details held at a higher classification level)</div> <div>*Modeling and Simulation products and support (details held at a higher classification level)</div> <div>*Weekly Signals Intelligence assessments</div> <div>*Linguist support and open source research</div> <div>*Information Systems Engineering Automated Information Systems and IT support</div> <div>*Material shipment, building inspection, site maintenance, alternate facility, and government vehicle maintenance</div> <div>*Program management, acquisition, and systems engineering support</div> <div>*Develop and test IO Countermeasures capabilities across various platforms</div> <div>*Develop specific waveforms to attack adversary systems</div> <div>*Develop and use modeling and simulations techniques to prototype and test emergent waveforms</div> <div>*Information Warfare (IW)/Information Operations (IO) Electronic Attack (EA) capability development (details held at a higher classification level)</div> <div>*Waveform Weapon Development</div> <div>*Integrate MCS-21 Planning Optimization and Tasking Services (MPOTS) 3.x with CLASSIC REACH capability</div> <div>*Upgrade current SDF development and validation systems to maintain concurrency with systems on maritime platforms (software upgrade)</div> <div>*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 a higher classification level)</div> <div>*Engineering, equipment integration, mission planning analysis, logistics, accreditation, and training for Tactical Research and Target Development (TRTD)</div> <div>*Acquisition of new Signal Intelligence (SIGINT) technologies and research</div> <div>*Systems administration and Information Assurance & Accreditation</div> <div>*Research signal analysis lab (RSAL) upgrades</div>					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<ul style="list-style-type: none">*Hexadecimal code analysis and reverse engineering project*Secure DevOps prototype capability proof of concept*NPS research efforts to support operation requirements (details held at a higher classification level)*DevOps environment tech refresh and expansion*Scalable secure DevOps capability design and implementation*Mission oriented software research and development*Maritime commercial architecture research*Test centric DevOps environment support*Expeditionary Cyber*Maritime navigation analysis*Project detail held at a classified level*Position Navigation & Timing Research <p>FY 2019 Base Plans:</p> <ul style="list-style-type: none">*All FY19 activities are iterative in a dynamic and evolving signals environment,*Additional Site infrastructure updates are to support search, collection, 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 support additional hardware and software required to transition these capabilities to the fleet*Integrate Information Operations (IO) / Electronic Attack (EA) capability into fleet systems and platforms (details held at a higher classification level)*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&W) and OPINTEL analysis*Deliver stand-alone prototypes to test and integrate waveforms for countering adversary systems*Conduct software updates and system maintenance on search and survey systems*Provide technical information to increase effectiveness of Information Operations (IO) systems development/ planning and situational awareness*Conduct surveys and planning for additional search and survey site*Modeling and Simulation Lab (applied/projected level of effort) (details held at a higher classification level)*Modeling and Simulation products and support (details held at a higher classification level)*Weekly SIGINT assessments						

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<ul style="list-style-type: none">*Linguist support and open source research*Information Systems Engineering Automated Information Systems and IT support*Material shipment, building inspection, site maintenance, COOP facility, and government vehicle maintenance*Program management, acquisition, and systems engineering support*Develop and test IO Countermeasures capabilities across various platforms*Develop specific waveforms to attack adversary systems*Develop and use modeling and simulations techniques to prototype and test emergent waveforms*Information Warfare (IW) / Information Operations (IO) Electronic Attack (EA) capability development (details held at a higher classification level)*Waveform Weapon Development*Integrate MCS-21 Planning Optimization and Tasking Services 3.x with CLASSIC REACH*Upgrade current Signal Data File 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 a higher classification level)*Engineering, equipment integration, mission planning analysis, logistics, accreditation, and training for TRTD*Acquisition of new SIGINT technologies and research*Systems administration and Information Assurance & Accreditation*Research signal analysis lab (RSAL) upgrades*Hexadecimal code analysis and reverse engineering project*Secure DevOps prototype capability proof of concept*NPS research efforts to support operation requirements (details held at a higher classification level)*DevOps environment tech refresh and expansion*Project detail held at a high level*Ship integration to support operational implementation and operational evaluation of a "speed to fleet" Computer Network Operation and Electronic Warfare projects <ul style="list-style-type: none">*Management and engineering services for mission essential systems engineering and security tasks in support of operational shipboard testing*Further develop Electronic Warfare to meet emergent technical threats*Enhance cyber research and Radio Frequency (RF) development/deployment						

