| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy | | | | | | | | | | | DATE: April 2013 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | | | | | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | | | | | | | |
| **COST ($ in Millions)** | **All Prior Years** | **FY 2012** | **FY 2013#** | **FY 2014 Base** | **FY 2014 OCO ##** | **FY 2014 Total** | **FY 2015** | **FY 2016** | **FY 2017** | **FY 2018** | **Cost To Complete** | **Total Cost** |
| Total Program Element | 1,071.648 | 313.832 | 219.054 | 178.753 | - | 178.753 | 162.231 | 98.082 | 95.915 | 96.217 | Continuing | Continuing |
| 2270: *Exp Indirect Fire Gen Supt Wpn Sys* | 170.433 | 31.905 | 21.119 | 33.019 | - | 33.019 | 28.113 | 26.775 | 24.588 | 24.978 | Continuing | Continuing |
| 2273: *Air Ops Cmd & Control (C2) Sys* | 228.138 | 59.435 | 94.071 | 68.669 | - | 68.669 | 73.436 | 24.886 | 23.853 | 18.147 | Continuing | Continuing |
| 2274: *Command & Control Warfare Sys* | 19.071 | 25.624 | 32.052 | 11.234 | - | 11.234 | 10.397 | 10.209 | 10.206 | 10.363 | Continuing | Continuing |
| 2275: *Joint Tactical Radio System* | 7.426 | 5.280 | 4.413 | 21.923 | - | 21.923 | 5.353 | 2.383 | 3.072 | 6.176 | Continuing | Continuing |
| 2276: *Comms Switching and Control Sys* | 24.280 | 4.121 | 8.327 | 15.405 | - | 15.405 | 11.114 | 7.767 | 5.083 | 5.171 | Continuing | Continuing |
| 2277: *System Engineering and Integration* | 9.434 | 10.923 | 6.171 | 11.626 | - | 11.626 | 6.637 | 6.648 | 6.588 | 6.692 | Continuing | Continuing |
| 2278: *Air Defense Weapons System* | 33.700 | 2.129 | 1.993 | 3.041 | - | 3.041 | 3.498 | 3.475 | 3.499 | 3.555 | Continuing | Continuing |
| 2510: *MAGTF CSSE & SE* | 214.097 | 40.415 | 25.231 | 3.526 | - | 3.526 | 4.176 | 3.668 | 3.048 | 3.381 | Continuing | Continuing |
| 3099: *Radar System* | 116.834 | 31.545 | 25.677 | 10.310 | - | 10.310 | 19.507 | 12.271 | 15.978 | 17.754 | Continuing | Continuing |
| 9C89: *Marine Ground-Air Radar* | 248.235 | 102.455 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 350.690 |
| **MDAP/MAIS Code(s):** 582 | | | | | | | | | | | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

This program element provides funding to develop the command and control (C2) support and information infrastructures for the Fleet Marine Force and supporting establishment. Doctrinally, the C2 support system and the information infrastructure form two parts of a triad of capabilities which permits command and control systems to be transformed into a complete operating system. The third element of the triad is command and control organization and is not covered in this program element. USMC command and control is divided into seven functional areas and one supporting functional area as follows: intelligence C2, fire support C2, air operations C2, radio systems C2, combat service support C2, warfare C2, radar systems C2, and C2 support (information processing and communications).

| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy | DATE: April 2013 |
|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* |

Within this program element, subprojects have been grouped by C2 functional area for more efficient planning. Air defense weapons systems have been added to facilitate planning and a separate project is used for systems assigned to the supporting establishment. Subprojects which support the commander's decision processes have been collected into the Command Post Systems project since these systems must work in close cooperation to ensure effective C2 of Marine Air Ground Task Forces.

| B. Program Change Summary ($ in Millions) | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total |
|---|---|---|---|---|---|
| Previous President's Budget | 321.623 | 219.054 | 200.011 | - | 200.011 |
| Current President's Budget | 313.832 | 219.054 | 178.753 | - | 178.753 |
| Total Adjustments | -7.791 | 0.000 | -21.258 | - | -21.258 |
| • Congressional General Reductions | - | - | | | |
| • Congressional Directed Reductions | - | - | | | |
| • Congressional Rescissions | - | - | | | |
| • Congressional Adds | - | - | | | |
| • Congressional Directed Transfers | - | - | | | |
| • Reprogrammings | 1.331 | 0.000 | | | |
| • SBIR/STTR Transfer | -9.121 | 0.000 | | | |
| • Program Adjustments | 0.000 | 0.000 | -8.961 | - | -8.961 |
| • Rate/Misc Adjustments | -0.001 | 0.000 | -12.297 | - | -12.297 |

**Change Summary Explanation**

FY14 decrease due to a change in requirements for the enhanced Ground Based Operational Surveillance System (G-BOSS) system.

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2270: *Exp Indirect Fire Gen Supt Wpn Sys* | 170.433 | 31.905 | 21.119 | 33.019 | - | 33.019 | 28.113 | 26.775 | 24.588 | 24.978 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

Marine Air Ground Task Force (MAGTF) Command and Control (C2) Systems Applications - MAGTF C2 SA merges the development, integration and testing of 45 existing C2 systems and applications into one common enterprise capability. They reside in all Combat Operations Centers (COCs) and related USMC C2 platforms. This effort provides greater economies of scale/affordability with system developers, technical design agents, integration agents and individual program offices. MAGTF C2 SA efforts are in alignment with the combat developers requirements for: Net-Centric systems, Development of reusable Open Architecture components, Data exposure, Enhancing the war-fighter's Situational Awareness and Increasing/Maximizing the Commander's decision space.

Joint Battle Command - Platform (JBC-P) FoS - JBC-P FoS is a joint Army led ACAT II program. It is a product line made up of systems and products formerly associated with the Blue Force Tracker (BFT) FoS and JBC-P. It comprises L-Band SATCOM and terrestrial Command and Control (C2) and Situational Awareness (SA) systems that use graphic displays to identify friendly units by providing Position Location Information (PLI) while facilitating tactical level C2.

Blue Force Situational Awareness (BFSA) - The Marine Corps' Situational Awareness Blue Force Tracker family of systems is comprised of the Mounted and Dismounted variants of a terrestrial Enhanced Position Location Reporting System/Single Channel Ground Airborne Radio System (EPLRS/SINCGARS) and the mounted celestial (SATCOM) system. In FY14, the BFSA and JBPC funding lines are merged into the JBCP FoS line.

Tactical Command Operations System (TCO) - TCO is the principle tool within the Marine Air Ground Task Force (MAGTF) for situational awareness through distribution of the Common Tactical Picture (CTP). It supports tactical operations providing information via high speed computer systems in a timely manner and includes the Intel Operations Workstations/Servers. R&D funds provide science and technology advanced concepts to be applied to the system for an increase in functional capabilities to the warfighter, to include JC2 development efforts within Tactical Service Oriented Architecture (TSOA).

Identity Dominance System-MC (IDS-MC) - IDS-MC is a multi-modal (fingerprint, iris and face) biometric collection system that provides the USMC a reliable and effective capability to collect, share, match, access, verify and store identity information. IDS-MC will enable the Marine to collect appropriate biometric, biographical and reference information on an individual and match this locally developed information with pre-existing information available to the expeditionary force. The system will display match results with linkage to the respective individual's biographical and reference information as well as help analyze the response, update records as appropriate, create reports and disseminate updated information in accordance with current MAGTF policy. The primary mission of IDS-MC is to provide the MAGTF with the means to identify persons encountered in the battlespace. While IDS-MC is not an intelligence analysis system, it does provide identification information

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
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| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

in support of military intelligence and law enforcement operations by providing positive identification of persons of interest. IDS-MC is an enabler in the areas of detainee management and questioning, base access, counterintelligence screening, border control, law enforcement, displaced persons' management and aiding in humanitarian assistance missions. IDS-MC supports the tactical application of identity dominance and fully supports a forward presence, crisis response and contingency response capability. IDS-MC will incrementally phase out the Biometric Automated Toolset(BAT).

Advanced Field Artillery Tactical Data System (AFATDS) - The Advanced Field Artillery Tactical Data System (AFATDS) is an automated fire support command and control (C2) system consisting of fire support application software operating on common hardware platforms, which provides the MAGTF with the ability to rapidly integrate all supporting arms assets into maneuver plans via digital data communications links. The AFATDS program includes AFATDS software and hardware, the Effects Management Tool (EMT) (a C2PC injector), the Back-up Computer System (BUCS), and the Battery Mobile Tactical Shelter (MTS).

Target Location Designation and Handoff System (TLDHS) - TLDHS is the only Marine Corps man-portable digital fires entry system designed for the Forward Air Controllers (FACs), Forward Observers (FOs), Fire Support Teams (FSTs), Firepower Control Teams (FCTs), Tactical Air Control Parties (TACPs) and Reconnaissance Teams to quickly acquire targets in day, night and near-all-weather visibility conditions, in order to conduct precise, rapid indirect surface fire support, Naval Surface Fire Support (NSFS) and Close Air Support (CAS).

