Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy **Date:** May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational

PE 0206625M I USMC Intelligence/Electronics Warfare Sys

R-1 Line #223

Systems Development

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	70.795	13.373	24.187	30.886	-	30.886	33.131	29.504	32.250	26.445	Continuing	Continuing
2272: Intel Command and Control (C2) Sys	70.795	13.373	24.187	30.886	-	30.886	33.131	29.504	32.250	26.445	Continuing	Continuing

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

This Program Element (PE) for Intelligence Command and Control (C2) includes Military Intelligence Program (MIP) funds for Marine Corps Intelligence capabilities necessary to support the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence. It ensures that all-source tactical intelligence is tailored to meet specific mission requirements. The systems collect and convert raw intelligence data on the battlefield into processed information and deliver the processed products to the Intelligence Analysis Systems (IAS) for analysis and dissemination.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	12.671	17.171	19.548	-	19.548
Current President's Budget	13.373	24.187	30.886	-	30.886
Total Adjustments	0.702	7.016	11.338	-	11.338
Congressional General Reductions	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	0.702	0.000			
SBIR/STTR Transfer	-	-			
Program Adjustments	0.000	7.016	10.973	-	10.973
<ul> <li>Rate/Misc Adjustments</li> </ul>	0.000	0.000	0.365	-	0.365

## **Change Summary Explanation**

Increase \$11.3M in FY18 aligns funding profiles to the acquisition phase for the following programs: Communication Emitter Sensing and Attacking System (CESAS), Counter Intel Human Intel Equip (CIHEP). Ground Based Operational Surveillance System (GBOSS), MAGTF Secondary Imagery Dissemination System (MSIDS), Tactical Signal Intelligence (SIGINT) Collection System (TSCS), Intelligence Analysis System (IAS), Intelligence Broadcast Receiver (IBR), SCI Communications (SCI COMMS) and Tactical Exploitation of National Capabilities (TENCAP).

Increase \$6.7M between FY17 and FY18 provides funding for the following major Intelligence Command and Control efforts: CESAS development of hardware/ software capability enhancements including Silk Thread; GBOSS sensor network development and testing; MSIDS data controller test and evaluation; TRSS test and evaluation of Signature Data Recorder, Hand Held Programmable Monitor and Common Sensor Radio; IAS integration, testing and evaluation of Distributed

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O.	HOLAGOII ILD							
Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy		Date: May 2017						
Appropriation/Budget Activity  1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development  Common Ground/Surface System (DCGS) Integrated Backbone into the IAS Family of Systems; IBR system integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability; and the IAS Family of Systems integration and server producer capability in the IAS Family of Systems in the IAS Family of Syst								
Common Ground/Surface System (DCGS) Integrated Backbone into the TENCAP Rapid Reliable Targeting (RRT) capability and transition sup		erver producer capability; and						

PE 0206625M: USMC Intelligence/Electronics Warfare Sy... Navy

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 N	lavy							Date: May	2017	
Appropriation/Budget Activity 1319 / 7					,					Project (Number/Name) 272 I Intel Command and Control (C2)		
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
2272: Intel Command and Control (C2) Sys	70.795	13.373	24.187	30.886	-	30.886	33.131	29.504	32.250	26.445	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

Intelligence Command and Control (C2) includes Military Intelligence Program (MIP) funds for Marine Corps Intelligence capabilities necessary to support the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence through all phases of operation. It ensures that all-source tactical intelligence is tailored to meet specific mission requirements. The systems below collect and convert raw intelligence data on the battlefield into processed information and deliver the processed products to the Intelligence Analysis Systems (IAS) for analysis and dissemination.

PERSISTENT INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE (PISR) Ground Collection Systems: PISR is a comprehensive strategy that synchronizes organic and external ISR assets in support of MAGTF operations. This capability involves sensing the operational environment through a variety of systems, from satellites overhead to reconnaissance Marines on the ground. PISR incorporates terrestrial sensing capability from the following ground collection systems:

Communication Emitter Sensing and Attacking System (CESAS) is the sole USMC high power, man-packable, and ground mobile Electronic Attack (EA) asset. CESAS supports the Marine Air-Ground Task Force (MAGTF) commander in the execution of his EW operations and Information Operations, by detecting, denying, and disrupting hostile communication emitters across a broad range of communication frequencies. CESAS covers the High Frequency (HF), Very High Frequency (VHF), and Ultra High Frequency (UHF) frequency ranges against enemy emitters using modern modulation schemes. CESAS allows flexible employment to conduct EA while on the move or in a stationary position, thus optimizing the Commander's ability to employ this asset for the greatest success of the mission.

Counter Intelligence and Human Intelligence (CI/HUMINT) Equipment Program (CIHEP) provides each Marine Counterintelligence/Human Intelligence (CI/HUMINT) Company within the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISRE) with an integrated, standardized, and interoperable suite of information and communication systems. The CIHEP program encompasses this specialized equipment that is lightweight, modular, and tailorable, in deployable packages to conduct full spectrum, tactical CI and HUMINT activities, to include Technical Surveillance Countermeasures (TSCM) operations. TSCM operations use techniques to detect, neutralize, and exploit technical surveillance technologies and hazards that permit the unauthorized access to or removal of information. CI/ HUMINT elements are generally task-organized in support of a Marine Air-Ground Task Force or other supported commanders, providing them the capability to rapidly collect, process, and disseminate counterintelligence and human intelligence information in support of military planning and operations. CIHEP is comprised of ten modules of commercial and government off the-shelf equipment. Different components are selected for refresh each year in order to maintain current capabilities and ensure interoperability and standardization with related systems. This results in an equipment suite that enhances the operating force's CI/HUMINT capabilities, while maintaining interoperability within the USMC and joint CI/HUMINT communities. The modularity of the CIHEP program allows Marines to perform a variety of missions in support of commanders, while carrying only those items necessary to accomplish the mission. CIHEP provides state- of-the-art mission critical information protection capabilities, as well as the ability to detect, identify, and locate specific technical threats.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
1	R-1 Program Element (Number/Name) PE 0206625M I USMC Intelligence/ Electronics Warfare Sys	- , (	umber/Name) I Command and Control (C2) Sys

Ground-Based Operational Surveillance System (G-BOSS) is an expeditionary, ground-based, self-contained, multi-spectral sensor-oriented, persistent surveillance system used to observe, collect, detect, identify, classify, track, and report on contacts, objects of interest, and assessed threats twenty-four hours a day utilizing a fused video and sensor data display. System variants will allow mobility, transportability, scalability and modularity, and will be capable of independent employment or as part of a network. All G-BOSS variants may be integrated into mutually supporting, closed networks. The G-BOSS variants are: G-BOSS Light (GBL): A tripod-mounted variant that provides short-range surveillance support. It is employed when surveillance support is required, but location and operational requirements are impractical to employ either of the two other variants. G-BOSS Medium (GBM): A trailer-mounted variant that provides longer range surveillance and is transported using a light trailer and tactical vehicle while in support of mobile combat operations, convoy security, temporary security operations, etc. G-BOSS Heavy (GBH): The 80-foot tall tower configuration, Heavy variant provides surveillance support of a more permanent nature. It is employed when operations are static, displacements are few, and longer surveillance ranges are desired.

MAGTF Secondary Imagery Dissemination System (MSIDS) Family of Systems (FoS) provides organic tactical digital imagery collection, transmission and receiving capability to the MAGTF Commander. MSIDS is comprised of components necessary to enable Marines to capture, manipulate, annotate, transmit and receive images in Near Real Time (NRT), internally with subordinate commands that are widely separated throughout the areas of operation and externally with higher and adjacent commands. MSIDS capability resides with the MAGTF G/S-2 sections and Ground Reconnaissance Battalions, Light Armored Reconnaissance Battalions, Infantry Battalion Scout Sniper Platoons and Marine Corps Forces Special Operations Command. The MSIDS FoS extends the digital imaging capability to all echelons within the Marine Expeditionary Force (MEF), down to and including battalions and squadrons. Captured images are capable of being forwarded throughout the MAGTF through the use of Base Station Workstation/Communication Interface (BW/CI), Out Station Workstation/Communication Interface (OW/CI) or existing C4ISR architecture. Images can also be transmitted to the Tactical Exploitation Group (TEG) for more detailed processing and analysis. The Video Exploitation Workstation (VEW) is used to import, manipulate, annotate still and video imager, create intelligence products, lift still frames from video, view multi-format TV signals and provide a field briefing capability.

Tactical Remote Sensor Systems (TRSS) provides all weather direction, location determination, targeting, and tactical indications and warning of enemy activity in the Marine Air-Ground Task Force (MAGTF) Commander's Area of Interest. TRSS is an equipment suite consisting of three primary sub-systems: Unattended Ground Sensors (UGS); Relay Systems; and monitoring systems. The sensor systems include seismic/acoustic sensors, electro-magnetic sensors, and infrared (passive) sensors. The relay systems include SATCOM retransmission systems. The monitoring system includes the Sensor Monitoring imaging sensors group and Hand-Held Programmable Monitors (HHPM). The composition of the three sub-systems are comprised of several individual components. Upgrading individual components will occur on an as needed basis. TRSS 6.0 development improves the TRSS sensor management software in order to integrate TRSS sensor systems with theater-provided-equipment sensor systems and improve system interoperability.