UNCLASSIFIED

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<div>*Enhance validation of Signal Descriptor (SDF) file collection and results in complete ship self-defense warning indications and signal collections for the war-fighter</div> <div>*Scalable secure DevOps capability design and implementation</div> <div>*Mission oriented software research and development</div> <div>*Maritime commercial architecture research</div> <div>*Test centric DevOps environment support</div> <div>*Expeditionary Cyber</div> <div>*Maritime navigation analysis</div> <div>*Position Navigation & Timing Research</div> <div>FY 2019 OCO Plans:</div> <div>N/A</div> <div>FY 2018 to FY 2019 Increase/Decrease Statement:</div> <div>Increase between FY18 and FY19 is due to antenna refurbishment in Maryland and at an OCONUS site. Site is classified. The FY 2019 funding request was reduced by \$1.486 million to account for the availability of prior year execution balances.</div>						
<div>Title: Mocking Jay</div> <div>Articles:</div> <div>Description: FY18 funding for MOCKING JAY realigning from project 2263 Information Warfare Systems to project 3426 Maritime Cyber.</div> <div>FY 2018 Plans:</div> <div>N/A</div> <div>FY 2019 Base Plans:</div> <div>N/A</div> <div>FY 2019 OCO Plans:</div> <div>N/A</div> <div>FY 2018 to FY 2019 Increase/Decrease Statement:</div> <div>Funding was moved in FY17 to project 3426 Maritime Cyber</div>		24.738 -	0.000 -	0.000 -	0.000 -	0.000 -
Accomplishments/Planned Programs Subtotals		79.410	32.740	47.049	0.000	47.049

UNCLASSIFIED

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C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
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: PB 2019 Navy												Date: February 2018			
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>				
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	11.810	23.464	Oct 2016	5.697	Oct 2017	13.503	Oct 2018	-		13.503	Continuing	Continuing	Continuing
System Engineering	SS/CPFF	Applied Research Laboratory : University Park, PA	6.885	7.932	Dec 2016	7.057	Oct 2017	6.113	Oct 2018	-		6.113	0.000	27.987	-
Systems Engineering	WR	NRL : Washington, DC	6.704	9.486	Oct 2016	3.725	Oct 2017	3.562	Oct 2018	-		3.562	0.000	23.477	-
Ancillary Hardware Development	Various	Classified : Classified	0.500	5.000	Nov 2016	2.367	Oct 2017	4.346	Oct 2018	-		4.346	0.000	12.213	-
Training Development (Classified)	Reqn	Classified : Classified	0.159	0.009	Oct 2016	0.950	Oct 2017	2.849	Oct 2018	-		2.849	0.000	3.967	-
Subtotal			26.058	45.891		19.796		30.373		-		30.373	Continuing	Continuing	N/A
Remarks															
Training Development: Contract Method is Goverment Purchase Card (GPC).															
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	0.604	0.570	Dec 2016	0.575	Oct 2017	2.400	Oct 2018	-		2.400	0.000	4.149	-
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		0.268	Oct 2018	-		0.268	0.000	0.268	-
Development Support	WR	NRL-1 : Washington, DC	2.420	4.388	Oct 2016	3.720	Oct 2017	3.270	Oct 2018	-		3.270	0.000	13.798	-
Development Support	Various	Classified-1 : Classified	0.750	13.590	Oct 2016	5.075	Oct 2017	0.594	Oct 2018	-		0.594	0.000	20.009	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy **Date:** February 2018

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>
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Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Studies & Analysis	WR	NRL-2 : Washington, DC	0.413	0.000		0.000		0.000		-		0.000	0.000	0.413	-
Software Development	SS/CPFF	ARL : University Park, PA	0.000	0.000		0.000		1.672	Oct 2018	-		1.672	0.000	1.672	-
Software Development	Various	Classified-2 : Classified	2.420	4.100	Jan 2017	0.000		0.686	Oct 2018	-		0.686	0.000	7.206	-
NSMA	Various	Classified : Classified	0.750	0.000		0.000		1.380	Oct 2018	-		1.380	0.000	2.130	-
Integrated Logistics Support (ILS)	Reqn	NAVICP : Philadelphia, PA	0.120	0.075	Dec 2016	0.075	Oct 2017	0.129	Oct 2018	-		0.129	0.000	0.399	-
Technical Data (Software Programs & Ref Materials)	Reqn	NPWC : Chesapeake, VA	0.065	0.040	Nov 2016	0.050	Nov 2017	0.748	Nov 2018	-		0.748	0.000	0.903	-
Engineering Support	Various	Classified : Classified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Studies & Analysis	MIPR	Classified : Classified	2.622	0.000		0.000		0.000		-		0.000	0.000	2.622	-
Comm'l Drivers Licenses (CDL)	Reqn	Classified : Classified	0.050	0.000	Jan 2017	0.045	Jan 2018	0.082	Oct 2018	-		0.082	0.000	0.177	-
Subtotal			10.214	22.763		9.540		11.229		-		11.229	0.000	53.746	N/A