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** *MAGTF C2: Engineering, research, and software development for MAGTF capability release | 12.785 | 7.096 | 19.070 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Focus of effort was initiating adaptation, development and integration of entity, task and presentation services from multiple programs of record to operate with the Service. Initiated activities to incorporate functionality from the Fires, Logistics and Intelligence communities. Initiated and built TSOA builds 3 and 4, with development of the MCTSSA hosted Application Environment and new IA services. Builds 3 and 4 introduced the enhanced Warfighter capability, and include interfaces with other Service SOA efforts, such as System of Systems Common Operating Environment (SOSCOE, Army) and Consolidated Afloat Network and Enterprise Services (CANES, Navy). | | | |
| ***FY 2013 Plans:***<br>Focus of effort is initiating adaptation, development and integration of entity, task and presentation services from multiple programs of record to operate with the Service. Initiate activities to incorporate functionality from the Fires, Logistics and Intelligence communities. Initiate and build 5 and 6. Builds 5 and 6 introduce enhanced collaboration and imagery functionality. | | | |
| ***FY 2014 Plans:***<br>Increase in FY 14 funding from FY13 supports enhancing services capability from builds 5 and 6 with the addition of user-facing applications, to include the Battle Command Display. Incorporate services which interoperate with logistics and intelligence systems and initiate builds 7 and 8. | | | |
| ***Title:*** *MAGTF C2: Program Support. Software engineering program support | 2.362 | 1.596 | 1.623 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Federally Funded Research Center (FFRDC) provided software engineering support to provide appropriate government direction in design and development of software, conduct of source code reviews and prime vendor oversight.<br>***FY 2013 Plans:***<br>Federally Funded Research Center (FFRDC) continue software engineering support to provide appropriate government direction in design and development of software, conduct of source code reviews and prime vendor oversight.<br>***FY 2014 Plans:***<br>Federally Funded Research Center (FFRDC) will continue software engineering support to provide appropriate government direction in design and development of software, conduct of source code reviews and prime vendor oversight. | | | |
| ***Title:*** *JBC-P: Software Development/Integration. | 0.824 | 0.525 | 2.189 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Personnel integrated into the software development team at the Software Engineering Directorate in Huntsville, AL in order to assist in the development and integration of the JBC-P capability. Federally Funded Research Center (FFRDC) software engineering support funded to provide appropriate government direction in design and development of software. Support provided to assist and serve as subject matter experts in this effort. Existing documentation and logistics support analyzed for supportability of JBC-P and follow on increments of the capability.<br>***FY 2013 Plans:***<br>Continue personnel integrate into the software development team at the Software Engineering Directorate in Huntsville, AL in order to assist in the development and integration of the JBC-P capability. Federally Funded Research Center (FFRDC) software engineering support funded to provide appropriate government direction in design and development of software. Support provided to assist and serve as subject matter experts in this effort. Existing documentation and logistics support analyzed for supportability of JBC-P and follow on increments of the capability.<br>***FY 2014 Plans:***<br>The increase in FY14 is a result of the BFSA and JBCP funding lines merge into the JBCP FoS Line. The increase will continue personnel integration into the software development team at the Software Engineering Directorate in Huntsville, AL in order to assist in the development and integration of the JBCP software capability. Federally Funded Research Center (FFRDC) software engineering support funded to provide appropriate government direction in design and development of software. Support provided | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
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| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| to assist and serve as subject matter experts in this effort. Existing documentation and logistics support analyzed for supportability of JBC-P and follow on increments of the capability. | | | |
| ***Title:*** *JBC-P: Training Development.<br>***Articles:*** | 0.150<br>0 | 0.200<br>0 | 0.225<br>0 |
| ***FY 2012 Accomplishments:***<br>Evaluated and updated existing documentation for re-use as JBC-P evolves in support of training development.<br>***FY 2013 Plans:***<br>Continue evaluation and updating of existing documentation for re-use as JBC-P evolves in support of training development.<br>***FY 2014 Plans:***<br>Will continue evaluation and updating of existing documentation for re-use as JBC-P evolves in support of training development. | | | |
| ***Title:*** *JBC-P: Developmental Test (DT)/Operational Test (OT)<br>***Articles:*** | 0.605<br>0 | 0.400<br>0 | 0.400<br>0 |
| ***FY 2012 Accomplishments:***<br>Laboratories integrated with Huntsville Software Engineering Division (SED) and Marine Corps Tactical Systems Support Activity (MCTSSA) in order to facilitate test and network integration test events. Marine Corps Operational Test and Evaluation Activity (MCOTEA) provided initial test planning support.<br>***FY 2013 Plans:***<br>Continue laboratories integration with Huntsville SED and MCTSSA in order to facilitate test and network integration test events. MCOTEA support for developmental test and planning/support for operational test.<br>***FY 2014 Plans:***<br>Continue laboratories integration with Huntsville SED and MCTSSA in order to facilitate test and network integration test events. MCOTEA DT/OT evaluation and documentation. | | | |
| ***Title:*** JBC-P: Software Certification and Accreditation<br>***Articles:*** | 0.490<br>0 | 0.400<br>0 | 0.525<br>0 |
| ***FY 2012 Accomplishments:***<br>Information assurance efforts supported developmnent of information assruance-related required documents.<br>***FY 2013 Plans:***<br>Information assurance efforts to support certification and accreditation efforts of JBC-P software.<br>***FY 2014 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
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| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Information assurance efforts to support certification and accreditation efforts of JBC-P software. | | | |
| ***Title:*** *JBC-P: System Engineering, Programmatic, and Logistics Program Support | 0.307 | 0.400 | 0.396 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Supported personnel and travel. | | | |
| ***FY 2013 Plans:***<br>Support personnel and travel. | | | |
| ***FY 2014 Plans:***<br>Support personnel and travel. | | | |
| ***Title:*** *BFSA: Joint Interoperability Testing | 0.020 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>Continued Joint interoperability certification with U.S. Army. | | | |
| ***Title:*** *BFSA: Software Development, Integration and Testing | 2.298 | 1.913 | 0.000 |
| ***Articles:*** | 0 | 0 | |
| ***FY 2012 Accomplishments:***<br>Conducted software and network developmental efforts for USMC specific requirements, software field user evaluations and associated risk reduction events. | | | |
| ***FY 2013 Plans:***<br>Continue software and network developmental efforts for USMC specific requirements and associated risk reduction events. | | | |
| ***Title:*** *BFSA: Software Certification and Accreditation | 0.140 | 0.141 | 0.000 |
| ***Articles:*** | 0 | 0 | |
| ***FY 2012 Accomplishments:***<br>Information assurance efforts supported certification and accreditation efforts of Joint Capability Release (JCR) software upgrades. | | | |
| ***FY 2013 Plans:***<br>Information assurance efforts to support certification and accreditation efforts of Joint Capability Release (JCR) software upgrades. | | | |
| ***Title:*** *TCO: System testing and integration to develop additional functional capabilities. | 1.306 | 1.297 | 1.194 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
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| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Articles:*** | 0 | 0 | 0 |
| ***Description:*** Hardware upgrade solutions were researched and documented, in preparation for seamless transition to future technology and increased software capability.<br><br>***FY 2012 Accomplishments:***<br>Executed Proof of Concept /backwards compatability Registration and Orchestration Capability Modules (CM).<br><br>***FY 2013 Plans:***<br>Update Global capability as enhanced Command Operation Picture (COP) service. Integrate and test ability to exchange data with multiple Command and Control (C2) systems. Execute interoperability between Global and modules.<br><br>***FY 2014 Plans:***<br>Develop services linking the COP from GCCS-TCO to other COP viewing tools as a service inside the Combat Operations Center. The GCCS-TCO software will improve interoperability with the Tactical Service Oriented Architecture, allowing COP and Situational Awareness data to be shared between the GCCS-TCO and other C2 systems. | | | |
| ***Title:*** *TCO: Integrate software changes into new system and perform testing. | 0.725 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>Conducted efforts to implement newly developed concepts and technologies for proof of concept. | | | |
| ***Title:*** *TCO: Testing and validations of advanced concepts and technologies. | 1.453 | 1.320 | 1.422 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Continued testing and validation of advanced concepts and technologies.<br><br>***FY 2013 Plans:***<br>Continue testing and validation of advanced concepts and technologies.<br><br>***FY 2014 Plans:***<br>Continue testing and validation of advanced concepts and technologies. | | | |
| ***Title:*** *IDS: System Development and Testing | 0.923 | 0.936 | 0.946 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:*** | | | |

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| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Provided technical support, research studies, and program development documentation in preparation for Material Development Decision.<br>***FY 2013 Plans:***<br>Provide system integration, testing, and technical program development documentation in preparation for Milestone C<br>***FY 2014 Plans:***<br>Provide system integration, software development, testing, validation and verification, systems engineering and technical program support | | | |
| ***Title:*** *AFATDS: AFATDS Software Development and Integration<br>***Articles:***<br>***FY 2013 Plans:***<br>Limited AFATDS/BUCS software and interface enhancements. Limited interoperability testing.<br>***FY 2014 Plans:***<br>Development of increment II adding limited AFATDS/BUCS USMC capabilities or interface enhancments with other C2 systems. Limited interoperability testing. | 0.000<br>0 | 1.548<br>0 | 1.574<br>0 |
| ***Title:*** *TLDHS: Software Development<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Completed development of two software increments TLDHS software.<br>***FY 2013 Plans:***<br>Continue the development of the next major software release and migrate to a new operating system.<br>***FY 2014 Plans:***<br>Continue the development of the next major software release and early protyping of the next operating system migration. | 5.123<br>0 | 1.911<br>0 | 1.950<br>0 |
| ***Title:*** *AFATDS: Information Assurance Support<br>***Articles:***<br>***FY 2013 Plans:***<br>Information Assurance Certification and Accreditation activities to ensure confidentiality, integrity, and availability of AFATDS/ BUCS S/W.<br>***FY 2014 Plans:*** | 0.000<br>0 | 0.411<br>0 | 0.423<br>0 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
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| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Maintain Information Assurance Certification and Accreditation activities to ensure confidentiality, integrity, and availability of AFATDS/BUCS S/W. | | | |
| ***Title:*** *TLDHS: Testing and Evaluation<br>***Articles:*** | 2.196<br>0 | 0.195<br>0 | 0.205<br>0 |
| ***FY 2012 Accomplishments:***<br>Performed software interoperability testing for Strikelink version 1.1.6.x Activities included testing of Net Enabled Weapons (NEW), Theater Battle Management Core System (TBMCS) web services, tactical messaging (Link 16, VMF, DACAS Block I) for interoperability and safety compliance.<br>***FY 2013 Plans:***<br>Perform software interoperability testing for Strikelink version 1.2. Activities include testing of Small Diameter Bomb (SDB), Theater Battle Management Core System (TBMCS) web services, tactical messaging (Link 16, VMF, DACAS Block II) for interoperability and safety compliance.<br>***FY 2014 Plans:***<br>Perform software interoperability testing for the next version of software. Activities include testing of Small Diameter Bomb (SDB), Theater Battle Management Core System (TBMCS) web services, tactical messaging (Link 16, VMF, DACAS Block II) for interoperability and safety compliance. | | | |
| ***Title:*** *TLDHS: Engineering Research in Support of Software Development<br>***Articles:*** | 0.000 | 0.270<br>0 | 0.280<br>0 |
| ***FY 2013 Plans:***<br>Analysis of trade studies and market research regarding industry response to a network modem performance specification.<br>***FY 2014 Plans:***<br>Analysis of Alternatives (AoA) to determine viable hardware candidates capable of hosting a future TLDHS software application on an android operating system. | | | |
| ***Title:*** *TLDHS - Video Down Link Receiver Prototypes<br>***Articles:*** | 0.000 | 0.125<br>5 | 0.000 |
| ***FY 2013 Plans:***<br>Procure Video Down Link Receiver Prototypes to develop a cable interface with existing system, develop a software interface with existing software and perform Electromagnetic Inteferance (EMI) and Environmental Testing to support VDL procurement in FY14. | | | |
| ***Title:*** *TLDHS: Software Oversight and Information Assurance Support<br>***Articles:*** | 0.198<br>0 | 0.435<br>0 | 0.597<br>0 |

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|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***FY 2012 Accomplishments:***<br>Renewed the authority to operate (ATO) and started the next ATO gate process. Performed TLDHS software code review prior to conduct the testing. Conducted software code review on the Gusto application to comply with Information Assurance. requirements. Continues software code review prior to testing, certification and accreditation and to obtain authority to operate (ATO) .<br>***FY 2013 Plans:***<br>Perform TLDHS software code review prior to testing, obtain the next ATO to the Marine Corps and Weapon System Explosives Safety certification.<br>***FY 2014 Plans:***<br>Perform TLDHS software code review prior to testing, obtain the next ATO to operate on the Marine Corps Enterprise Network and conduct safety oversight Video Down-Link Receiver. | | | |
| **Accomplishments/Planned Programs Subtotals** | 31.905 | 21.119 | 33.019 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/463109: *AFATDS* | 2.487 | 2.545 | 20.903 | | 20.903 | 25.071 | 2.714 | 2.973 | 2.842 | Continuing | Continuing |
| • PMC/463117: *TLDHS* | 7.093 | 4.823 | 4.224 | | 4.224 | 4.151 | 2.223 | 0.000 | 0.000 | Continuing | Continuing |
| • PMC/463023: *GCCS/TCO MCHS* | 9.165 | 1.381 | 2.905 | | 2.905 | 1.270 | 1.467 | 3.171 | 3.228 | Continuing | Continuing |
| • PMC/463100: *GCC/TCO* | 17.059 | 8.958 | 9.836 | | 9.836 | 11.731 | 8.471 | 8.865 | 9.024 | Continuing | Continuing |

**Remarks**

**D. Acquisition Strategy**

MAGTF C2 SA: MAGTF C2 SA is delivering command and control capabilities through bi-annual software releases with major releases in FY13 and FY15 through multiple programs of record. Currently the initial focus is developing the Tactical Service Oriented Architecture (TSOA) software, which provides a common software infrastructure through which services and applications from other programs of record can begin the process of interfacing with in order to maximize software commonality across echelons and missions. The long term goal is a software capability that will enable data discovery and data sharing across mission areas, a common standards-based viewer, core services and applications, and access to the GIG and other Joint networks, data and services.