Tactical Signal Intelligence (SIGINT) Collection System (TSCS) provides modular, lightweight and team/man transportable/portable systems and components which provide signal intercept, collection, Direction-Finding (DF), reporting and collection management capability to MAGTF Commander. It provides the MAGTF Commander with a modular and scalable carry on/carry off suite of equipment which exploits information from more technically advanced target sets. TSCS uses rapid technology insertion processes and procedures to incorporate advanced SIGINT technology to allow the MAGTF Commander to maintain technological parity with the adversary. The increase of \$2.829M from FY17 to FY18 reflects increased development, testing, and evaluation of advanced SIGINT cyber technology.

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PROCESSING, EXPLOITATION, ANALYSIS AND PRODUCTION: Processing, exploitation, analysis and production actions of the Intelligence process enables us to understand the all-source information/data revealed by PISR.

Intelligence Analysis System, Family of Systems (IAS FoS) provides timely planning and all source fusion, analysis, and dissemination of intelligence across the Intelligence Community of the Marine Air-Ground Task Force (MAGTF). IAS FoS is a scalable system that supports all missions, and provides a tactical intelligence capability tailored to meet specific mission requirements. Advanced analytics provides improved linking of structured and unstructured data sources, data and information discovery, and improved interoperability of data and exchange amongst the existing toolset applications. Funding allows the IAS FoS to stay up-to-date with current technology (COTS/GOTS) that allows an increase in response time of intelligence analysis process, better quality intelligence products, and timely dissemination for units in all deployed environments.

Technical Control Analysis Center (TCAC) Family of Systems (FoS) consists of the AN/UYQ-83 TCAC Remote Analysis Workstation (RAWS), AN/MYQ-9 TCAC Transportable Workstation, and Cross Domain Solution (CDS), and is the focal point of Radio Battalions (RADBN), Marine Corps Forces Special Operations Command (MARFORSOC), and Fixed Wing Marine Electronic Attack Squadron (VMAQ) Signals Intelligence (SIGINT) operations. TCAC automatically collects, stores, retrieves and plays back digital audio signals, and fuses and analyzes SIGINT data from tactical, theater and national collectors and databases for dissemination to tactical commanders. TCAC provides SIGINT analysis applications to deployable Marine Air-Ground Task Force (MAGTF) units capable of directing and managing the technical and operational functions of other RADBN SIGINT/Electronic Warfare (EW) assets. TCAC provides termination of national, theater and tactical data networks for data exchange with tactical SIGINT/EW assets, the Intelligence Analysis System (IAS) and national databases. TCAC also enables the transfer of USMC tactical SIGINT collection and analytical data into the Real-Time Regional Gateway (RT-RG) and into the Distributed Common Ground System - Marine Corps (DCGS-MC). The system provides ground processing of Electronic Warfare (EW) information, including Electronic Warfare Support (EWS) and Electronic Attack (EA) data collected by the RADBN and WMAQ-EA-6B aircraft. The system is capable of correlating, fusing, and evaluating radar emitter identification and location data from the EA-6B with other National and theater sources.

INTELLIGENCE DISSEMINATION AND UTILIZATION (IDU): The IDU capability set performs the dissemination and integration functions of the Intelligence process. Dissemination connects the Intelligence product to the Commander who "operationalizes" these products through informed decisions.

The Intelligence Broadcast Receiver (IBR) acquisition program is a family of terminals that conform to the Department of Defense (DoD) Integrated Broadcast Service (IBS) objectives of interoperability and commonality to receive and process near-real time multi-intelligence data. The IBR family of terminals provide Marine Air-Ground Task Force (MAGTF) Commanders with the only direct access to IBS data via Ultra High Frequency (UHF) Satellite Communications (SATCOM) broadcast channels. The IBR program is an evolving, multi-Service architecture designed to keep pace with Commanders' targeting and information requirements and conforms to the Department of Defense Integrated Broadcast Service (IBS) objectives of interoperability and commonality, which is currently accomplished using the Universal Serial Bus (USB) Embedded National Tactical Receiver (ENTR). The ENTR Version 4 (V4) will supplement and replace the USB ENTR which is no longer in production. The ENTR V4 provides a 50% weight reduction and doubles the life expectancy of the battery compared to the USB ENTR. The IBR family of terminals receive Blue Force Tracker data, which is a key element in developing and maintaining situational awareness as it relates to the common threat/common operating picture. The IBR provides NRT strategic, theater, and tactical sensor-to-shooter connectivity as well as NRT Theater Missile Defense indications and warnings. Additionally, the IBR provides connectivity to IBS Common Interactive Broadcast and IBS Alternative Path.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
1319 / 7	,	- , (	umber/Name) I Command and Control (C2) Sys

Intelligence Equipment Readiness (IER) project provides a responsive capability to alleviate Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISRE) systems shortfalls as a result of rapidly evolving missions and threats associated with overseas contingency operations (OCO) and expeditionary military, humanitarian assistance, and disaster relief operations. IER's primary effort is the horizontal integration of Marine Corps intelligence systems to achieve interoperability and integration into the Distributed Common Ground/Surface System-MC (DCGS-MC) framework.

Sensitive Compartmented Information Communications (SCI COMMS) - is a Super-High Frequency (SHF) multi-band satellite communications terminal, available in a transit case configuration that provides dedicated tactical communications capability at the Top Secret/Sensitive Compartmented Information (TS/SCI) and Secret Collateral levels to USMC intelligence units. TROJAN SPIRIT terminals provide connectivity into Joint Worldwide Intelligence Communications System (JWICS), National Security Agency Network (NSANET) and Secret Internet Protocol Router Network (SIPRNET) via the TROJAN Network Control Center. Funding supports research, development and testing of incremental product improvements, product interoperability and accreditation for Top Secret/Sensitive Compartmented Information (TS/SCI) connectivity.

Tactical Exploitation of National Capabilities (TENCAP) exploits current national reconnaissance systems and programs by examining both technical and operational capabilities, implementing training, and sponsoring concept demonstrations to directly support Marine Corps operating forces. The goal is to pursue technologies which exploit data from national systems to enhance intelligence support to the Marine Air-Ground Task Force (MAGTF) and/or the supported Joint Task Force commander.

Joint Worldwide Intelligence Communications System (JWICS) is the Top Secret Sensitive Compartmented Information (TS/SCI) portion of the Defense Information System Network. It incorporates advanced networking technologies that permit point-to-point or multi-point information exchange involving voice, text, graphics, data and video teleconferencing within the Department of Defense (DoD) Intelligence Community. JWICS provides Marine Forces with special intelligence that significantly enhances the detail and quality of intelligence support that intelligence organizations provide to operating forces.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: *Communication Emitter Sensing and Attacking System (CESAS): Product Development  Articles:	0.475	0.484	3.294	0.000	3.294
<b>Description:</b> Communication Emitter Sensing and Attacking System (CESAS): Increase of \$2.818M from FY17 to FY18 will initiate planning to transition Silk Thread advanced digital payload/electronic warfare technology and provide program support for required hardware/software modifications to CESAS II/Radio Reconnaissance Equipment Man Packable Electronic Attack System (RREMPEAS) and hardware modifications to HMMWV PIK to enhance capability via Engineering Change Proposals (ECPs).					
FY 2016 Accomplishments: - Initiated development of required modifications for CESAS II.					
FY 2017 Plans:					

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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/ PE 0206625M / USMC Intelligend Electronics Warfare Sys			umber/Nan I Command		ol (C2) Sys
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in	n Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<ul> <li>Initiate development of Light Armored Vehicle Electronic Warfare (LAV-EW) F Engineering Change Proposals (ECPs).</li> </ul>	Platform Integration Kit (PIK) and					
FY 2018 Base Plans: -Initiate planning to transition Silk Thread advanced digital payload/electronic wrequired hardware/software modifications to CESAS II/RREMPEAS and hardware enhance capability via ECPs. Initiate hardware/software capability enhancer	are modifications to HMMWV PIK					
<b>FY 2018 OCO Plans:</b> N/A						
Title: *Communication Emitter Sensing and Attacking System (CESAS): Supp	ort <i>Articles:</i>	0.030	0.017	0.025	0.000	0.025
FY 2016 Accomplishments: Continued to provided program support for required modifications to CESAS II.						
FY 2017 Plans: Continue to provide program support for required modifications to LAV-EW PIK	<u>.</u>					
FY 2018 Base Plans: Continue to provide program support for required modifications to CESAS II/RF	REMPEAS/HMMWV PIK.					
<b>FY 2018 OCO Plans:</b> N/A						
Title: *Counterintel and Human Intel Equip (CIHEP): Test and Evaluation	Articles:	0.490	0.692	0.325	0.000	0.325
<b>Description:</b> Counterintel and Human Intel Equip (CIHEP): Decrease of \$0.36 completion of sensor software consolidation effort.	7M from FY17 to FY18 reflects					
FY 2016 Accomplishments:  - Continued to provided engineering, integration and technical support required software refresh.						
<ul> <li>Initiated and provided interoperability between refreshed CIHEP Family of Sys Data Processing Module, Advanced Imagery Module, and Technical Surveillan</li> </ul>						
FY 2017 Plans:						

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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/ PE 0206625M / USMC Intelligenc Electronics Warfare Sys			umber/Nan I Command		ol (C2) Sys
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<ul> <li>Continue interoperability efforts between CIHEP Family of Systems componin compatable technology baseline to reduce future costs.</li> <li>Continue to provide engineering, integration and technical support required upgrades and CIHEP and TRSS sensor software consolidation.</li> </ul>						
FY 2018 Base Plans: - Continue to provide engineering, integration and technical support required to fithe TSCM (Tactical Surveillance Counter Measures) equipment and CIHEF						
FY 2018 OCO Plans: N/A						
Title: *Intelligence Analysis System (IAS): Product Development		1.765	2.981	4.862	0.000	4.86
	Articles:	-	-	-	-	-
<b>Description:</b> Intelligence Analysis System (IAS): Increase of \$2.576M from Fimplementation of Distributed Common Ground/Surface System Integrated Barramily of Systems (FoS), in order to ingest and publish Marine Corps Intelligence Community.	ackbone capability within the IAS					
FY 2016 Accomplishments: - Initiated integration, system testing, and evaluation of advanced analytic tec Analysis System (IAS) Family of Systems (FoS).	hnologies into the Intelligence					
<ul> <li>Initiated market research, evaluation and development of advanced analytic</li> <li>Initiated integration, system testing, and evaluation of Windows 10 Operating and new</li> <li>Intelligence Workstation hardware into the IAS FoS.</li> </ul>						
FY 2017 Plans: - Continue integration, system testing, and evaluation of advanced analytic te Analysis System (IAS) Family of Systems (FoS).	chnologies into the Intelligence					
- Continue integration, system testing, and evaluation of Windows 10 Operation enhancements, capability enhancement (such as the Universal Serial Bus En Receiver) and new Intelligence Workstation hardware into the IAS FoS.						