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 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	0.586	2.870	Dec 2016	0.000	Oct 2017	0.000	Oct 2018	-		0.000	0.000	3.456	-
Mod & Sim	Various	Contract : Classified	0.000	0.000		1.069	Oct 2017	1.569	Oct 2018	-		1.569	0.000	2.638	-
Operational Test & Evaluation	Various	Not Specified : Not Specified	0.000	0.000		0.355	Oct 2017	1.052	Oct 2018	-		1.052	0.000	1.407	-
Subtotal			0.586	2.870		1.424		2.621		-		2.621	0.000	7.501	N/A

UNCLASSIFIED

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Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	1.330	0.950	Dec 2016	1.980	Oct 2017	2.826	Oct 2018	-		2.826	0.000	7.086	-
Engineering & Develoment Services	Various	Classified-4 : Classified	0.000	3.256	Dec 2016	0.000		0.000		-		0.000	0.000	3.256	-
Program Management Services	Various	Classified : Classified	3.329	2.164	Dec 2016	0.000		0.000		-		0.000	0.000	5.493	-
Contractor Engineering Services	Various	Classified : Classified	1.320	0.770	Nov 2016	0.000		0.000		-		0.000	0.000	2.090	-
Program Analysis Services (Classified)	Various	Classified : Classified	3.566	0.746	Dec 2016	0.000		0.000		-		0.000	0.000	4.312	-
Subtotal			9.545	7.886		1.980		2.826		-		2.826	0.000	22.237	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			46.403	79.410		32.740		47.049		-		47.049	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy			Date: February 2018		
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>

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
Information Warfare System																												
Acquisition Milestones: Milestone B																												
Acquisition Milestones: IOC - Initial Operational Capability																												
Acquisition Milestones: FOC - Full Operational Capability																												
Systems Engineering: CDD/RFP APPROVAL (Capability Development Document / Request for Proposal)																												
Systems Engineering: SRR - SRR - System Requirements Review																												
Systems Engineering: PDR - Preliminary Design Review																												
Systems Engineering: CDR - Critical Design Review																												
Systems Engineering: ATO - Authorization to Operate																												
Development Work: Waveforms: 1- Waveforms																												
Development Work: Waveforms: 2- Waveforms																												
Development Work: Waveforms: 3 - Waveforms - Target Research & Technical Development (TRTD)																												
Development Work: Waveforms: 4- Waveforms - Classified																												
Development Work: Waveforms: 5 - Waveforms - Classified																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy																Date: February 2018																					
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>																			
										FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
										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
Development Work: Waveforms: 6 - Waveforms - Classified																																					
Development Work: Waveforms: 7 - Waveforms - Classified																																					
Development Work: Waveforms: 8 - Waveforms - Classified																																					
Development Work: Waveforms: 9 - Waveforms - Classified																																					
Development Work: Waveforms: 9 - Unique Access																																					
TESTING: Prototypes: 5 - Prototypes - Classified																																					
TESTING: Prototypes: 6 - Prototypes - Classified																																					
TESTING: Prototypes: 7 - Prototypes - Classified																																					
TESTING: Prototypes: 8 - Prototypes - Classified																																					
TESTING: Prototypes: 5 - MCS-21 Integration - Classified																																					
TESTING: Prototypes: 6 - MCS-21 Integration																																					
TESTING: Prototypes: 7 - MCS-21 Integration																																					
TESTING: Prototypes: 8 - MCS-21 Integration																																					
DELIVERIES: Information Operations Capabilities (IOC): Information Operations Capabilities (IOC) Modeling & Simulation Lab																																					
DELIVERIES: Information Operations Capabilities (IOC): 1 - MCS-21 IOC - Spiral Enhancements																																					