JBC-P: The JBC-P is leveraging the Army's (PM Force Battle Command XXI Brigade and Below (FBCB2) development of the JBC-P software and the Marine Corps' program is contingent upon the Army's development and acquisition strategy. PM FBCB2 will fund research and development for JBC-P unless there are Service

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

unique requirements, which the Marine Corps program office will fund. The Marine Corps' program office will participate in all design and readiness reviews and a joint operational testing events.

BFSA: The BFT FoS is leveraging an Army (PM Force Battle Command XXI Brigade and Below (FBCB2)) ACAT II program to deliver a critical battlefield command and control system to the operating forces. These systems operate on both a terrestrial and celestial network and enable tactical units to move more effectively by providing friendly unit identification and location, as well as friendly intent and status. The current focus is on testing and evaluating improved software which will make possible type-1 encryption and a greater bandwidth network. The long term goal is a secured reduced latency system that will greatly improve the battlefield commander's situational awareness and reduce the potential of fratricide.

TCO: Contracting is done with various vendors for software test and integration, COTS evaluation and documentation to develop advanced concepts and additional functional capabilities. The PMO conducts quarterly performance reviews. Specific hardware is also procured for test purposes which include environmental, shock, compatibility, and interoperability testing.

Identity Dominance System (IDS): Currently, the IDS-MC Program Office acquistion strategy is to leverage off the Navy's IDS Program and provide funding to meet Marine Corps requirements. The Marine Corps' program office will participate in all design and readiness reviews and as well as the DOT&E activities. The long-term goal is to equip the Marine with a user-friendly biometric authentication technology that will be employed throughout DoD to deny the enemy freedom of movement within the populace and positively identify known insurgents within an Area of Responsibility (AOR).

AFATDS: AFATDS is a Cost Plus Award Fee contract through Army CECOM, Aberdeen Proving Ground, MD. R&D efforts will be a combined effort between the software developer (Raytheon), the Army PM and the USMC of software enhancements for the next planned versions of AFATDS.

TLDHS: The acquisition of components (software/hardware) for the TLDHS initiative will maximize the use of existing COTS, GOTS, NDI, and GFE. Software development is conducted utilizing a sole source small-business contract. Software must maintain compatibility with five Programs of Record (POR) and seven Operational Flight Programs (OFP).

**E. Performance Metrics**

Milestone Reviews

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAGTF C2 | C/FFP | NGMS:Herdon, VA | 28.385 | 1.201 | Nov 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 29.586 | |
| MAGTF C2 | C/CPFF | SPAWAR:Charleston, SC | 36.358 | 3.872 | Jan 2012 | 3.573 | Mar 2013 | 5.300 | Nov 2013 | - | | 5.300 | Continuing | Continuing | Continuing |
| MAGTF C2 | WR | NSWC:Panama City, FL | 0.460 | 0.000 | | 0.000 | | 0.300 | Nov 2013 | - | | 0.300 | Continuing | Continuing | Continuing |
| MAGTF C2 | C/CPFF | GD:Scottsdale, AZ | 18.160 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 18.160 | |
| MAGTF C2 | C/CPFF | Viecore:NJ | 0.402 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.402 | |
| MAGTF C2 | C/CPFF | MCSC:Quantico, VA | 12.381 | 2.127 | Mar 2012 | 0.000 | | 7.920 | Dec 2013 | - | | 7.920 | Continuing | Continuing | Continuing |
| MAGTF C2 | WR | NSWC:Dahlgren, VA | 0.000 | 3.003 | Nov 2011 | 0.685 | Jan 2013 | 3.050 | Jan 2014 | - | | 3.050 | Continuing | Continuing | Continuing |
| MAGTF C2 | C/CPFF | SPAWAR:San Diego, CA | 0.000 | 0.000 | | 1.007 | Apr 2013 | 1.000 | Dec 2013 | - | | 1.000 | 0.000 | 2.007 | |
| JBC-P | WR | SPAWAR:Charleston, SC | 0.992 | 0.762 | Mar 2012 | 0.700 | Dec 2012 | 2.950 | Dec 2013 | - | | 2.950 | Continuing | Continuing | Continuing |
| JBC-P | C/FFP | MCSC:Quantico, VA | 1.118 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| JBCP | C/CPFF | PM FBCB2:Aberdeen Proving Ground, MD | 0.283 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.283 | |
| BFSA | MIPR | PM FBCB2:Aberdeen Proving Grounds, MD | 0.000 | 1.414 | Mar 2012 | 0.250 | Jan 2013 | 0.000 | | - | | 0.000 | 0.000 | 1.664 | |
| TCO | C/CPFF | SPAWAR:Charleston, SC | 0.000 | 2.759 | Apr 2012 | 2.167 | May 2013 | 2.234 | May 2014 | - | | 2.234 | 0.000 | 7.160 | |
| IDS | MIPR | NAVSEA/ PMS-408:Washington,DC | 0.000 | 0.000 | | 0.186 | Nov 2012 | 0.190 | Nov 2013 | - | | 0.190 | Continuing | Continuing | Continuing |
| AFATDS | C/CPAF | Raytheon:Fort Wayne, IN | 22.958 | 0.000 | | 1.548 | Jan 2013 | 1.574 | Jan 2014 | - | | 1.574 | Continuing | Continuing | Continuing |
| TLDHS | C/CPFF | Stauder Tech:St. Louis, MO | 15.494 | 5.073 | Mar 2012 | 1.911 | Feb 2013 | 1.950 | Feb 2014 | - | | 1.950 | Continuing | Continuing | Continuing |
| TCO | C/FFP | DISA:Fort Meade, MD | 0.000 | 0.725 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.725 | |
| | | **Subtotal** | 136.991 | 20.936 | | 12.027 | | 26.468 | | 0.000 | | 26.468 | | | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Remarks**

IDS-MC-NAVSEA/PMS408: Provide software development and engineering change proposals in support of USMC requirements.

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JBC-P | C/FFP | MCSC:Quantico, VA | 0.300 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| BFSA | WR | NSWC Corona:Corona, CA | 0.000 | 0.142 | Feb 2012 | 0.850 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.992 | |
| BFSA | WR | SPAWAR:Charleston, SC | 0.000 | 0.300 | Jul 2012 | 0.470 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.770 | |
| IDS | WR | NSWC CRANE:Crane, IN | 0.173 | 0.000 | | 0.495 | Dec 2012 | 0.496 | Dec 2013 | - | | 0.496 | 0.000 | 1.164 | |
| IDS | WR | NSWC Dahlgren:Dahlgren, VA | 0.250 | 0.869 | Dec 2012 | 0.255 | Dec 2012 | 0.260 | Dec 2013 | - | | 0.260 | 0.000 | 1.634 | |
| IDS | C/FFP | MCSC:Quantico, VA | 0.600 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.600 | |
| AFATDS | C/CPFF | MCSC:Quantico | 1.935 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| TLDHS | WR | NSWC Dahlgren:Dahlgren, VA | 0.557 | 0.198 | Mar 2012 | 0.000 | | 0.157 | Mar 2014 | - | | 0.157 | Continuing | Continuing | Continuing |
| MAGTF C2 | C/FFP | Kalman Inc:Virginia Beach, VA | 0.000 | 0.237 | Dec 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.237 | |
| MAGTF C2 | C/FFP | NSMA:Arlington, VA | 0.000 | 0.523 | Feb 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.523 | |
| IDS | C/CPFF | SPAWAR:Charleston, SC | 0.000 | 0.054 | Jan 2013 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.054 | |
| MAGTF C2 | C/FP | SPAWAR:Charleston, SC | 0.000 | 0.450 | Jan 2013 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.450 | |
| | | **Subtotal** | 3.815 | 2.773 | | 2.070 | | 0.913 | | 0.000 | | 0.913 | | | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Remarks**

IDS - NSWC CRANE and Dahlgren provide engineering support, research studies, validation and verification
IDS - MCSC/CEOss commence research studies, and cost analysis activities

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAGTF C2 | WR | MCOTEA:Quantico, VA | 0.857 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| MAGTF C2 | WR | MCTSSA:Camp Pendleton, CA | 4.959 | 0.622 | Jan 2012 | 1.410 | Dec 2012 | 1.500 | Nov 2013 | - | | 1.500 | Continuing | Continuing | Continuing |
| MAGTF C2 | WR | NRL:Washington, DC | 0.400 | 0.400 | Feb 2012 | 0.421 | Jan 2013 | 0.000 | | - | | 0.000 | 0.000 | 1.221 | |
| JBC-P | C/CPFF | MCOTEA:Quantico, VA | 0.372 | 0.364 | Mar 2012 | 0.400 | Dec 2012 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| JBC-P | WR | MCTSSA:Camp Pendleton, CA | 0.048 | 0.048 | Jan 2012 | 0.025 | Dec 2012 | 0.030 | Dec 2013 | - | | 0.030 | Continuing | Continuing | Continuing |
| JBC-P | WR | SPAWAR:Charleston, SC | 0.614 | 0.490 | Jan 2012 | 0.400 | Dec 2012 | 0.425 | Dec 2013 | - | | 0.425 | 0.000 | 1.929 | |
| JBC-P | MIPR | DISA/JITC:Ft. Huachuca, AZ | 0.000 | 0.000 | | 0.025 | Dec 2012 | 0.030 | Dec 2013 | - | | 0.030 | 0.000 | 0.055 | |
| JBCP | C/FP | MCSC:Quantico, VA | 0.000 | 0.305 | Jul 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.305 | |
| JBCP | MIPR | EPG:Ft. Huachuca, AZ | 0.000 | 0.135 | Jun 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.135 | |
| BFSA | WR | MCTSSA:Camp Pendleton, CA | 0.474 | 0.000 | | 0.010 | Jan 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| BFSA | WR | MCOTEA:Quantico, VA | 1.235 | 0.185 | Jan 2012 | 0.050 | Jan 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| BFSA | MIPR | DISA/JITC:Ft. Huachuca, AZ | 0.070 | 0.025 | Feb 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BFSA | WR | SPAWAR:Charleston, SC | 4.499 | 0.140 | Mar 2012 | 0.141 | Dec 2012 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| TCO | C/CPFF | SPAWAR:Charleston, SC | 0.000 | 0.000 | | 0.325 | Feb 2013 | 0.330 | Jan 2014 | - | | 0.330 | Continuing | Continuing | Continuing |
| TCO | MIPR | JITC:Ft. Huachuca, AZ | 0.550 | 0.000 | | 0.125 | Feb 2013 | 0.052 | Feb 2014 | - | | 0.052 | 0.000 | 0.727 | |
| AFATDS | WR | MCTSSA:Camp Pendleton, CA | 2.431 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| AFATDS | WR | SPAWAR:Charleston, SC | 2.678 | 0.000 | | 0.411 | Dec 2012 | 0.423 | Dec 2013 | - | | 0.423 | Continuing | Continuing | Continuing |
| AFATDS | WR | MCOTEA:Quantico, VA | 0.580 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| TLDHS | WR | MCOTEA:Quantico, VA | 1.527 | 0.050 | Jul 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| TLDHS | WR | SPAWAR:Charleston, SC | 0.267 | 1.583 | Nov 2011 | 0.435 | Dec 2012 | 0.440 | Dec 2013 | - | | 0.440 | Continuing | Continuing | Continuing |
| TLDHS | WR | DISA/JITC:Ft. Huachuca, AZ | 0.237 | 0.106 | Dec 2011 | 0.155 | Dec 2012 | 0.160 | Dec 2013 | - | | 0.160 | Continuing | Continuing | Continuing |
| TLDHS | WR | NAWCD China Lake:China Lake, CA | 0.139 | 0.014 | Oct 2011 | 0.017 | Dec 2012 | 0.020 | Dec 2013 | - | | 0.020 | Continuing | Continuing | Continuing |
| TLDHS | WR | 46th Test Squadron:Eglin AFB, FL | 0.039 | 0.000 | | 0.023 | Dec 2012 | 0.025 | Dec 2013 | - | | 0.025 | Continuing | Continuing | Continuing |
| TLDHS | C/CPFF | MCSC:Quantico, VA | 0.000 | 0.000 | | 0.125 | Feb 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.125 | |
| TLDHS | Reqn | NSWC Crane:Crane, IN | 0.678 | 0.493 | May 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 22.654 | 4.960 | | 4.498 | | 3.435 | | 0.000 | | 3.435 | | | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