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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/ PE 0206625M / USMC Intelligenc Electronics Warfare Sys		• •	umber/Nam Command	er/Name) nmand and Control (C2) Sys		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	s in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
-Initiate integration, system testing, and evaluation of the Global Command $\&$ 6.0 into the IAS FoS.	Control System - Joint (GCCS-J)						
FY 2018 Base Plans:  - Continue integration, system testing, and evaluation of advanced analytic to Analysis  System (IAS) Family of Systems (FoS).  - Initiate integration, system testing, and evaluation of Intelligence Servers in Initiate integration, system testing, and evaluation of DCGS Integrated Back	to the IAS FoS.						
<b>FY 2018 OCO Plans:</b> N/A							
Title: Intelligence Analysis System (IAS): Test and Evaluation	Articles:	0.000	0.299	0.961 -	0.000	0.96	
<b>FY 2016 Accomplishments:</b> N/A							
FY 2017 Plans:  - Continue support for integration and testing of advanced analytic tools into - Continue support for integration and testing of Windows 10 Operating Systenew Intelligence Workstation hardware into the IAS FoS Initiate support for integration and testing of GCS-J 6.0 in the IAS FoS.							
FY 2018 Base Plans:  - Continue support for integration of advanced analytics tools into the IAS Fo  - Initiate support for integration and testing of Intelligence Servers into the IA  - Initiate integration, system testing, and evaluation of DCGS Integrated Back	S FoS.						
<b>FY 2018 OCO Plans:</b> N/A							
Title: *Intelligence Analysis System (IAS): Support	Articles:	0.569 -	0.933	0.966 -	0.000	0.960	
FY 2016 Accomplishments:							

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May	2017	
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B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<ul> <li>Continued program management support for integration of advantagement.</li> <li>Initiated program management support for integration and testing enhancements and new Intelligence Workstation hardware into the</li> </ul>	of Windows 10 Operating System, software					
FY 2017 Plans:  - Continue program management support for integration of advance baseline.  - Continue program management support for integration and testing enhancements and new Intelligence Workstation hardware into the linitiate program management support for integration and testing of the support for integration and test	g of Windows 10 Operating System, software a IAS FoS.					
FY 2018 Base Plans:  - Continue program management support for integration of advance baseline.  - Initiate program management support for integration and testing of a linitiate integration, system testing, and evaluation of DCGS Integration.	of Intelligence Servers into the IAS FoS.					
<b>FY 2018 OCO Plans:</b> N/A						
Title: *Intelligence Broadcast Receiver (IBR): Product Developmen	nt <i>Articles:</i>	0.100	0.111	0.474	0.000	0.47
<b>Description:</b> Intelligence Broadcast Receiver (IBR): Increase \$365 On-The-Move (NOTM) integration and IBS server producer capabilities.						
FY 2016 Accomplishments: - Continued required interoperability software testing support for Jo Tactical Receive Segment (TRS).	oint Integration Test Command certification for					
FY 2017 Plans: - Continuesrequired interoperability software testing support for Jo Tactical Receive Segment (TRS).	int Integration Test Command certification for					
FY 2018 Base Plans:						

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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/ PE 0206625M / USMC Intelligenc Electronics Warfare Sys	Project (Number/Name) 2272 I Intel Command and Control (C2) Sy				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quan	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
<ul> <li>Continue required interoperability software testing support for Joint Interactical Receive Segment (TRS).</li> <li>Initiate the Networking-On-The-Move (NOTM) integration and Integrate producer capability.</li> </ul>						
FY 2018 OCO Plans: N/A						
Title: *SCI COMMS: Product Development	Articles:	0.073	0.076	0.168 -	0.000	0.168
<b>Description:</b> Sensitive Compartmented Information Communications (SFY17 to FY18 supports test and evaluation activities associated with pro-	,					
FY 2016 Accomplishments: - Initiated maintenance of dedicated test and evaluation assets.						
FY 2017 Plans: - Continue maintenance of dedicated test and evaluation assets.						
FY 2018 Base Plans: - Initiate efforts to procure new test assets, such as controlled cryptograproduct improvements and ECPs.	phic items, to support security-based					
FY 2018 OCO Plans: N/A						
Title: *SCI COMMS: Support	Articles:	0.126 -	0.122	0.110 -	0.000	0.110
FY 2016 Accomplishments: - Initiated development of Engineering Change Proposal (ECP) to suppoproduct improvement	ort the network refresh security-based					
FY 2017 Plans:	rofrooh					
- Continue development of Engineering Change Proposals for network r	ellesii.					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		<b>Date</b> : May 2017				
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/I PE 0206625M / USMC Intelligence Electronics Warfare Sys	Project (Number/Name) 2272 I Intel Command and				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantition)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
- Continue development of ECPs for end-of-life/end-of-sale equipment and	modernization efforts.					
<b>FY 2018 OCO Plans:</b> N/A						
Title: *SCI COMMS: Test and Evaluation	Articles:	0.000	0.000	0.073	0.000	0.073
<b>FY 2016 Accomplishments:</b> N/A						
<b>FY 2017 Plans:</b> N/A						
FY 2018 Base Plans: - Initiate test and evaluation efforts which support engineering change propitem refresh.	osals (ECPs) such as cryptographic					
<b>FY 2018 OCO Plans:</b> N/A						
Title: *Tactical Exploitation of National Capabilities (TENCAP): Product De	velopment & Technical Assessments Articles:	4.520 -	4.746 -	6.448 -	0.000	6.448
<b>Description:</b> Tactical Exploitation of National Capabilities (TENCAP): Incresupports Rapid Reliable Targeting (RRT) capability and transition.	ease of \$1.702M from FY17 to FY18					
FY 2016 Accomplishments:  - Continued to conduct research and development, advanced technology dof emerging technologies into the Marine Corps Intelligence, Surveillance, a (MCISRE).  - Continued to support the congressionally mandated TENCAP office and a to include the coordination with national agencies, the intelligence communindustry, and academia, for exploration of collaborative Science and Technevolutionary intelligence capabilities to the operating forces.  - Continued to provide technical assessments and field utility evaluations for	and Reconnaissance Enterprise all associated ongoing activities, iity, research laboratories, private					

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PE 0206625M: USMC Intelligence/Electronics Warfare Sy... UNavy

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May	2017				
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number PE 0206625M / USMC Intelligen Electronics Warfare Sys			umber/Nan / Command		trol (C2) Sys	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantition)	es in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
<ul> <li>Continued to support operational planning and enhance operating force of and development of advanced technologies for the MCISRE architecture.</li> <li>Continued training and education efforts by providing the operating forces visualization, and improved mission planning capabilities.</li> </ul>						1000	
<ul> <li>Continue to conduct research and development, advanced technology de emerging technologies into the Marine Corps Intelligence, Surveillance, and (MCISRE).</li> <li>Continue to support the Congressionally mandated TENCAP office and all to include the coordination with national agencies, the intelligence communindustry, and academia, for exploration of collaborative Science and Technical evolutionary intelligence capabilities to the operating forces.</li> <li>Continue to provide technical assessments and field utility evaluations for emerging intelligence capabilities into the tactical decision making process.</li> <li>Continue to support operational planning and enhance operating force capand development of advanced technologies for the MCISRE architecture.</li> <li>Continue training and education efforts by providing the operating forces visualization, and improved mission planning capabilities.</li> <li>Continue development of advanced technologies for the MCISRE architecture development and transition into the tactical environment.</li> </ul>	d Reconnaissance Enterprise  Il associated ongoing activities, ity, research laboratories, private ology (S&T)/R&D efforts to bring the integration of current and pabilities through the identification with supported simulation,						
<ul> <li>FY 2018 Base Plans:</li> <li>Continue to conduct research and development, advanced technology de emerging technologies into the Marine Corps Intelligence, Surveillance, and (MCISRE).</li> <li>Continue to support the Congressionally mandated TENCAP office and all to include the coordination with national agencies, the intelligence communindustry, and academia, for exploration of collaborative Science and Techn evolutionary intelligence capabilities to the operating forces.</li> <li>Continue to provide technical assessments and field utility evaluations for emerging intelligence capabilities into the tactical decision making process.</li> <li>Continue to support operational planning and enhance operating force capand development of advanced technologies for the MCISRE architecture.</li> </ul>	d Reconnaissance Enterprise  Il associated ongoing activities, ity, research laboratories, private ology (S&T)/R&D efforts to bring the integration of current and						

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PE 0206625M: USMC Intelligence/Electronics Warfare Sy...