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy

Date: February 2018

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)

PE 0204575N / *Elect Warfare Readiness Supt*

Project (Number/Name)

2263 / *Information Warfare System*

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
DELIVERIES: Information Operations Capabilities (IOC): 2 - MCS-21 IOC - Classified				■																								
DELIVERIES: Information Operations Capabilities (IOC): 3 - MCS-21 IOC - Classified								■																				
DELIVERIES: Information Operations Capabilities (IOC): 4 - MCS-21 IOC - Classified												■																
DELIVERIES: Information Operations Capabilities (IOC): 5 - MCS-21 IOC - Classified															■													
DELIVERIES: Information Operations Capabilities (IOC): 6 - MCS-21 IOC - Classified																			■									
DELIVERIES: Information Operations Capabilities (IOC): 7 - MCS-21 IOC - Classified																												
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 1-CNO Capabilities - Spiral Enhancements				■																								
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 2-CNO Capabilities - Spiral Enhancements / Full Operational Capability (FOC)				■																								
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 3 -CNO Capabilities - Classified				■																								

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy																								Date: February 2018													
Appropriation/Budget Activity 1319 / 7										R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt										Project (Number/Name) 2263 / Information Warfare System																	
										FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 4 - CNO Capabilities - Classified										<div></div>																											
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 5 - CNO Capabilities										<div></div>																											
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 6 - CNO Capabilities										<div></div>																											
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 7- CNO Capabilities										<div></div>																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
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>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Information Warfare System</i>				
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	2017	4	2017
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	2017	4	2017
Development Work: Waveforms: 2-Waveforms	4	2018	4	2018
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	2023
Development Work: Waveforms: 9 - Unique Access	4	2022	4	2023
TESTING: Prototypes: 5 - Prototypes - Classified	4	2019	4	2019
TESTING: Prototypes: 6 - Prototypes - Classified	4	2020	4	2020

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018		
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: 7 - Prototypes - Classified		4	2021	4	2021
TESTING: Prototypes: 8 - Prototypes - Classified		4	2021	4	2021
TESTING: Prototypes: 5 - MCS-21 Integration - Classified		2	2019	3	2019
TESTING: Prototypes: 6 - MCS-21 Integration		2	2020	3	2020
TESTING: Prototypes: 7 - MCS-21 Integration		4	2021	4	2021
TESTING: Prototypes: 8 - MCS-21 Integration		4	2022	4	2023
DELIVERIES: Information Operations Capabilities (IOC): Information Operations Capabilities (IOC) Modeling & Simulation Lab		4	2017	4	2017
DELIVERIES: Information Operations Capabilities (IOC): 1 - MCS-21 IOC - Spiral Enhancements		4	2017	4	2017
DELIVERIES: Information Operations Capabilities (IOC): 2 - MCS-21 IOC - Classified		4	2017	4	2017
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	2023
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 1-CNO Capabilities - Spiral Enhancements		4	2017	4	2017
DELIVERIES: Cyber Network Operations (CNO) Capabilities: 2-CNO Capabilities - Spiral Enhancements / Full Operational Capability (FOC)		4	2017	4	2017
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
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	2023

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3426: <i>Maritime Cyber</i>	0.000	0.000	18.300	19.840	-	19.840	19.777	20.186	20.607	21.029	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 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 Forces. Details held at a higher classification.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Mocking Jay Articles:								0.000	18.300	19.840	0.000	19.840
								-	-	-	-	-
Description: 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 teams. Enables development of new operating systems to ensure access and cyber weapons delivery. Provides Navy contribution to the United States Cyber Command (USCYBERCOM) planned Unified Platform and Cyber Mission Force (details held at a higher classification level). FY 2018 Plans: *Develop intelligence analysis to determine specific technical vulnerabilities for Computer Network Operations *Fund specialized information technology and exploitation capabilities to create a premier Navy Cyberspace development capability *Fund the Cyber Infrastructure to support technical Research & Development of the Navy portion of the USCYBERCOM planned Unified Platform (details held at a higher classification level) FY 2019 Base Plans: *Maritime cyber effects development requires a state of the art facility, equipped with a reconfigurable space, a hardware lab, and software development capacity at multiple classification levels. Industry standard practices for software development, risk assessment, and collateral impact require a development network at each classification level, a separate test network with the ability to generate a representative environment, and the ability to conduct testing with hardware in the loop. Funding will provide the ability to deliver cyber capability to												