**Management Services ($ in Millions)**

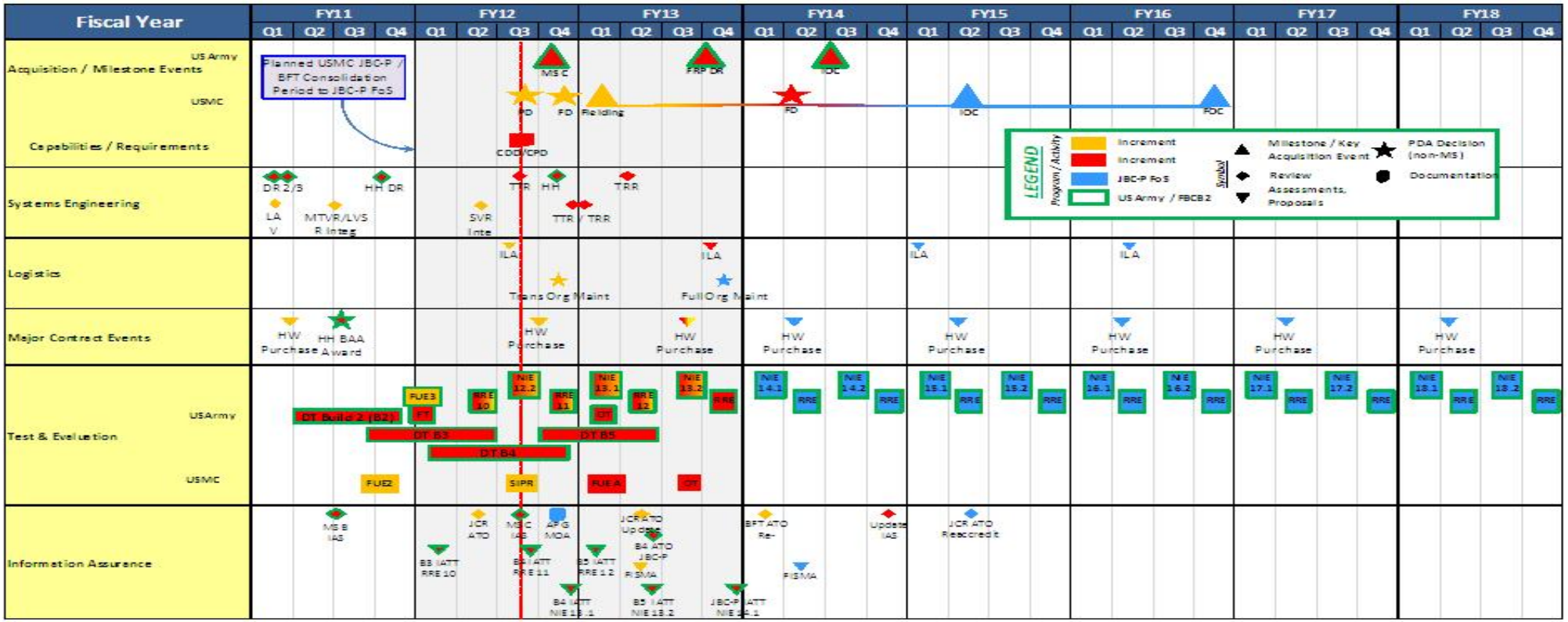
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAGTF C2 | MIPR | CECOM/MITRE:Ft Monmouth, NJ | 3.075 | 2.712 | Feb 2012 | 1.596 | Nov 2012 | 1.623 | Dec 2013 | - | | 1.623 | Continuing | Continuing | Continuing |
| JBC-P | C/FFP | MCSC:Quantico, VA | 0.075 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| JBC-P | MIPR | CECOM/MITRE:Ft Monmouth, NJ | 0.741 | 0.252 | Jan 2012 | 0.290 | Dec 2012 | 0.300 | Dec 2013 | - | | 0.300 | Continuing | Continuing | Continuing |
| JBC-P | Various | MCSC/ Travel:Quantico, VA | 0.064 | 0.020 | Sep 2012 | 0.085 | Sep 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| BFSA | C/FFP | MCSC:Quantico, VA | 2.143 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| BFSA | MIPR | CECOM/MITRE:Ft Monmouth, NJ | 0.875 | 0.252 | Dec 2011 | 0.283 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.410 | |
| TLDHS | MIPR | CECOM/MITRE:Ft Monmouth, NJ | 0.000 | 0.000 | | 0.270 | Dec 2012 | 0.280 | Dec 2013 | - | | 0.280 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 6.973 | 3.236 | | 2.524 | | 2.203 | | 0.000 | | 2.203 | | | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 170.433 | 31.905 | | 21.119 | | 33.019 | | 0.000 | | 33.019 | | | |

**Remarks**

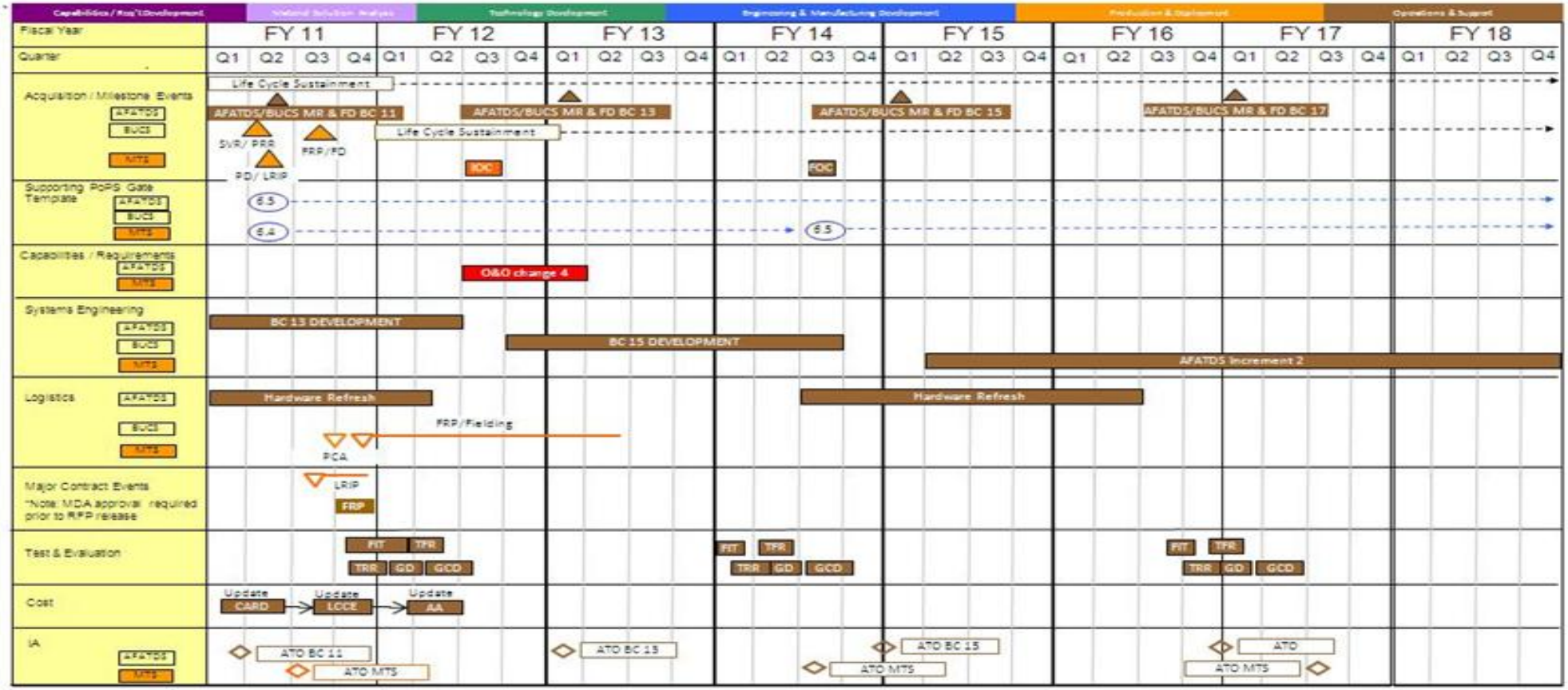
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

## BFSA/JBCP FoS Schedule



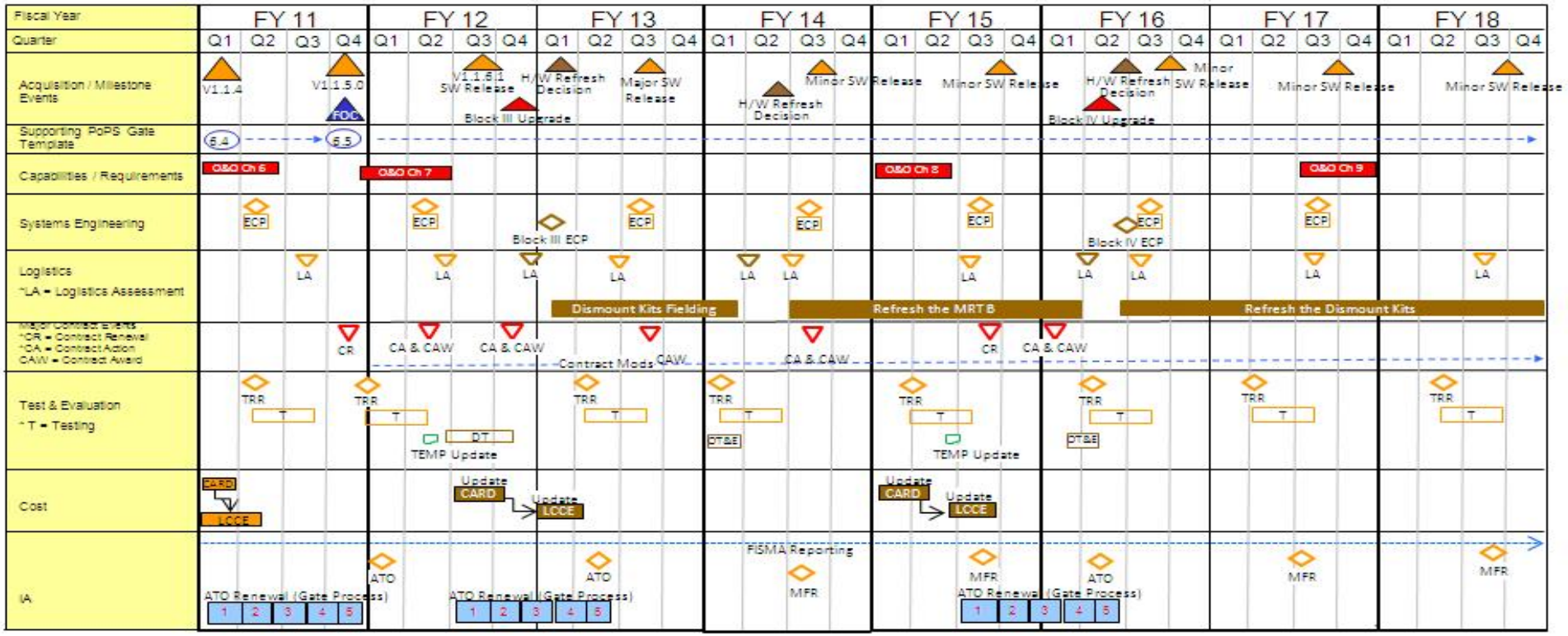
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