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				<b>Date:</b> May 2017			
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0206625M / USMC Intelligence/ Electronics Warfare Sys			ne) and Contro	ntrol (C2) Sys	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quar	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total		
<ul> <li>Continue training and education efforts by providing the operating force visualization, and improved mission planning capabilities.</li> <li>Initiate efforts to provide transition support to Rapid Reliable Targeting</li> <li>Initiate efforts for the development of Process, Exploitation, and Disse Command Level Intelligence Cell (CLIC)</li> </ul>	g (RRT).						
FY 2018 OCO Plans: N/A							
Title: *MAGTF Secondary Imagery Dissemination System (MSIDS): Te	est and Evaluation  Articles:	0.000	0.000	0.171 -	0.000	0.171	
<b>Description:</b> MAGTF Secondary Imagery Dissemination System (MSII to FY18 supports test and evaluation effort for Base Station and Outstathroughput.							
FY 2016 Accomplishments: -N/A							
<b>FY 2017 Plans:</b> -N/A							
FY 2018 Base Plans: -Initiate test and evaluation effort for Base Station and Outstation data compatibility with a new organic tactical radio waveform.	controllers to improve data throughout for						
<b>FY 2018 OCO Plans:</b> N/A							
Title: *Tactical Remote Sensor System (TRSS): Test and Evaluation	Articles:	0.000	0.000	0.802	0.000	0.802	
<b>FY 2016 Accomplishments:</b> N/A							
<b>FY 2017 Plans:</b> N/A							
FY 2018 Base Plans:							

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May	2017	
1319 <i>l</i> 7	R-1 Program Element (Number/l PE 0206625M / USMC Intelligence Electronics Warfare Sys		Project (Number/Name) 2272 I Intel Command and Control (			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
Will initiate engineering efforts to determine the acceptability of the Signature Da Programmable Monitor (HHPM) and Common Sensor Radio (CSR) to include ha						
FY 2018 OCO Plans: N/A						
Title: *Tactical Remote Sensor System (TRSS): Product Development		0.100	0.099	0.200	0.000	0.200
	Articles:	-	-	-	-	-
<b>Description:</b> Tactical Remote Sensor System (TRSS)Program: Increase of \$.90 test and evaluation of the Signature Data Recorder, Hand-Held Programmable Madio.						
FY 2016 Accomplishments: - Continued providing engineering and technical management support required for TRSS systems.	or developing critical upgrades					
FY 2017 Plans:  - Continue engineering and technical management support required for developing systems, such as software changes to properly receive, parse, and display mess improved radios as well as interface directly with these systems to program them.	ages from systems with					
FY 2018 Base Plans: - Continue development of software changes to properly receive, parse, and disp with improved radios as well as interface directly with these systems to program of hardware and software to replace obsolete Hand Held Programmable Monitor to configure and monitor the operation of the sensor network.	them. Will initiate development					
FY 2018 OCO Plans: N/A						
Title: *Tactical Signal Intelligence (SIGINT) Collection System (TSCS): Product I	Development Articles:	1.588	2.625	4.558 -	0.000	4.558 -
<b>Description:</b> Increase from FY17 to FY18 initiates development and integration integration, and software defined capability.	of Mod Case 2.0, sleeve design					
FY 2016 Accomplishments:						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		<b>Date</b> : May 2017				
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number) PE 0206625M / USMC Intelligence Electronics Warfare Sys			umber/Nan I Command		ol (C2) Sys
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
- Continued development for TSCS technology refresh and insertions as	well as potential engineering changes.					
FY 2017 Plans:  - Complete development for Digital Network Intelligence (DNI)/ Dual Rectesting and Operational Testing (DT/OT) in preparation for fielding.  - Initiate development and integration of Digital Network Intelligence (DN (DRR) software to include Legacy Signals of Interest (SOI), as well as fird development, and mods case/PIK development.	I)/ Dual Receiver Replacement					
FY 2018 Base Plans:  - Continue development and integration of Digital Network Intelligence (I(DRR)) software to include Legacy Signals of Interest (SOI), as well as fir development, and mods case/PIK development.  - Initiate development and integration of Mod Case 2.0, sleeve design in capability, integration and testing.	mware upgrades, hardware/software					
<b>FY 2018 OCO Plans:</b> N/A						
Title: *Tactical Signal Intelligence (SIGINT) Collection System (TSCS):	Test and Evaluation  Articles:	0.000	2.647	0.560	0.000	0.56
<b>FY 2016 Accomplishments:</b> N/A						
FY 2017 Plans:  - Continue test and evaluation efforts for ongoing TSCS technology refreengineering changes.  - Initiate test and evaluation of the DNI/DRR and legacy SOI, Software Dand integration for future capability insert.	·					
FY 2018 Base Plans: - Initiate Mod Case 2.0 testing and continue SDR development and integ	gration for future capability.					
<b>FY 2018 OCO Plans:</b> N/A						
Title: Ground-Based Operational Surveillance System: Test and Evaluat	tion	0.000	0.000	1.800	0.000	1.80

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PE 0206625M: USMC Intelligence/Electronics Warfare Sy...

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May	2017		
1319 / 7	R-1 Program Element (Number/Name) PE 0206625M I USMC Intelligence/ Electronics Warfare Sys			Project (Number/Name) 2272 I Intel Command and Control (C			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in E	Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
	Articles:	-	-	-	-	-	
<b>Description:</b> Ground-Based Operational Surveillance System: Increase of \$1.800 supports sensor network development and testing in support of technical refresh							
FY 2016 Accomplishments: N/A							
FY 2017 Plans: N/A							
FY 2018 Base Plans: - Initiate test and evaluation efforts to develop ECPs.							
FY 2018 OCO Plans: N/A							
Title: *Tactical Signal Intelligence (SIGINT) Collection System (TSCS): Support	Articles:	0.024	0.057	0.040	0.000	0.04	
FY 2016 Accomplishments: - Continued to provide program support and management for TSCS technology repotential engineering changes.	efresh and insertions as well as						
FY 2017 Plans: - Continue to provide program support and management for ongoing development drawings, environmental testing for server sleeves.	tal testing, engineering						
FY 2018 Base Plans: - Continue to provide program support and management for ongoing development drawings, environmental testing for server sleeves.	tal testing, engineering						
FY 2018 OCO Plans: N/A							
Title: *Technical Control and Analysis Center (TCAC): Product Development	Articles:	1.894 -	3.019	3.394	0.000	3.39	
FY 2016 Accomplishments:							

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PE 0206625M: USMC Intelligence/Electronics Warfare Sy... Page 17 of 39 R-1 Line #223 Navy

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May	2017	
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/I PE 0206625M / USMC Intelligence Electronics Warfare Sys	Project (Number/Name) 2272 I Intel Command and Co			ol (C2) Sys	
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Continued integration, testing, and selection of next generation T such as the Remote Analysis Work Station (RAWS) and Cross Do						
FY 2017 Plans: - Continue integration and testing of next generation TCAC analyst Transportable Workstation (TWS), JICD 4.2 net centric analytic calinto the TCAC FoS.						
FY 2018 Base Plans: - Continue system development and system design for JICD 4.2 a - Initiate research and development in support of next hardware re (RAWS/TWS/CDS).						
FY 2018 OCO Plans: N/A						
Title: Joint Worldwide Intel Comms Sys (JWICS): Product Develo	pment  Articles:	0.000	2.800	0.000	0.000	0.00
<b>Description:</b> Joint Worldwide Intel Comms Sys (JWICS) program completion of development effort to engineer a solution to provide						
<b>FY 2016 Accomplishments:</b> N/A						
FY 2017 Plans: The SCI Enterprise Office (SEO) will conduct research, developmengineer a	, ,					
deployable voice, video, data, and circuit realignment solution that the tactical environment. The solution(s) developed will re-engineer the						
Palletized Terminal (HBSI-PT) communications path to reduce the latency for Communication (JWICS) network, by development of a tactical Pohouse						

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PE 0206625M: USMC Intelligence/Electronics Warfare Sy... Page 18 of 39 R-1 Line #223 Navy

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		<b>Date:</b> May 2017				
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/I PE 0206625M I USMC Intelligenc Electronics Warfare Sys			umber/Nan Command		ol (C2) Sys
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
enterprise services such as Active Directory (AD), Dynamic Host Control Proservices (DFS), data storage, and print services behind a tactical node. This effort will cloud services for continuity of tactical operations support. The solution(s) will produce useful and timely intelligence in a reliable, efficient manner.	also research the potential use of					
<b>FY 2018 Base Plans:</b> N/A						
FY 2018 OCO Plans: N/A						
Title: *Technical Control and Analysis Center (TCAC): Support	Audiala	1.078	0.835	0.298	0.000	0.29
FY 2016 Accomplishments: - Continued technical support for integration of next generation TCAC analys such as the RAWS and CDS into the TCAC FoS.	Articles: is tools and hardware components	-	-	-	-	-
FY 2017 Plans: - Continue technical support for integration of next generation TCAC analysis such as the TWS into the TCAC FoS.	tools and hardware components					
FY 2018 Base Plans: - Continue technical support of improvements to TCAC baseline Initiate technical support for next TCAC hardware refresh/TCAC FoS capab CDS).	ility enhancement (RAWS/TWS/					
FY 2018 OCO Plans:						
N/A						
Title: *Technical Control and Analysis Center (TCAC): Test and Evaluation	Articles:	0.541 -	1.644 -	1.357 -	0.000	1.35 -
FY 2016 Accomplishments:						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy								
Appropriation/Budget Activity 1319 / 7		PE 0206625M / USMC Intelligence/ 2272 / I			(Number/Name) Intel Command and Control (C2) Sy			
B. Accomplishments/Planned Programs (\$ in Millions, Article 6	Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total		
- Continued Conducted developmental testing on TCAC Sensitive integration testing on RAWS and CDS, conducted security and cer assessment evaluations on TWS hardware refresh.								
FY 2017 Plans: - Continue developmental tests, integration, and validation/verificat generation TCAC analysis tools and hardware components such a into the TCAC FoS.	<u> </u>							
FY 2018 Base Plans: - Continue integration and testing of JICD 4.2 and TWS software b - Initiate research and test design in support of next hardware refree (RAWS/TWS/CDS).								
FY 2018 OCO Plans:								

# C. Other Program Funding Summary (\$ in Millions)

PE 0206625M: USMC Intelligence/Electronics Warfare Sy...