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018			
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>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<p>maritime forces in support of COCOM requirements. Extension of a Title 10 network will allow for potential cyber reconnaissance and surveillance, and provide the Navy a basic capability against which to maintain readiness for future cyber warfare. (Details available at a higher classification.)</p> <p>*Further fund specialized information technology and exploitation capabilities in order to create a premier Navy Cyberspace development capability</p> <p>*Further fund the Cyber Infrastructure to support technical Research & Development of the Navy portion of the USCYBERCOM planned Unified Platform (details held at a higher classification level)</p> <p>*Efforts will focus on delivery and sustainment of a non-kinetic effect that can potentially hold a target at risk during all phase of operations. (Details available at a higher classification.)</p> <p>FY 2019 OCO Plans: N/A</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: The increase from FY18 to FY19 is to support Phase 2 of the Navy's innovative intelligence activity to develop analytical and engineering assessments, an industrial Laboratory facility which will provide training and certification of the Navy's contribution to the USCYBERCOM Cyber Mission Force, and development of new Cyber capabilities and accesses to meet COCOM/USCYBERCOM requirements.</p>						
Accomplishments/Planned Programs Subtotals		0.000	18.300	19.840	0.000	19.840
C. Other Program Funding Summary (\$ in Millions) N/A						
Remarks						
D. Acquisition Strategy 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.						
E. Performance Metrics 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						

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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>
<p>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.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
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 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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		3.300	Nov 2017	3.680	Nov 2018	-		3.680	Continuing	Continuing	Continuing
System Engineering	SS/CPFF	Applied Research Laboratory : University Park, PA	0.000	0.000		5.000	Dec 2017	5.132	Dec 2018	-		5.132	0.000	10.132	-
System Engineering	WR	Naval Research Laboratory : Washington, DC	0.000	0.000		5.000	Oct 2017	5.452	Oct 2018	-		5.452	0.000	10.452	-
Subtotal			0.000	0.000		13.300		14.264		-		14.264	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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		2.000	Nov 2017	2.230	Nov 2018	-		2.230	0.000	4.230	-
Development Support	Various	Classified : Classified	0.000	0.000		2.000	Nov 2017	2.230	Nov 2018	-		2.230	0.000	4.230	-
Subtotal			0.000	0.000		4.000		4.460		-		4.460	0.000	8.460	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
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>					
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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		0.500	Dec 2017	0.558	Dec 2018	-		0.558	0.000	1.058	-
Program Management Services	Various	Classified : Classified	0.000	0.000		0.500	Dec 2017	0.558	Dec 2018	-		0.558	0.000	1.058	-
Subtotal			0.000	0.000		1.000		1.116		-		1.116	0.000	2.116	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		18.300		19.840		-		19.840	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy

Date: February 2018

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)

PE 0204575N / *Elect Warfare Readiness Supt*

Project (Number/Name)

3426 / *Maritime Cyber*

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
Maritime Cyber																												
Unique Access (UA): 4 - Unique Access																												
Unique Access (UA): 5 - Unique Access																												
Unique Access (UA): 6 - Unique Access																												
Unique Access (UA): 7 - Unique Access																												
Unique Access (UA): 8 - Unique Access																												
Testing: Prototype: 4 - Prototype - Classified																												
Testing: Prototype: 5 - Prototype - Classified																												
Testing: Prototype: 6 - Prototype - Classified																												
Testing: Prototype: 7 - Prototype - Classified																												
Testing: Prototype: 8 - Prototype - Classified																												
Deliveries: Maritime Cyber: 4 - MJ																												
Deliveries: Maritime Cyber: 5 - MJ																												
Deliveries: Maritime Cyber: 6 - MJ																												
Deliveries: Maritime Cyber: 7 - MJ																												
Deliveries: Maritime Cyber: 8-MJ																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
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>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Maritime Cyber</i>				
Unique Access (UA): 4 - Unique Access	2	2018	2	2018
Unique Access (UA): 5 - Unique Access	2	2019	2	2019
Unique Access (UA): 6 - Unique Access	2	2020	2	2020
Unique Access (UA): 7 - Unique Access	2	2021	2	2021
Unique Access (UA): 8 - Unique Access	4	2023	4	2023
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
Deliveries: Maritime Cyber: 8-MJ	3	2023	3	2023