# AFATDS Schedule



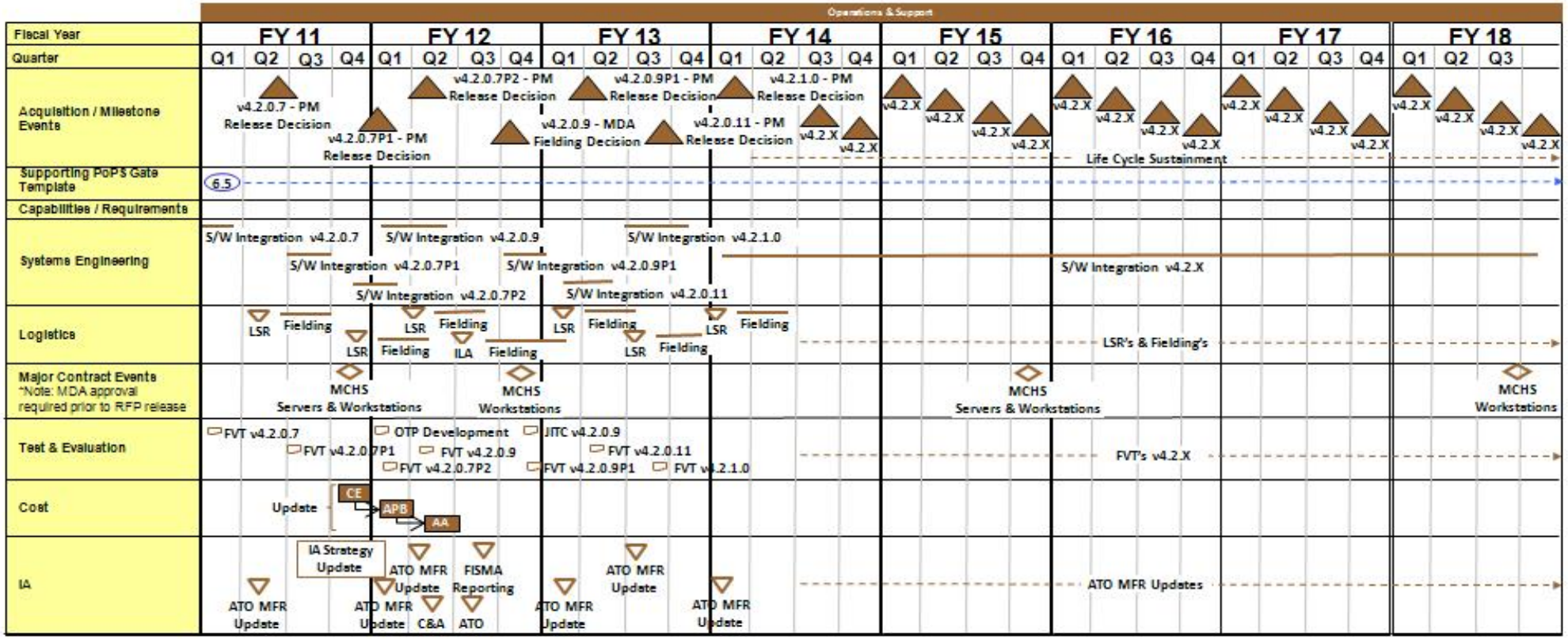
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

# TLDHS Schedule

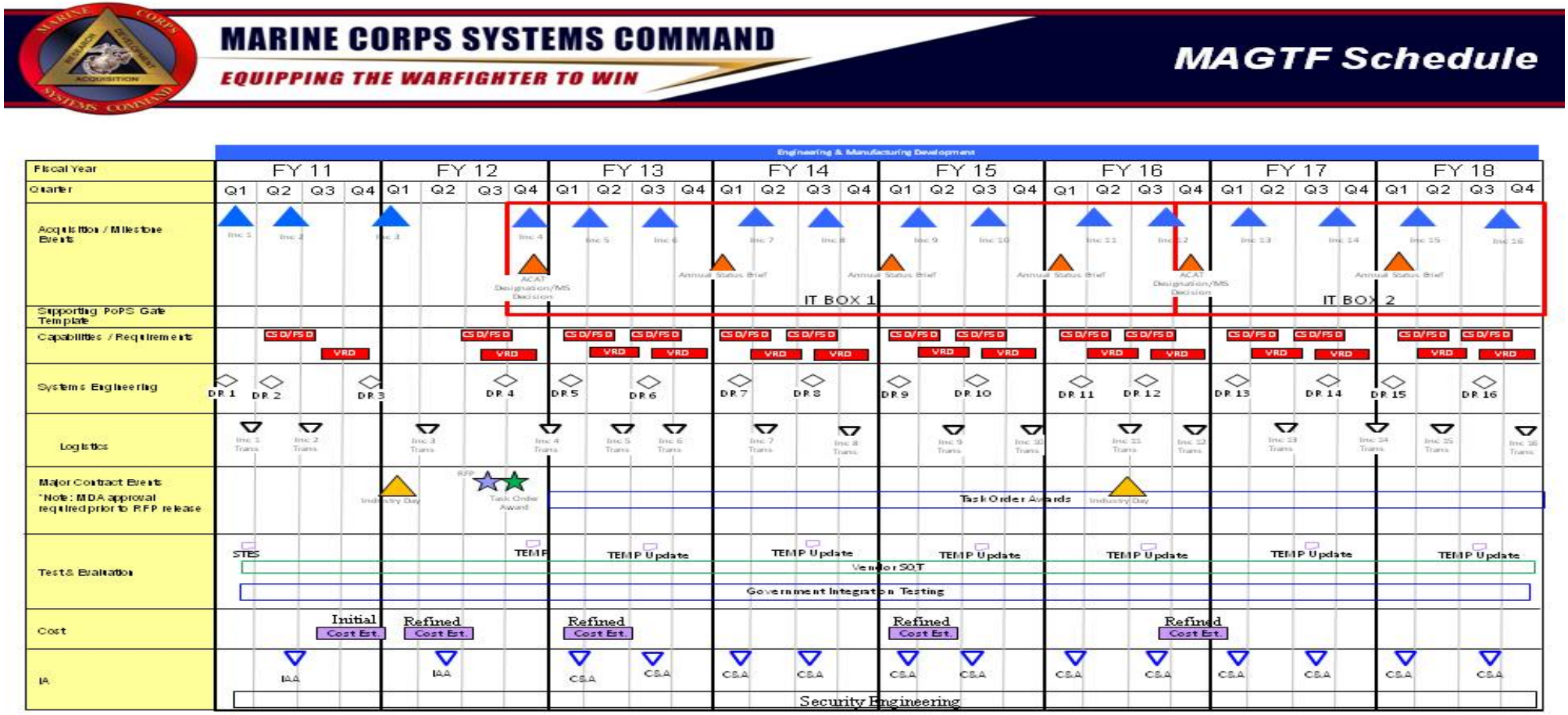


| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

# GCCS-TCO Program Schedule



| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2270: *Exp Indirect Fire Gen Supt Wpn Sys* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2270*** | | | | |
| MAGTF C2 SA JTCW 1.1 Release | 4 | 2012 | 4 | 2012 |
| MAGTF C2 SA TSOA Increment 3 Release | 2 | 2012 | 2 | 2012 |
| MAGTF C2 SA TSOA Increment 4 Release | 4 | 2012 | 4 | 2012 |
| MAGTF C2 SA TSOA Increment 5 Release | 2 | 2013 | 2 | 2013 |
| MAGTF C2 SA TSOA Increment 6 Release | 4 | 2013 | 4 | 2013 |
| MAGTF C2 SA TSOA Increment 7 Release | 2 | 2014 | 2 | 2014 |
| MAGTF CS SA TSOA Increment 8 Release | 4 | 2014 | 4 | 2014 |
| JBC-P FoS Operational Test | 2 | 2013 | 2 | 2013 |
| JBC-P FoS Software and Handheld End User Device Fielding Decison | 2 | 2014 | 2 | 2014 |
| BFSA JCR Capability FRP/FD | 2 | 2012 | 2 | 2013 |
| TCO Fielding Decision | 3 | 2013 | 3 | 2013 |
| AFATDS MC13 (6.8) Software Release | 2 | 2013 | 4 | 2013 |
| AFATDS MC15 (6.8.1) Development/Testing | 3 | 2012 | 1 | 2015 |
| AFATDS Increment II Software Development | 2 | 2015 | 3 | 2018 |
| AFATDS MTS Fielding | 1 | 2012 | 2 | 2013 |
| TLDHS 1.1.6.1 S/W Release | 3 | 2012 | 4 | 2012 |
| TLDHS Maj S/W Release Decision for 1.2.0.x | 3 | 2013 | 4 | 2013 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2273: *Air Ops Cmd & Control (C2) Sys* | 228.138 | 59.435 | 94.071 | 68.669 | - | 68.669 | 73.436 | 24.886 | 23.853 | 18.147 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

Common Aviation Command and Control System (CAC2S) is a coordinated modernization effort to replace the existing aviation command and control equipment of the Marine Air Command and Control System (MACCS) and to provide the Aviation Combat Element with the necessary hardware, software, equipment, and facilities to effectively command, control, and coordinate aviation operations. The CAC2S system will accomplish the MACCS missions with a suite of operationally scalable modules to support the Marine Air Ground Task Force (MAGTF), Joint, and Coalition Forces. The CAC2S integrates the functions of aviation command and control into an interoperable system that will support the core competencies of all Marine Corps warfighting concepts. The CAC2S, in conjunction with MACCS organic sensors and weapons systems, supports the tenets of Expeditionary Maneuver Warfare and fosters joint interoperability. CAC2S Increment I will replace legacy aviation command and control systems in the following Marine aviation agencies: Direct Air Support Center (DASC), Tactical Air Command Center (TACC), and Tactical Air Operations Center (TAOC).

Theater Battle Management Core System (TBMCS) - Joint mandated Air War planning tool for the generation, dissemination and execution of the Air Tasking Order (ATO). TBMCS is an Air Force lead program, which provides the automated tools necessary to manage tactical air operations, execute area air defense and airspace management in the tactical area of operation, and coordinate operations with components of other military services. TBMCS is located at the Tactical Air Command Center (TACC), with remotes located throughout the Marine Air Ground Task Force (MAGTF). It is scalable, allowing for joint, coalition and service specific operations. It is an evolutionary acquisition program.

Composite Tracking Network (CTN) - will provide the Marine Air Ground Task Force (MAGTF) Commander a ground based sensor netting solution that significantly improves situational awareness by correlating sensor measurement data (target position, speed, heading, Identification Friend and Foe (IFF), etc.) from local and remote radars in the Cooperative Engagement Capability (CEC) network, which is then provided to the warfighter in the form of composite, real-time, air surveillance tracks. AN/MSQ-143A (V)I - funding will allow CTN to execute transportability testing and conduct a Field User Evaluation (FUE) of this system configuration. These events will wrap up the Testing for this configuration and allow the CTN Program Office to go to the Milestone Decision Authority (MDA) for a fielding decision for this system configuration.