N/A

		<del></del>	FY 2018	FY 2018	FY 2018					<b>Cost To</b>	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
• PMC/474703: <i>TCAC</i>	11.202	4.874	1.581	3.000	4.581	9.991	5.666	5.917	6.049	Continuing	Continuing
• PMC/474761: <i>IAS</i>	5.603	22.326	8.396	-	8.396	9.806	8.107	8.369	8.615	Continuing	Continuing
• PMC/700000: <i>IAS SPARES</i>	0.100	0.154	0.158	-	0.158	0.161	0.167	0.170	0.173	Continuing	Continuing
• PMC/474709: <i>CIHEP</i>	3.931	29.392	3.525	-	3.525	3.666	4.334	3.610	3.846	Continuing	Continuing
• PMC/474702: <i>TSCS</i>	8.608	13.484	9.496	-	9.496	12.580	6.343	6.750	11.934	Continuing	Continuing
• PMC/474701: CESAS	0.842	12.243	9.223	-	9.223	4.556	0.188	0.068	0.000	Continuing	Continuing
• PMC/474700: SCI COMMS	1.355	7.136	6.402	-	6.402	7.325	1.859	0.246	0.251	Continuing	Continuing
PMC/700003: TRSS SPARES	0.100	0.063	0.099	-	0.099	0.165	0.101	0.101	0.103	Continuing	Continuing
PMC/700005: MSIDS SPARES	0.100	0.099	0.099	-	0.099	0.099	0.101	0.103	0.105	Continuing	Continuing
• PMC/474752: <i>IBR</i>	0.053	1.420	6.697	-	6.697	6.704	1.512	1.495	1.510	Continuing	Continuing
• PMC/474713: TRSS	0.848	1.536	2.638	-	2.638	3.058	0.876	0.783	0.687	Continuing	Continuing
• PMC/474719: <i>MSIDS</i>	0.000	1.500	2.503	-	2.503	1.558	0.000	0.000	0.000	0.000	5.561
• PMC/700001: SCI COMMS	0.362	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.362

**Accomplishments/Planned Programs Subtotals** 

13.373

24.187

30.886

0.000

30.886

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 7	PE 0206625M I USMC Intelligence/	2272 I Intel Command and Control (C2) Sys
	Electronics Warfare Sys	
O Other Branch Frankling Organization (A in Millians)	•	

#### C. Other Program Funding Summary (\$ in Millions)

			<b>FY 2018</b>	<b>FY 2018</b>	<b>FY 2018</b>					Cost To	
Line Item	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
<ul> <li>PMC/4747XX: G-BOSS</li> </ul>	0.000	0.000	1.200	-	1.200	1.826	2.100	0.000	0.000	0.000	5.126
<ul> <li>PMC/643800: G-BOSS</li> </ul>	8.153	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.153
<ul><li>PMC/4747XY: JWICS</li></ul>	4.407	29.963	4.098	-	4.098	4.615	4.701	4.792	4.887	Continuing	Continuing

#### Remarks

#### D. Acquisition Strategy

- (U) SCI COMMS: SCI COMMS leverages SSC-LANT support for Engineering Change Proposal support and existing SSC-LANT contract for test asset procurement.
- (U) TCAC: The acquisition of components for the TCAC will maximize the use of existing equipment, NDI/COTS/GFE equipment/software.
- (U) TRSS: TRSS makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.
- (U) MSIDS: MSIDS makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.
- (U) IER: IER makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.
- (U) IAS: IAS makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.
- (U) CIHEP: CIHEP makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.
- (U) IBR: IBR software upgrades are developed at Naval laboratories and integrated into the system. IBR makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.
- (U) TENCAP: All work will be led in-house and necessary contractor support will be acquired using existing contracts. Research, test and integrate new technology and conduct advanced technology demonstrations to identify the most appropriate programs which are mature for integration of emerging technologies into the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise (MCISR-E).
- (U) CESAS: CESAS II production will consist of COTS and NDI integration into an existing GOTS architecture. Production efforts will be conducted at Naval laboratories.
- (U) TSCS: TSCS makes maximum use of COTS, GOTS and NDI with Firm Fixed Price Production.

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 0206625M / USMC Intelligence/ Electronics Warfare Sys	Project (Number/Name) 2272 I Intel Command and Control (C2) Sys
(U) G-BOSS: Tech refresh for sustainability to ensure opera additional capability initiative.	ational readiness of the G-BOSS assets, assumes required eng	ineering and logistics refresh funded per
(U) JWICS: JWICS makes maximum use of COTS, GOTS a	and NDI with Firm Fixed Price Production.	
E. Performance Metrics N/A		

PE 0206625M: USMC Intelligence/Electronics Warfare Sy... Navy

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy **Date: May 2017** 

Project (Number/Name)

Appropriation/Budget Activity R-1 Program Element (Number/Name) PE 0206625M / USMC Intelligence/ 1319 / 7

2272 I Intel Command and Control (C2) Sys Electronics Warfare Svs

FY 2018 FY 2018 FY 2018 **Product Development (\$ in Millions)** FY 2016 FY 2017 Base oco Total Contract Target Method Performing Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location **Years** Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost Prior Years Cummulative Various : Various 29.929 0.000 0.000 0.000 0.000 0.000 29.929 Various Fundina SPAWAR: **CESAS** WR 0.475 Dec 2015 0.484 Dec 2016 2.300 3.294 Dec 2017 3.294 0.000 6.553 CHARLESTON, SC SPAWAR: IAS WR 1.201 Nov 2016 1.737 Nov 2017 0.000 1.725 Oct 2015 1.737 0.000 4.663 CHARLESTON, SC SPAWAR-A3: C/CPFF IAS 0.000 0.039 Apr 2016 1.780 Feb 2017 3.125 Feb 2018 3.125 0.000 4.944 CHARLESTON, SC DTIC-1: FT. **TENCAP** C/CPFF 7.709 3.838 Nov 2015 1.086 Oct 2016 0.000 0.000 0.000 12.633 **BELVOIR** SPAWAR: 0.423 Continuing Continuing Continuing **TENCAP** WR 1.110 0.672 Jan 2016 0.433 Oct 2016 0.423 Oct 2017 CHARLESTON, SC DTIC-2: FT. **TENCAP** C/CPFF 0.000 3.227 0.010 Jul 2016 Jan 2017 5.959 Oct 2017 5.959 0.000 9.196 **BELVOIR** SPAWAR · **TSCS** WR 3.354 1.588 Dec 2015 2.625 Dec 2016 4.558 Mar 2018 4.558 Continuing Continuing Continuing CHARLESTON, SC SPAWAR2: **TCAC** C/CPFF 1.344 0.228 Jan 2016 0.342 Jan 2017 0.228 Jan 2018 0.228 0.000 2.142 Charleston, SC SPAWAR8: San **TCAC** WR 7.260 1.666 2.677 3.166 Jan 2018 3.166 Continuing Continuing Continuing Jan 2016 Jan 2017 Diego, CA SPAWAR-A2: **TRSS** WR 0.095 0.100 Nov 2015 0.099 Nov 2016 0.200 Nov 2017 0.200 Continuing Continuing Continuing CHARLESTON, SC CECOM: SCI COMMS C/FFP 0.000 0.073 Mar 2016 0.076 Mar 2017 0.168 Mar 2018 0.168 Continuing Continuing Continuing ABERDEEN MD SPAWAR: SAN **TENCAP** WR 0.000 0.000 0.000 0.066 Nov 2017 0.066 0.000 0.066 DIEGO, CA VARIOUS: **IBR** 0.000 0.100 Feb 2016 Dec 2016 0.474 Dec 2017 0.474 0.685 Various 0.111 0.000 **VARIOUS** DTIC-2: FT. **JWICS** C/CPFF 0.000 0.000 2.800 May 2017 0.000 0.000 0.000 2.800 **BELVOIR** 23.398 Subtotal 53.101 10.514 16.941 23.398

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy **Date:** May 2017

Project (Number/Name) Appropriation/Budget Activity R-1 Program Element (Number/Name)

1319 / 7 PE 0206625M / USMC Intelligence/

Electronics Warfare Sys

2272 I Intel Command and Control (C2) Sys

Support (\$ in Millior	ıs)			FY 2	2016	FY 2	2017		2018 ise	FY 2		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	Total Cost	Target Value of Contract
Prior Years Cumulative Funding	Various	Not Specified : Not Specified	2.674	0.000		0.000		0.000		-		0.000	0.000	2.674	-
SCI COMMS	WR	SPAWAR : Charleston, SC	0.059	0.113	Feb 2016	0.122	Feb 2017	0.110	Feb 2018	-		0.110	Continuing	Continuing	Continuing
SCI COMMS	WR	SPAWAR-2 : Charleston, SC	0.000	0.013	Feb 2017	0.000		0.000		-		0.000	0.000	0.013	-
TSCS	Various	MCSC20 : QUANTICO, VA	0.101	0.024	Aug 2016	0.057	Aug 2017	0.040	Aug 2018	-		0.040	Continuing	Continuing	Continuing
TCAC	MIPR	DTIC : FT Belvoir, VA	0.611	1.072	Apr 2016	0.545	Apr 2017	0.000		-		0.000	0.000	2.228	-
TCAC	WR	SPAWAR-P : San Diego, CA	3.568	0.000		0.275	Apr 2017	0.283	Apr 2018	-		0.283	Continuing	Continuing	Continuing
TCAC	Various	MCSC26 : QUANTICO, VA	0.000	0.006	Sep 2016	0.015	Sep 2017	0.015	Sep 2018	-		0.015	0.000	0.036	-
IAS	C/CPFF	DTIC : Fort Belvoir, VA	1.178	0.570	Apr 2016	0.000		0.662	Apr 2018	-		0.662	0.000	2.410	-
IAS	C/FFP	CECOM : FT. BELVOIR, VA	0.000	0.000		0.933	Nov 2016	0.304	Oct 2017	-		0.304	0.000	1.237	-
CESAS	Various	MCSC9 : QUANTICO, VA	0.751	0.030	Sep 2016	0.017	Sep 2017	0.025	Sep 2018	-		0.025	Continuing	Continuing	Continuing
		Subtotal	8.942	1.828		1.964		1.439		-		1.439	-	-	-

Test and Evaluation	(\$ in Milli	ons)		FY 2	2016	FY :	2017		2018 ase		2018 CO	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	Total Cost	Target Value of Contract
Prior Years Cumulative Funding	Various	Various : Various	8.033	0.000		0.000		0.000		-		0.000	0.000	8.033	-
TSCS	WR	SPAWAR : CHARLESTON, SC	0.719	0.000		2.647	Dec 2016	0.560	Dec 2017	-		0.560	Continuing	Continuing	Continuing
TCAC	C/CPFF	SPAWAR8 : CHARLESTON, SC	0.000	0.541	Feb 2016	0.841	Feb 2017	0.841	Feb 2018	-		0.841	0.000	2.223	-

PE 0206625M: USMC Intelligence/Electronics Warfare Sy... Navy

**UNCLASSIFIED** 

Page 24 of 39 R-1 Line #223

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy **Date:** May 2017

R-1 Program Element (Number/Name) Project (Number/Name) Appropriation/Budget Activity 2272 I Intel Command and Control (C2) Sys 1319 / 7

PE 0206625M / USMC Intelligence/

Electronics Warfare Sys

FY 2018 FY 2018 FY 2018 Test and Evaluation (\$ in Millions) **FY 2016** FY 2017 Base oco Total Contract Target Method Performing Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location **Years** Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost SPAWAR9: SAN TCAC C/CPFF 0.000 0.000 0.803 Jan 2017 0.516 Jan 2018 0.516 0.000 1.319 DIEGO, CA SPAWAR-A1: **TRSS** WR 0.000 0.000 0.000 0.802 Dec 2017 0.802 0.000 0.802 CHARLESTON, SC DTIC: FT. IAS C/FFP 0.000 0.000 0.299 Apr 2017 0.500 Apr 2018 0.500 0.000 0.799 BELVOIR, VA MCIA: QUANTICO. SCI COMMS **TBD** 0.000 0.000 0.000 0.073 Mar 2018 0.073 Continuing Continuing Continuing VA **NSWC CRANE: G-BOSS** WR 0.000 0.000 0.000 1.800 Feb 2018 1.800 0.000 1.800 CRANE. IN SPAWAR-A4: CIHEP 0.000 0.490 Nov 2015 0.692 Nov 2016 0.325 Nov 2017 WR 0.325 0.000 1.507 CHARLESTON, SC SPAWAR: IAS WR 0.000 0.000 0.000 0.461 Nov 2017 0.461 0.000 0.461 CHARLESTON, SC SPAWAR: 0.171 Dec 2017 **MSIDS** WR 0.000 0.000 0.000 0.171 0.000 0.171 CHARLESTON, SC 8.752 1.031 5.282 6.049 6.049 Subtotal Target FY 2018 Prior FY 2018 FY 2018 Cost To Total Value of Years **FY 2016** FY 2017 Base oco Total Complete Cost Contract

24.187

Remarks

**Project Cost Totals** 

70.795

13.373

30.886

30.886

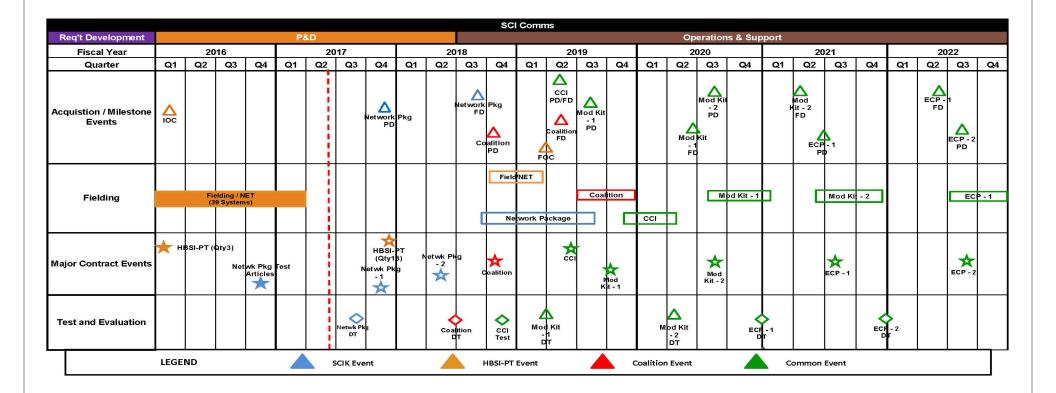
Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

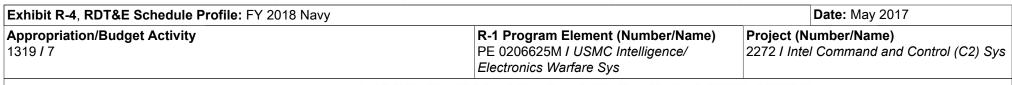
Appropriation/Budget Activity

1319 / 7

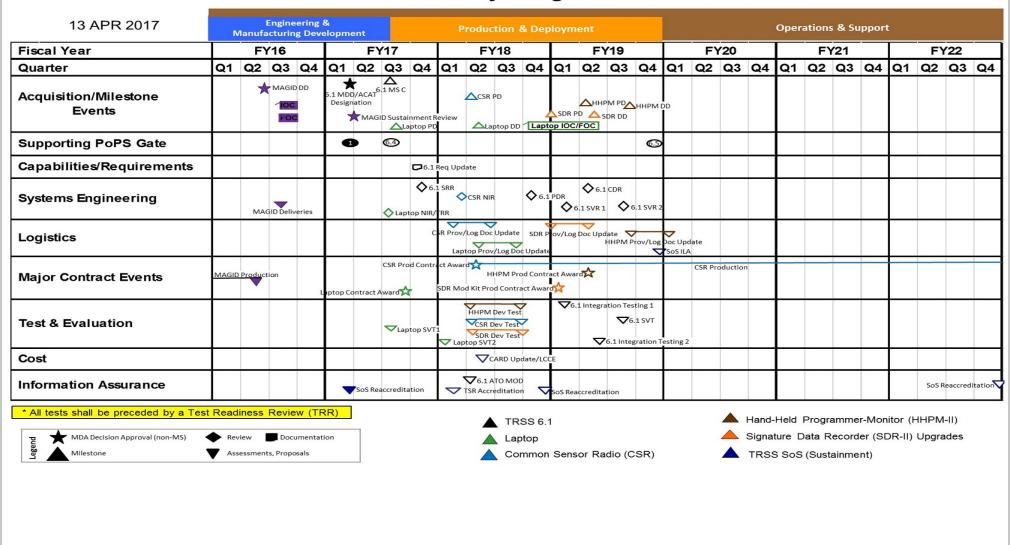
R-1 Program Element (Number/Name)
PE 0206625M / USMC Intelligence/
Electronics Warfare Sys