The Marine Air Command and Control System (MACCS) Sustainment - consists of various command and control agencies designed to provide the Aviation Combat Element (ACE) commander with the ability to monitor, supervise and influence the application of Marine aviation assets in support of Marine Air Ground Task Force

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

(MAGTF) operations. The MACCS Sustainment provides funding to keep these fielded systems ready, relevant and capable until their functions are replaced by the Common Aviation Command and Control System (CAC2S).

Joint Cooperative Target ID Ground (JCTI-G) - the program was refocused late in FY11 to reflect the results of a JFCOM led AoA that determined the best path to follow for continued reduction of fratricide incidents. Funding to support Fielded and Planned Capability Improvements (FPCI) which will contribute to Combat Identifications (CID) and fratricide mitigation. Army and Marine Corps agreement to support closure of the Fires-On-Dismount fratricide mitigation gap and to refocus on FPCI requirements.

Combat Operations Center (COC) AN/TSQ-239 (V)2/3/4 is a deployable, self-contained, modular, scalable and centralized facility which provides digital, shared Command and Control/Situational Awareness functionalities to enhance the Common Operational Picture (COP) for the Command Element, Ground Command Element, Air Combat Element, and Logistics Combat Element. It is a commercial-off-the-shelf integrated hardware solution using unit provided radios, re-hosted tactical data systems, and available Marine Corps prime movers to transport the system. Funds support testing and Information Assurance (IA) certification activities, integration of emerging technology, and On The Move (OTM) capabilities.

Remote Video Viewing Terminal (RVVT) - Provides warfighter with video connectivity to multiple types of aerial platforms (Raven B, Puma, Micro-UAS, Shadow, Predator, Fire Scout, and Litening Pod on P-3, AV8-B, and F/A-18). Data is displayed to Regimental Combat Teams (RCT), Forward Observers (FO) and Forward Air Controller (FAC) operators who coordinate with higher headquarters for fires.

Joint Interface Control Office (JICO) Support System (JSS) - will provide net-centric services through a transformational management system to enable internet protocol-based networks of the future to operate efficiently with current tactical networks. It will manage complex tactical networks through an automated toolset and information repository that enables planning, management and analysis of tactical data link communications before, during and after operations.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** *JICO Support System: Program Management Support | 0.381 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>Funding supported Program Office travel as an active participant with USAF to support Increment 2 development. | | | |
| ***Title:*** *JCTI-G: FPCI Programs | 13.404 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>Funding supported Fielded and Planned Capability Improvements (FPCI) which contributes to Combat Identifications (CID) and fratricide mitigation. Army and Marine Corps agreement to support closure of the Fires-On-Dismount fratricide mitigation gap and to refocus on FPCI requirements. | | | |
| ***Title:*** *COC: Continued Capability Solution | 3.981 | 6.304 | 3.510 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Completed (V)1 and OTM design, documentation, and testing.<br>***FY 2013 Plans:***<br>Conduct analysis of technologies for integration in COC Baseline.<br>***FY 2014 Plans:***<br>Conduct analysis of technologies for integration in COC Baseline. | | | |
| ***Title:*** *COC: Test and Evaluation | 0.000 | 0.149 | 0.185 |
| ***Articles:*** | | 0 | 0 |
| ***FY 2013 Plans:***<br>Funds MCOTEA/JTIC testing and analysis for COC.<br>***FY 2014 Plans:***<br>Funds MCOTEA/JTIC testing and analysis for COC. | | | |
| ***Title:*** *CTN: Engineering Development Model (EDM). | 2.234 | 1.019 | 3.517 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Funded Cooperative Engagement Capability (CEC) accredidation on the USS WASP, SW Maintenance Support, Baseline Development.<br>***FY 2013 Plans:***<br>Funds CEC WASP Support, SW Maintenance Support, Baseline Development, USG-4B Analysis/Extraction<br>***FY 2014 Plans:***<br>Funds SW Maintenance Support, Baseline Development, USG-4B Analysis/Extraction, WASP S/W Updates, Data Analysis, Safety, System Engineering. Antenna Trailer Development, Common Array Block - Expeditionary (CAB-E) Antenna Development. The driving factor for the increase in funding in FY14 is the CAD-E Development. | | | |
| ***Title:*** *CTN: Certification of Interfaces | 3.852 | 1.167 | 3.510 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Funding was expended on Data Collection and Analysis, SW Independent Validation and Verification (IV&V) in preparation for FOT&E from Sept - Oct 2012.<br>***FY 2013 Plans:***<br>Funds Data Collection and Analysis, CTN integration testing with Common Aviation Command and Control System (CAC2S) and Ground/Air Task Oriented Radar (G/ATOR) Testing<br>***FY 2014 Plans:***<br>Continue to fund Data Collection and Analysis, CTN integration testing with Common Aviation Command and Control System (CAC2S) and Ground/Air Task Oriented Radar (G/ATOR) Testing. Also funds Common Array Block (CAB) testing/verification/ updates and supports an accelerated Mid-Term Inter-operability Improvement Program. Ramp up System-to-System engineering to support interface between CTN. CAC2S, and G/ATOR is the driving factor for the increase in FY14. | | | |
| ***Title:*** *CTN: Program Management Support.<br>***Articles:*** | 0.400<br>0 | 1.636<br>0 | 3.691<br>0 |
| ***FY 2012 Accomplishments:***<br>Funding was expended on MCSC Travel, Technical Services Corporation (TSC) support, Operational Test support, and SW support.<br>***FY 2013 Plans:***<br>Funds MCSC Travel, Dahlgren engineering support, Test support, and SW support.<br>***FY 2014 Plans:***<br>Funds MCSC Travel, Dahlgren engineering support, test support, and S/W support. Additionally, funding will also support systems engineering and introduction of updates to the software baseline which attributes to the increase in funding from FY13 to FY14. | | | |
| ***Title:*** *MACCS SUSTAINMENT: TAOM, ADCP and CDLS.<br>***Articles:*** | 6.775<br>0 | 8.988<br>0 | 4.200<br>0 |
| ***FY 2012 Accomplishments:***<br>Conducted SFT and field 4 new CDLS to each TACC; test and field ADSI v.15; integrate Mode5/S into the TAOM; monitor the DSAN Life Cycle Support (LCS) contract; and repair/replace MERWS and 3:1 shelters as required. Migrate the TAOM/MTAOM software baseline from CMS to C++. Conducted testing and field software baseline as v. 7.0<br>***FY 2013 Plans:***<br>Funding supports MITRE Engineering efforts; JITC Support; TAOC Life Cycle Support Contract.<br>***FY 2014 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Funding continues to support MITRE Engineering efforts; JITC Support; TAOC Life Cycle Support Contract. | | | |
| ***Title:*** *RVVT: Preparation of MS C and Full Rate Production and Fielding activities | 2.495 | 0.589 | 2.620 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Developed a strategy to merge efforts with The Target Location Designation and Handoff System (TLDHS) to meet the fleets need of a combined capability to connect to VideoScout Systems to view video feed. Conduct development and testing efforts for Type I capable static COC VideoScout system (MC/3).<br>***FY 2013 Plans:***<br>Conduct pre-Milestone activities. Conduct development and testing efforts for Type I capable static COC VideoScout system (MC/3).<br>***FY 2014 Plans:***<br>The increase in funding from FY13 to FY14 completes pre-Milestone activities. Additionally, conducts development and testing efforts for non-static TLDHS and VideoScout merged system and the next generation of a static COC VideoScout. | | | |
| ***Title:*** *TBMCS: Program management support. | 0.332 | 0.500 | 0.540 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Funding was expended for Program Management support.<br>***FY 2013 Plans:***<br>Continue Program Management support.<br>***FY 2014 Plans:***<br>Continue Program Management support. | | | |
| ***Title:*** *TBMCS: Test and Evaluation for TBMCS Upgrades Joint Interoperability. | 0.230 | 2.403 | 2.667 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Funding was expended for Test and Evaluation for TBMCS Upgrades Joint Interoperability.<br>***FY 2013 Plans:***<br>Funding supports Test and Evaluation for TBMCS Upgrades Joint Interoperability.<br>***FY 2014 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Continue Test and Evaluation for TBMCS Upgrades Joint Interoperability. | | | |
| ***Title:*** *CAC2S: Program Management Support.<br>***Articles:*** | 0.000 | 4.000<br>0 | 4.142<br>0 |
| ***FY 2013 Plans:***<br>Funding will be used for program management support which includes business/financial, engineering and logistical support for Phase 1 and 2 efforts.<br>***FY 2014 Plans:***<br>Continue program management support which includes business/financial, engineering and logistical support for Phase 1 and 2 efforts. | | | |
| ***Title:*** *CAC2S: Test and Evaluation and Information Assurance Certification.<br>***Articles:*** | 2.242<br>0 | 3.265<br>0 | 4.235<br>0 |
| ***FY 2012 Accomplishments:***<br>Funding was used for Information Assurance certification test scans.<br>***FY 2013 Plans:***<br>Funds continue to support Phase 2 Information Assurance certification test scans.<br>***FY 2014 Plans:***<br>Funds continue to support Phase 2 Information Assurance certification test scans. Increase in funding is due to increased phase 2 IA certification test scans to coincide with the four DT events occurring this year. | | | |
| ***Title:*** *CAC2S: EDM, TR, Gov't DT<br>***Articles:*** | 4.152<br>0 | 37.824<br>0 | 18.266<br>0 |
| ***FY 2012 Accomplishments:***<br>Funding was used to award contract in August 2012 to one of the four demostration contractors performing Phase 2 development and integration of the Sensor Data Subsystem. Funding was expended by Phase 2 SDS contractor and NSWC Crane, Dahlgren and other support activities.<br>***FY 2013 Plans:***<br>Continue Phase 2 development and integration of the Processing Display Subsystem and Sensor Data Subsystem continues. Four (4) Engineering and Development Models (EDM) will be built by the Phase 2 contractor this year. Funding will be expended by Phase 2 SDS contractor and NSWC Crane, Dahlgren and other support activities.<br>***FY 2014 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Continue Phase 2 development and integration of the Processing Display Subsystem and Sensor Data Subsystem continues with developmental testing occurring using the EDM's this year. Funding will be expended by Phase 2 SDS contractor and NSWC Crane, Dahlgren and other support activities. Decrease in funding is due to the projected ramp down of the Engineering, Manufacturing and Design Phase of CAC2S Phase 2. Phase 2 production begins 1st Qtr FY15. | | | |
| ***Title:*** *CAC2S: Software development, DT, FUE, OA. | 14.436 | 22.800 | 15.215 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Funding was expended to support Phase 2 EDM data and information fusion component hardware. Software development began with the award of the Phase 2 contract in August 2012. | | | |
| ***FY 2013 Plans:***<br>Continue Phase 2 EDM data and information fusion, component hardware integration and software development. | | | |
| ***FY 2014 Plans:***<br>Continue Phase 2 EDM data and information fusion, component hardware integration and software development. Also, four developmental testing events will be supported with this funding. Decrease in funding is due to the projected ramp down of the Engineering, Manufacturing and Design Phase, specificially software development of CAC2S Phase 2. Phase 2 production begins 1st Qtr FY15. | | | |
| ***Title:*** *CAC2S: Engineering, Management and Logistics Support | 4.521 | 3.427 | 2.371 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Funding was expended for Engineering, Management & Logistics Support | | | |
| ***FY 2013 Plans:***<br>Continue Engineering, Management & Logistics Support | | | |
| ***FY 2014 Plans:***<br>Continue Engineering, Management & Logistics Support | | | |
| **Accomplishments/Planned Programs Subtotals** | 59.435 | 94.071 | 68.669 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/464017: *CTN* | 7.016 | 0.100 | 0.307 | | 0.307 | 8.832 | 0.015 | 0.000 | 0.000 | Continuing | Continuing |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/464002: *MACCS Sustainment* | 17.005 | 23.114 | 10.099 | | 10.099 | 2.861 | 0.885 | 0.046 | 0.047 | Continuing | Continuing |
| • PMC/464003: *TBMCS* | 6.580 | 3.585 | 4.465 | | 4.465 | 3.852 | 4.685 | 3.721 | 3.788 | Continuing | Continuing |
| • PMC/419005: *COC* | 16.848 | 1.420 | 16.273 | | 16.273 | 15.500 | 15.709 | 15.319 | 15.581 | Continuing | Continuing |
| • PMC/464023: *RVVT* | 2.923 | 0.001 | 2.195 | | 2.195 | 5.775 | 6.952 | 14.647 | 14.859 | Continuing | Continuing |
| • PMC/464013: *CAC2S* | 15.864 | 0.065 | 0.080 | | 0.080 | 18.300 | 26.898 | 54.700 | 49.919 | Continuing | Continuing |
| • PMC/700000: *CAC2S Initial Spares* | 0.000 | 0.000 | 0.000 | | 0.000 | 1.700 | 2.700 | 3.000 | 3.400 | Continuing | Continuing |