Project (Number/Name)
2272 / Intel Command and Control (C2) Sys





# TRSS SoS By Budget Schedule FY16-FY22



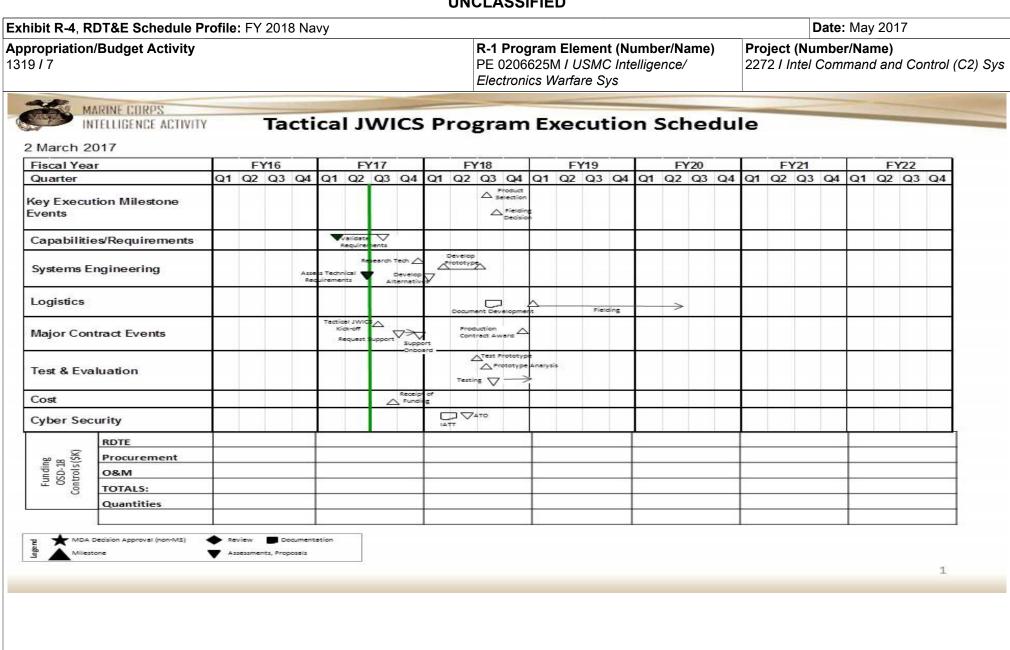


Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy **Date:** May 2017 **Appropriation/Budget Activity** R-1 Program Element (Number/Name) **Project (Number/Name)** PE 0206625M / USMC Intelligence/ 2272 I Intel Command and Control (C2) Sys 1319 / 7 Electronics Warfare Sys **IBR Program Schedule** Quarter Q1 Q2 Q3 Q4 Acquisition / Milestone Events PD/ MDD – USB EUTR Life Cycle Sustainment – DD Initial V4 Capabilities / Requirements SAR Systems Engineering TRS 7.0 TRS 5.0 TRS 4.0 ENTR/NOTM Integration Fielding CAC2S Receive Addl Test Assets Receive Incr 3 JTT/CTT Disposal Receive Incr 2 Receive Incr 4  $\nabla$ Logistics Receive Incr 1 eceive Test Assets Fielding IAS Test Assets Addl Test Assets Major Contract Events Incr 2 V USB ENTR CIB Upgrade NSA Cert TRS JITC TRS JITC Test & Evaluation TRS JITC TRS JITC JTIC Test Cost IA Documentation MDA Decision Approval (non-MS) Milestone / Key Acquisition Event Assessments, Proposals

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

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)
PE 0206625M / USMC Intelligence/

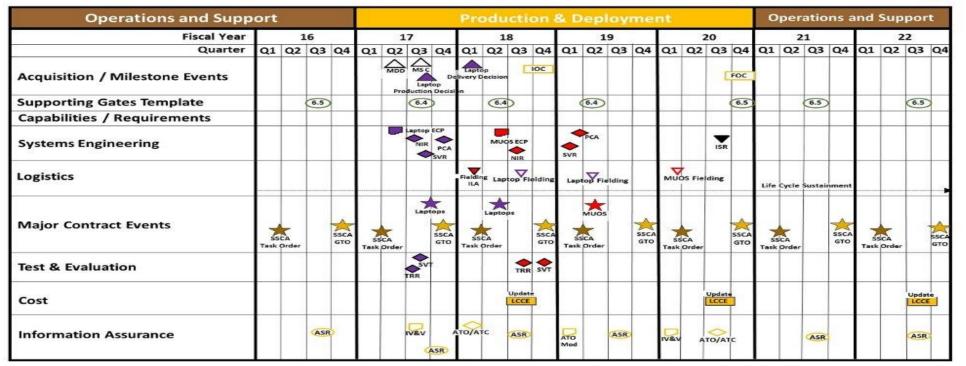
Electronics Warfare Sys

Project (Number/Name)

2272 I Intel Command and Control (C2) Sys

# **MSIDS Program Schedule**





Legend Contracting action Review or Test Documentation Milestone / Key Assessments, Proposals

MDA Decision Approval, Laptops for OW/CI, BW/CI & VEW Mobile User's Objective System data controllers for OW/CI, BW/CI

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy **Date:** May 2017

R-1 Program Element (Number/Name) Appropriation/Budget Activity

1319 / 7

PE 0206625M / USMC Intelligence/ Electronics Warfare Sys

Project (Number/Name) 2272 I Intel Command and Control (C2) Sys

# **CIHEP FoS Program Schedule**

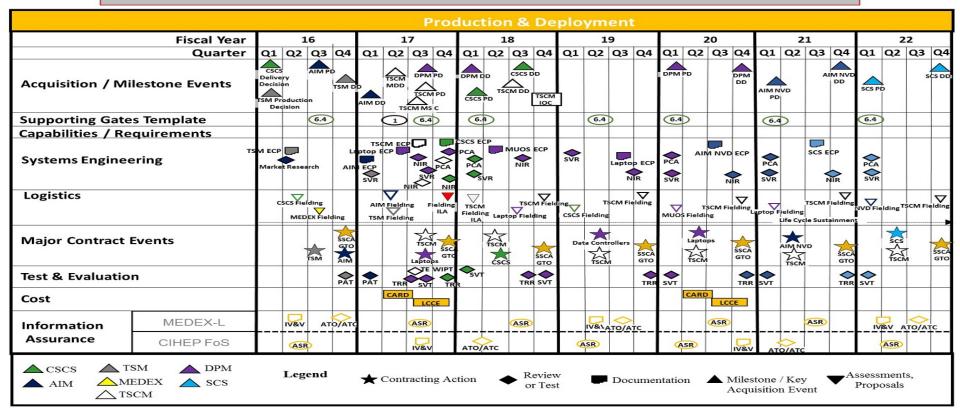
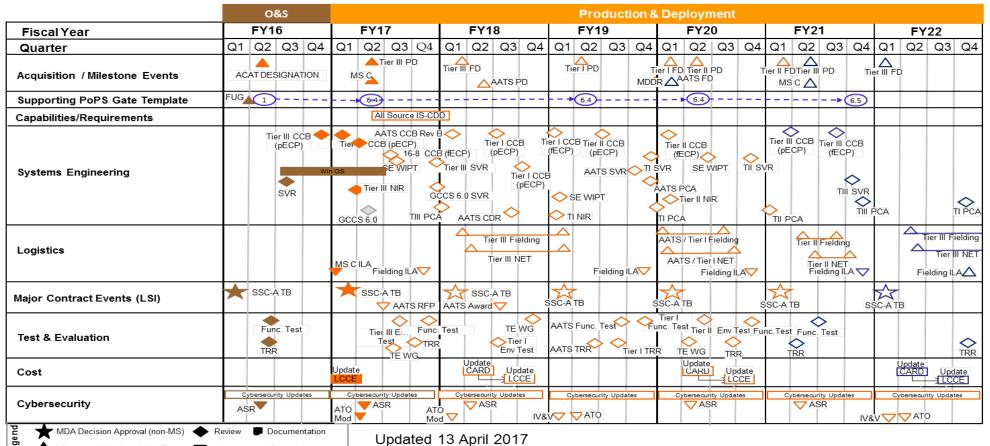


Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy **Date:** May 2017 Project (Number/Name) **Appropriation/Budget Activity** R-1 Program Element (Number/Name) PE 0206625M / USMC Intelligence/ 1319 / 7 2272 I Intel Command and Control (C2) Sys Electronics Warfare Sys

# IAS FoS Schedule 16-22 IAS FOS



Milestone / Key Acquisition Event Assessments, Proposals

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 0206625M / USMC Intelligence/

Project (Number/Name)

Electronics Warfare Sys

2272 I Intel Command and Control (C2) Sys



Navy

# **TCAC Program Schedule**

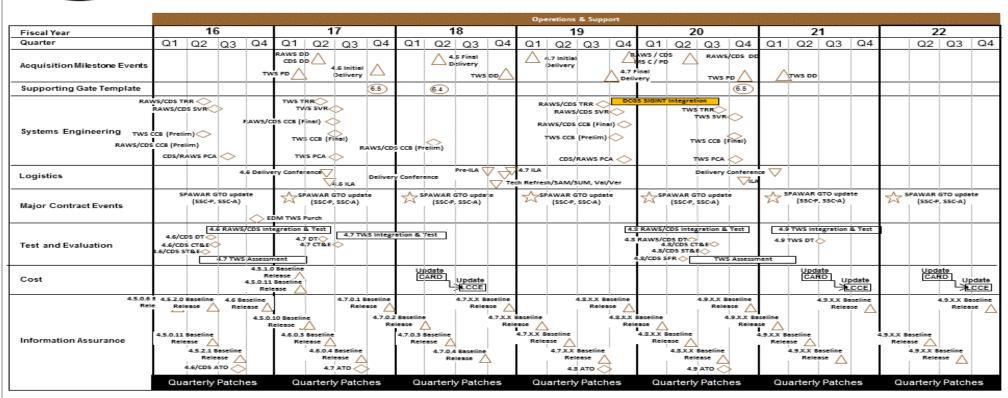


Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)
PE 0206625M / USMC Intelligence/
Electronics Warfare Sys