**Remarks**

**D. Acquisition Strategy**

CAC2S will employ an evolutionary acquisition strategy utilizing an incremental and phased approach for development and fielding of the CAC2S. The CPD identifies two increments to achieve the full requirements of CAC2S. The current acquisition strategy addresses Increment I of the CAC2S development process and focuses on the requirements that will modernize the assault and air support, air defense and control, and ACE battle management capabilities of the MACCS. Increment I of the CAC2S will be accomplished through a two phased approach. Phase 1 will address the requirements to establish the baseline CAC2S capabilities for the MACCS and improve AC2 performance and effectiveness. Phase 2 will address the requirements for remaining ACE BMC2 requirements

Theater Battle Management Core Systems (TBMCS) - TBMCS is an ACAT III, USAF Program with joint interest/oversight. It was mandated by the Chairman, Joint Chiefs of Staff in July 93 for Air Tasking Order (ATO) Interoperability among all services. The USMC will not be letting any competitive contracts for TBMCS, but following the USAF lead, utilizing USAF TBMCS contracts and fielding only the joint modules of TBMCS. As USMC unique requirements are identified and funded, they will be provided to the USAF (to include funding) for inclusion within TBMCS utilizing the USAF delivery order (fixed price) contract. Over the course of the FYDP, the USMC will leverage USAF software support activities vice funding strictly USMC software support.

MACCS SUSTAINMENT - The acquisition strategy implemented by the MACCS Sustainment Program Office is to maintain the readiness, relevance, and capabilities of the portfolio of post-Milestone C systems through Post Deployment Software Support (PDSS) activities, active refresh of obsolete hardware items, and the implementation of system improvements/modifications in accordance with approved systems engineering processes. Engineering changes to the systems make maximum use of Commercial Off-The-Shelf (COTS), Government Off-The-Shelf (GOTS), and Non-Developmental Items (NDI) in order to decrease risk, leverage developed capabilities and support apparatus, and minimize investment expenditures. These activities are performed by Original Equipment Manufacturer (OEM) commercial entities under contract to Marine Corps Systems Command (MCSC) or by Naval Surface Warfare Center (NSWC) Crane as the MACCS Sustainment Program In-Service Engineering Agent (ISEA). The next major milestone for the MACCS Sustainment Programs is Phase-out or Disposal as the replacement Common Aviation Command and Control System (CAC2S) reaches full operational capability.

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

CTN - The USMC's CTN acquisition strategy is to participate in the USN's program procurement and testing, making necessary modifications to support the Marine Corps' requirement.
RVVT - Program Office will utilize an existing SPAWAR IDIQ contract to procure Commercial Off-The-Shelf (COTS) capability with limited development required to test interoperability with Manned and Unmanned Air Platforms.

COC - The Combat Operations Center (COC) AN/TSQ-239 (V)2/3/4 is the foundation of USMC C2, meeting near term communications and network requirements in OEF. There is a continuing developmental effort to evolve the COC into a fully integrated MAGTF C2 capability. FY13 and FY14 supports continual tech refresh, technology insertion, modernization and software upgrade releases.

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTN | WR | NSWC:Crane, IN | 3.736 | 0.000 | | 0.000 | | 0.044 | Mar 2014 | - | | 0.044 | 0.000 | 3.780 | |
| CTN | C/CPFF | NAVSEA PEO IWS:Washington, DC | 6.956 | 2.000 | Jul 2012 | 0.754 | Jan 2013 | 3.766 | Jan 2014 | - | | 3.766 | 0.000 | 13.476 | |
| MACCS Sustainment | Reqn | NGES:Woodland Hills, CA | 17.415 | 0.974 | May 2012 | 1.000 | May 2013 | 2.870 | May 2014 | - | | 2.870 | Continuing | Continuing | Continuing |
| MACCS Sustainment | WR | NSWC:Crane, IN | 1.664 | 0.447 | Nov 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.111 | |
| MACCS Sustainment | Reqn | KATMAI:Van Nuys, CA | 0.000 | 1.455 | Apr 2012 | 2.126 | Jan 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| MACCS Sustainment | C/FFP | ULTRA:Austin, TX | 0.000 | 0.000 | | 1.160 | Jul 2013 | 0.000 | | - | | 0.000 | 0.000 | 1.160 | |
| COC | WR | SPAWAR:Charleston, SC | 11.043 | 0.581 | Apr 2012 | 1.449 | Feb 2013 | 3.510 | Jan 2014 | - | | 3.510 | Continuing | Continuing | Continuing |
| COC | Reqn | General Dynamics:Not Specified | 27.811 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| COC | Reqn | Coherent:Johnstown, PA | 0.299 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.299 | |
| COC | WR | NSWC:Crane, IN | 0.220 | 0.300 | Apr 2012 | 0.250 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.770 | |
| COC | C/CPIF | TBD:Not Specified | 0.305 | 0.645 | Aug 2012 | 1.152 | Mar 2013 | 0.000 | | - | | 0.000 | 0.000 | 2.102 | |
| JCTI-G | WR | NSWC:Crane, IN | 1.617 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| JCTI-G Pax 1 | WR | NAVAIR:Pax River, MD | 0.145 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.145 | |
| JCTI-G Pax 2 | Reqn | NAVAIR:Pax River, MD | 1.830 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.830 | |
| JCTI-G FPCI Efforts | Various | Various:Various | 10.479 | 13.404 | Mar 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 23.883 | |
| CAC2S | WR | NSWC:Crane, IN | 22.525 | 0.800 | Nov 2012 | 0.720 | Oct 2012 | 0.500 | Nov 2013 | - | | 0.500 | 0.000 | 24.545 | |
| CAC2S | C/CPIF | General Dynamics:Quantico, VA | 8.603 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 8.603 | |
| CAC2S | C/FFP | Phase 2 Contractor:Quantico, VA | 20.393 | 15.000 | Sep 2012 | 57.931 | Nov 2012 | 28.829 | Nov 2013 | - | | 28.829 | 0.000 | 122.153 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAC2S | WR | NSWC:Dahlgren, VA | 25.519 | 3.907 | Nov 2011 | 5.300 | Nov 2012 | 5.000 | Nov 2013 | - | | 5.000 | 0.000 | 39.726 | |
| CAC2S | MIPR | NAVSEA:Washington, DC | 0.000 | 0.656 | Jan 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.656 | |
| COC | WR | NSWC:Dahlgren, VA | 1.126 | 1.774 | Jan 2012 | 1.800 | Feb 2013 | 0.000 | | - | | 0.000 | 0.000 | 4.700 | |
| COC | WR | NSWC:Panama City, FL | 0.500 | 0.681 | Jan 2012 | 0.943 | Jan 2013 | 0.000 | | - | | 0.000 | 0.000 | 2.124 | |
| | | **Subtotal** | 162.186 | 42.624 | | 74.585 | | 44.519 | | 0.000 | | 44.519 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTN | WR | NSWC:Dahlgren, VA | 0.700 | 0.933 | Jan 2012 | 0.571 | Jan 2013 | 1.550 | Jan 2014 | - | | 1.550 | 0.000 | 3.754 | |
| CTN | WR | NSWC:PHD | 0.224 | 0.035 | Feb 2012 | 0.000 | | 0.412 | Feb 2014 | - | | 0.412 | 0.000 | 0.671 | |
| CTN | WR | NSWC:Crane, IN | 0.400 | 0.000 | | 0.000 | | 0.154 | Feb 2014 | - | | 0.154 | 0.000 | 0.554 | |
| CTN | MIPR | MACS:Quantico, VA | 0.140 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.140 | |
| CTN | WR | NAVSEA:Wallops Island, VA | 0.316 | 0.056 | Jan 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.372 | |
| CTN | Various | Travel-TAD:Not Specified | 0.755 | 0.134 | Sep 2012 | 0.100 | Sep 2013 | 0.243 | Sep 2014 | - | | 0.243 | 0.000 | 1.232 | |
| CTN | WR | SPAWAR:Charleston, SC | 0.435 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.435 | |
| MACCS Sustainment | WR | NSWC:Crane, IN | 0.089 | 0.000 | | 0.949 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.038 | |
| MACCS Sustainment | Reqn | NGES:Woodland Hills, CA | 0.000 | 0.800 | Nov 2011 | 0.500 | Nov 2012 | 0.800 | Nov 2013 | - | | 0.800 | Continuing | Continuing | Continuing |
| COC | MIPR | NUWC:Newport, RI | 0.200 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.200 | |
| JCTI-G | Reqn | Tecolote:Arlington, VA | 1.917 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| CAC2S | WR | Travel-TAD:Not Specified | 1.000 | 0.030 | Oct 2011 | 0.500 | Oct 2012 | 0.425 | Oct 2013 | - | | 0.425 | 0.000 | 1.955 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAC2S | WR | NSWC Carderock:Carderock, MD | 0.250 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.250 | |
| CAC2S | C/CPAF | AMSSA:APG, Mayrland | 0.000 | 0.260 | Nov 2011 | 0.225 | Nov 2012 | 0.225 | Nov 2013 | - | | 0.225 | 0.000 | 0.710 | |
| CAC2S | WR | SPAWAR:Charleston, SC | 0.000 | 0.110 | Nov 2011 | 0.300 | Nov 2012 | 0.300 | Nov 2013 | - | | 0.300 | 0.000 | 0.710 | |
| RVVT | C/FFP | QNA:Stafford, VA | 1.052 | 0.543 | Mar 2012 | 0.589 | Mar 2013 | 0.620 | Mar 2014 | - | | 0.620 | 0.000 | 2.804 | |
| CAC2S | WR | JITC:Fort Huachuca, AZ | 0.961 | 0.025 | Nov 2011 | 0.200 | Nov 2012 | 0.100 | Nov 2013 | - | | 0.100 | 0.000 | 1.286 | |
| CAC2S | MIPR | MITRE:Boston, MA | 4.863 | 0.765 | Nov 2011 | 1.500 | Nov 2012 | 1.500 | Nov 2013 | - | | 1.500 | 0.000 | 8.628 | |
| CTN | C/CPFF | NAVSEA PEO IWS:Washington DC | 0.000 | 0.000 | | 0.243 | Jan 2013 | 3.500 | Jan 2014 | - | | 3.500 | 0.000 | 3.743 | |
| CAC2S | WR | MACCS-X:Camp Pendleton | 1.564 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.564 | |
| CAC2S | WR | MCTSSA:Camp Pendleton | 2.606 | 0.010 | Jan 2012 | 0.500 | Nov 2012 | 0.100 | Nov 2013 | - | | 0.100 | 0.000 | 3.216 | |
| CAC2S | WR | NSWC Corona:Corona, CA | 2.903 | 0.000 | | 1.200 | Nov 2012 | 1.300 | Nov 2013 | - | | 1.300 | 0.000 | 5.403 | |
| CTN | WR | NSWC Corona:Corona, CA | 0.000 | 0.000 | | 0.000 | | 0.816 | Mar 2014 | - | | 0.816 | 0.000 | 0.816 | |
| CAC2S | C/FP | BAH:Stafford, VA | 2.003 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.003 | |
| SIAP | C/FP | RNB Technologies:Stafford VA | 5.374 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 5.374 | |
| TBMCS | Various | Travel:Not Specified | 0.050 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.050 | |
| JSS | WR | MCTSSA:Camp Pendleton | 0.183 | 0.084 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.267 | |
| CAC2S | C/IDIQ | SPAWAR:Pacific | 0.000 | 0.960 | Sep 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.960 | |
| CAC2S | C/FP | RNB Technologies:Stafford, VA | 0.000 | 0.778 | May 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.778 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MACCS Sustainment | C/FFP | SPAWAR Charleston:Charleston, SC | 0.000 | 0.963 | Aug 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.963 | |
| CAC2S | C/FP | American Systems Corp.:Chantilly, VA | 0.000 | 1.000 | Nov 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.000 | |
| | | **Subtotal** | 27.985 | 7.486 | | 7.377 | | 12.045 | | 0.000 | | 12.045 | | | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAC2S | WR | NSWC Port Hueneme:Port Hueneme, CA | 0.000 | 0.139 | Nov 2011 | 0.440 | Nov 2012 | 0.450 | Nov 2013 | - | | 0.450 | 0.000 | 1.029 | |
| CTN | C/BA | PHD:JITC | 0.000 | 0.000 | | 0.000 | | 0.033 | Feb 2014 | - | | 0.033 | 0.000 | 0.033 | |
| TBMCS | C/FFP | Lockheed Martin:Colorado Springs, CO | 0.000 | 0.000 | | 2.403 | Dec 2012 | 2.697 | Dec 2013 | - | | 2.697 | 0.000 | 5.100 | |
| CTN | WR | MCSC CTQ:Quantico, VA | 0.025 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.025 | |
| CTN | WR | PEO IWS 6:St. Petersburg, FL | 4.017 | 2.313 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 6.330 | |
| CTN | WR | NSWC Corona:Corona, CA | 1.114 | 0.220 | Feb 2012 | 0.177 | Nov 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.511 | |
| CTN | WR | NSWC DD:Dahlgren, VA | 0.942 | 0.320 | Aug 2012 | 0.143 | Nov 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.405 | |
| CTN | C/CPFF | NAVSEA PEO IWS:Washington DC | 0.000 | 0.000 | | 0.298 | Jan 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.298 | |
| CTN | WR | Fort Huachuca:JITC | 0.008 | 0.035 | Mar 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.043 | |
| CTN | WR | MCOTEA:Quantico VA | 1.144 | 0.200 | Jan 2012 | 0.000 | | 0.200 | Feb 2014 | - | | 0.200 | 0.000 | 1.544 | |
| CTN | WR | MCSC:Quantico, VA | 3.876 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 3.876 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTN | WR | NSWC:Crane, IN | 1.064 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.064 | |
| MACCS Sustainment | WR | Aberdeen Test Center:Aberdeen, MD | 0.273 | 0.211 | Nov 2011 | 0.200 | Nov 2012 | 0.230 | Nov 2013 | - | | 0.230 | Continuing | Continuing | Continuing |
| MACCS Sustainment | Reqn | NGES:Woodland Hills, CA | 0.914 | 1.008 | Apr 2012 | 1.516 | Nov 2012 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| MACCS Sustainment | Various | MCOTEA:Quantico, VA | 0.000 | 0.467 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.467 | |
| MACCS Sustainment | MIPR | DISA:Not Specified | 0.000 | 0.200 | May 2012 | 0.537 | May 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.737 | |
| RVVT | WR | SSC-LANT:North Charleston, SC | 0.000 | 1.952 | Aug 2012 | 0.000 | | 2.000 | Oct 2013 | - | | 2.000 | 0.000 | 3.952 | |
| COC | MIPR | MCOTEA:Quantico, VA | 0.728 | 0.000 | | 0.149 | Mar 2013 | 0.185 | Mar 2014 | - | | 0.185 | 0.000 | 1.062 | |
| COC | MIPR | JTIC:Fort Huachuca, AZ | 0.140 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.140 | |
| TBMCS | WR | MCOTEA:Quantico, VA | 0.560 | 0.000 | | 0.150 | Nov 2012 | 0.160 | Nov 2013 | - | | 0.160 | 0.000 | 0.870 | |
| CAC2S | WR | MCOTEA:Quantico, VA | 6.350 | 0.650 | Nov 2011 | 1.000 | Nov 2012 | 1.500 | Nov 2013 | - | | 1.500 | 0.000 | 9.500 | |
| TBMCS | MIPR | Englin AFB:Englin AFB, FL | 0.000 | 0.230 | Jul 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.230 | |
| | | **Subtotal** | 21.155 | 7.945 | | 7.013 | | 7.455 | | 0.000 | | 7.455 | | | |