Project (Number/Name)

2272 I Intel Command and Control (C2) Sys



# MARINE CORPS SYSTEMS COMMAND HOME OF THE MARINE CORPS ACQUISITION PROFESSIONAL

## **CESAS II Program Schedule**

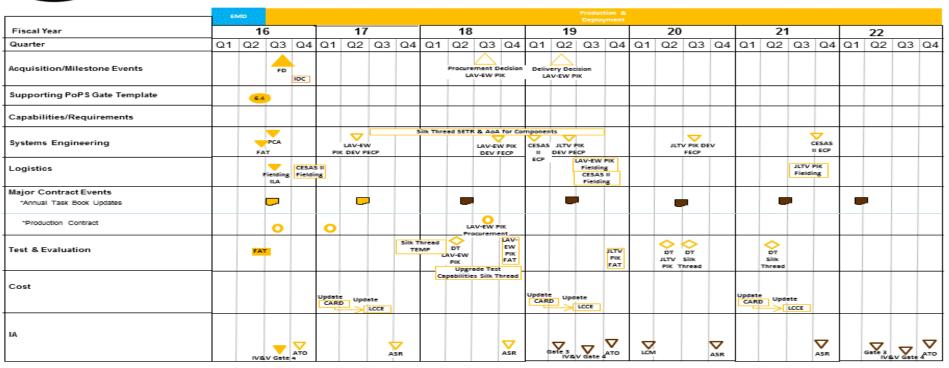


Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

**Appropriation/Budget Activity** 

1319 / 7

R-1 Program Element (Number/Name)
PE 0206625M / USMC Intelligence/
Electronics Warfare Sys

Project (Number/Name)
2272 I Intel Command and Control (C2) Sys



# TSCS (RREP and TPCS) Program Schedule



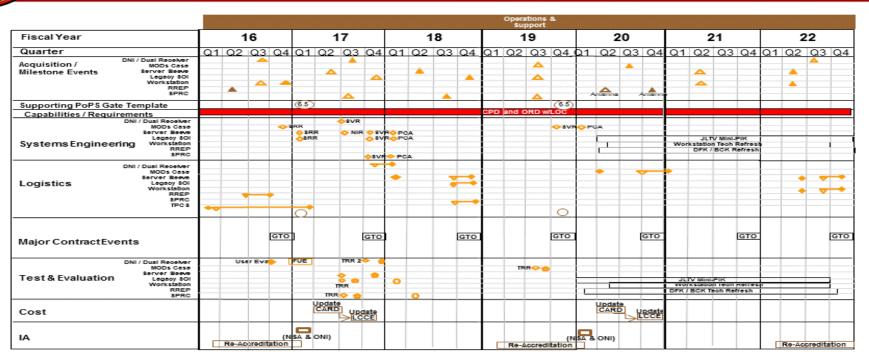


Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0206625M / USMC Intelligence/ Electronics Warfare Sys	, ,	umber/Name) I Command and Control (C2) Sys

#### **GBOSS PROGRAM SCHEDULE**

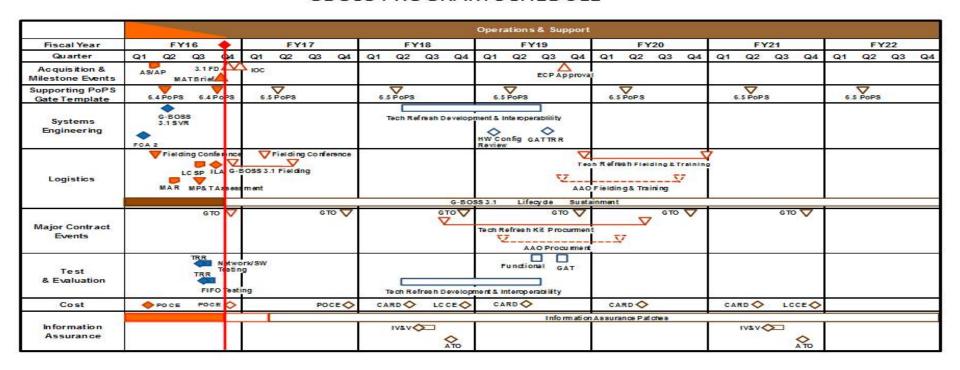


Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
1319 / 7	,	,	umber/Name) I Command and Control (C2) Sys

# Schedule Details

	Sta	ırt	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 2272					
TCAC Procurement Decision (HW/SW Laptop Refresh) (TWS)	1	2017	1	2017	
TCAC Delivery Decision (RAWS and CDS)	2	2017	2	2017	
TCAC Fielding Decision (HW/SW Server Refresh) (RAWS and CDS)	2	2017	2	2017	
TCAC Delivery Decision (TWS)	4	2018	4	2018	
IAS MS C Decision	2	2017	2	2017	
IAS Tier III Procurement Decision	2	2017	2	2017	
IAS Advanced Analytics Production Decision	2	2018	2	2018	
IAS Tier III Fielding Decision	1	2018	1	2018	
CESAS LAV/EW PIK Procurement Decision	3	2018	3	2018	
CESAS II Initial Operational Capability (IOC)	4	2016	4	2016	
SCI COMMS FOC (HBSI-PT)	1	2019	1	2019	
SCI COMMS Network Package Fielding Decision	3	2018	3	2018	
SCI COMMS Network Package Fielding	3	2018	3	2019	
TRSS Final Operational Capability (FOC) MAGID II	3	2016	3	2016	
TRSS MDD/ACAT Designation 6.1	1	2017	1	2017	
TRSS Sustainment Review MAGID II	1	2017	1	2017	
TRSS Milestone "C" Family of Systems (FOS) 6.1 Technical Refresh	3	2017	3	2017	
TRSS Procurement Decision Sensor Monitoring Group (SMG) / Sensor Monitoring Group-Lite (SMG-L) Components (Laptops)	3	2017	3	2017	
TRSS Procurement Decision Components - Common Sensor Radio (CSR)	2	2018	2	2018	
TRSS Delivery Descision SMG/SMG-LITE Components (Laptops)	2	2018	2	2018	

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

Appropriation/Budget Activity

1319 / 7

R-1 Program Element (Number/Name)
PE 0206625M / USMC Intelligence/
Electronics Warfare Sys

Date: May 2017

Project (Number/Name)
2272 / Intel Command and Control (C2) Sys

	Start		En	d
Events by Sub Project	Quarter	Year	Quarter	Year
TRSS IOC/FOC SMG/SMG-LITE Components (Laptops)	4	2018	4	2018
TRSS Procurement Decision Signature Data Recorder (SDR)	1	2019	1	2019
TRSS Procurement Decision Hand Held Programmable Monitor (HHPM)	2	2019	2	2019
TRSS Delivery Decision Signature Data Recorder (SDR)	2	2019	2	2019
TRSS Delivery Decision Hand Held Programmable Monitor (HHPM)	3	2019	3	2019
MSIDS MDD	2	2017	2	2017
MSIDS Milestone C	3	2017	3	2017
MSIDS Production Decision (Laptops)	3	2017	3	2017
MSIDS Delivery Decision (Laptops)	1	2018	1	2018
MSIDS IOC	3	2018	3	2018
MSIDS FOC	3	2020	3	2020
CIHEP Full Rate Production Decision Technical Surveillance Modules (TSM)	1	2016	1	2016
CIHEP Delivery Decision CSCS 1	1	2016	1	2016
CIHEP FRP Decision Advanced Imagery Module (AIM)	3	2016	3	2016
CIHEP Delivery Decision TSM	4	2016	4	2016
CIHEP Delivery Decision AIM	1	2017	1	2017
CIHEP MDD Technical Surveillance Countermeasures (TSCM)	2	2017	2	2017
CIHEP Milestone "C" TSCM	3	2017	3	2017
CIHEP Full Rate Production Decision DPM	3	2017	3	2017
CIHEP Full Rate Production Decision TSCM	3	2017	3	2017
CIHEP Delivery Decision DPM	1	2018	1	2018
CIHEP Full Rate Production Decision CSCS	1	2018	1	2018
CIHEP Delivery Decision TSCM	3	2018	3	2018
CIHEP Delivery Decision CSCS	3	2018	3	2018
CIHEP IOC TSCM	4	2018	4	2018

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
1	,	- , (	umber/Name)
1319 / 7	PE 0206625M I USMC Intelligence/ Electronics Warfare Sys	22721 Inte	I Command and Control (C2) Sys

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
IBR Procurement Decision (Initial ENTR Version 4)	2	2016	2	2016	
IBR Procurement Decision (ENTR Version 4)	4	2017	4	2017	
IBR Delivery Decision (ENTR Version 4)	1	2019	1	2019	
IBR Initial Operational Capability (IOC) (ENTR Version 4)	2	2020	2	2020	
IBR Delivery Decision Final Operational Capability (FOC) (ENTR Version 4)	2	2022	2	2022	
G-BOSS Tech Refresh Development & Interoperablilty	2	2018	3	2019	
TSCS Procurement Decision (Legacy SOI)	4	2017	4	2017	
TSCS Procurement Decision (SPRC)	3	2017	3	2017	
TSCS Delivery Decision (Legacy SOI)	4	2018	4	2018	
TSCS Delivery Decision (Server Sleeve)	2	2018	2	2018	
TSCS Delivery Decision (SPRC)	3	2018	3	2018	
JWICS Procurement Decision	3	2018	3	2018	
JWICS Fielding Decision	3	2018	3	2018	