**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTN | WR | NSWC Dahlgren:Dahlgren, VA | 0.000 | 0.000 | | 1.536 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.536 | |
| CTN | WR | MCSC:Quantico, VA | 0.882 | 0.240 | Nov 2011 | 0.000 | | 0.000 | Feb 2014 | - | | 0.000 | 0.000 | 1.122 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

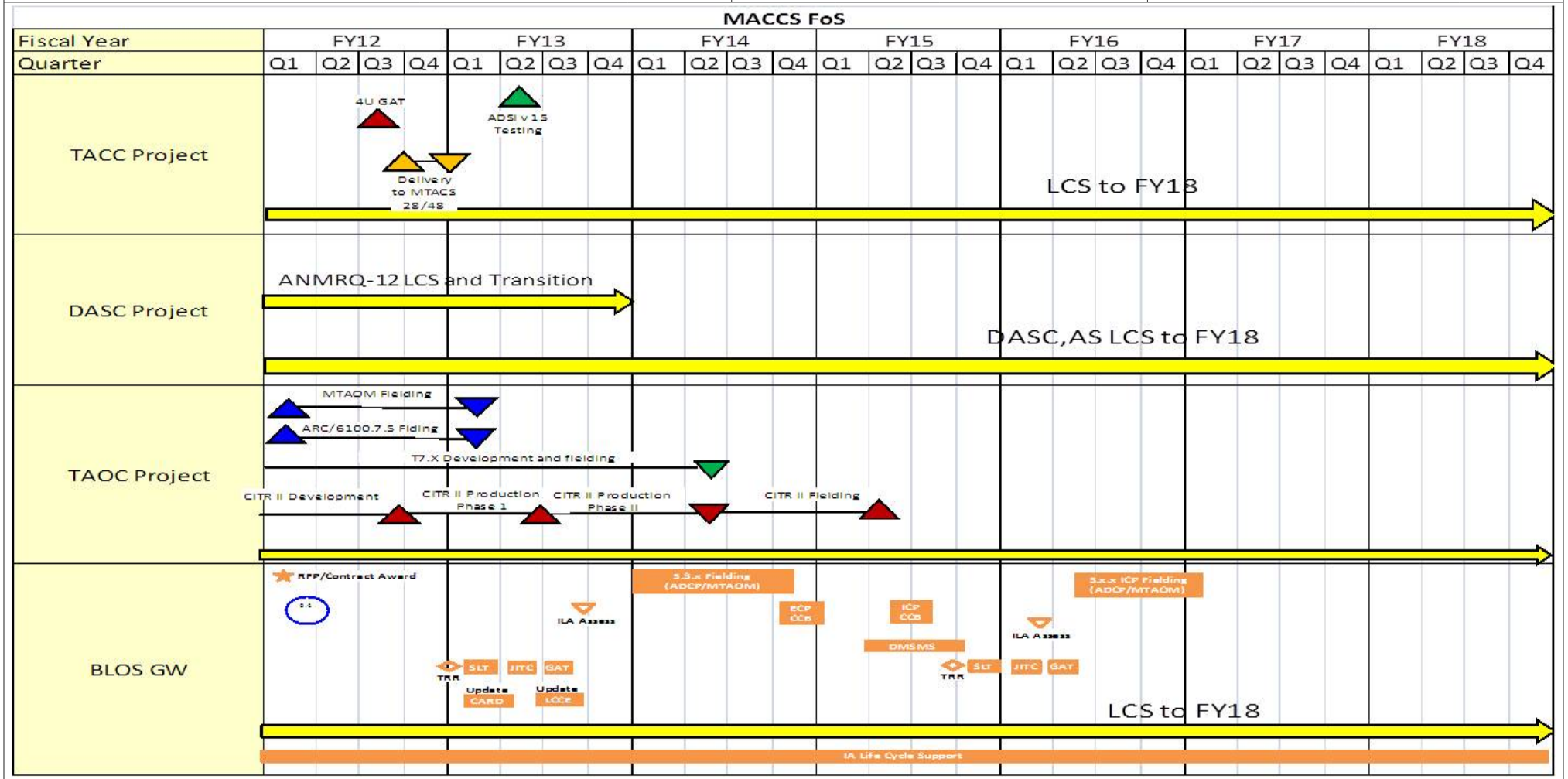
**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MACCS Sustainment | C/FFP | MCSC:Quantico, VA | 0.100 | 0.250 | Jan 2012 | 1.000 | Jul 2013 | 0.300 | Jul 2014 | - | | 0.300 | 0.000 | 1.650 | |
| COC | Reqn | MCSC:Quantico, VA | 0.057 | 0.000 | | 0.710 | Oct 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.767 | |
| CAC2S | MIPR | DTIC: Fort Belvoir, VA:Fort Belvoir, VA | 0.000 | 0.261 | Dec 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.261 | |
| CAC2S | C/FFP | QNA: Stafford, VA:Quantico, VA | 13.796 | 0.000 | | 1.500 | Apr 2013 | 4.000 | Nov 2013 | - | | 4.000 | 0.000 | 19.296 | |
| TBMCS | C/FFP | QNA: Stafford, VA:Quantico, VA | 1.977 | 0.332 | Nov 2011 | 0.350 | Nov 2012 | 0.350 | Nov 2013 | - | | 0.350 | 0.000 | 3.009 | |
| JSS | Reqn | Travel:Quantico, VA | 0.000 | 0.022 | Oct 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.022 | |
| JSS | C/FFP | TASC:Quantico, VA | 0.000 | 0.147 | Nov 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.147 | |
| JSS | WR | SPAWAR:Charleston, SC | 0.000 | 0.050 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.050 | |
| JSS | MIPR | Hanscom AFB:Hanscom AFB | 0.000 | 0.078 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.078 | |
| | | **Subtotal** | 16.812 | 1.380 | | 5.096 | | 4.650 | | 0.000 | | 4.650 | 0.000 | 27.938 | |

| | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 228.138 | 59.435 | | 94.071 | | 68.669 | | 0.000 | | 68.669 | | | |

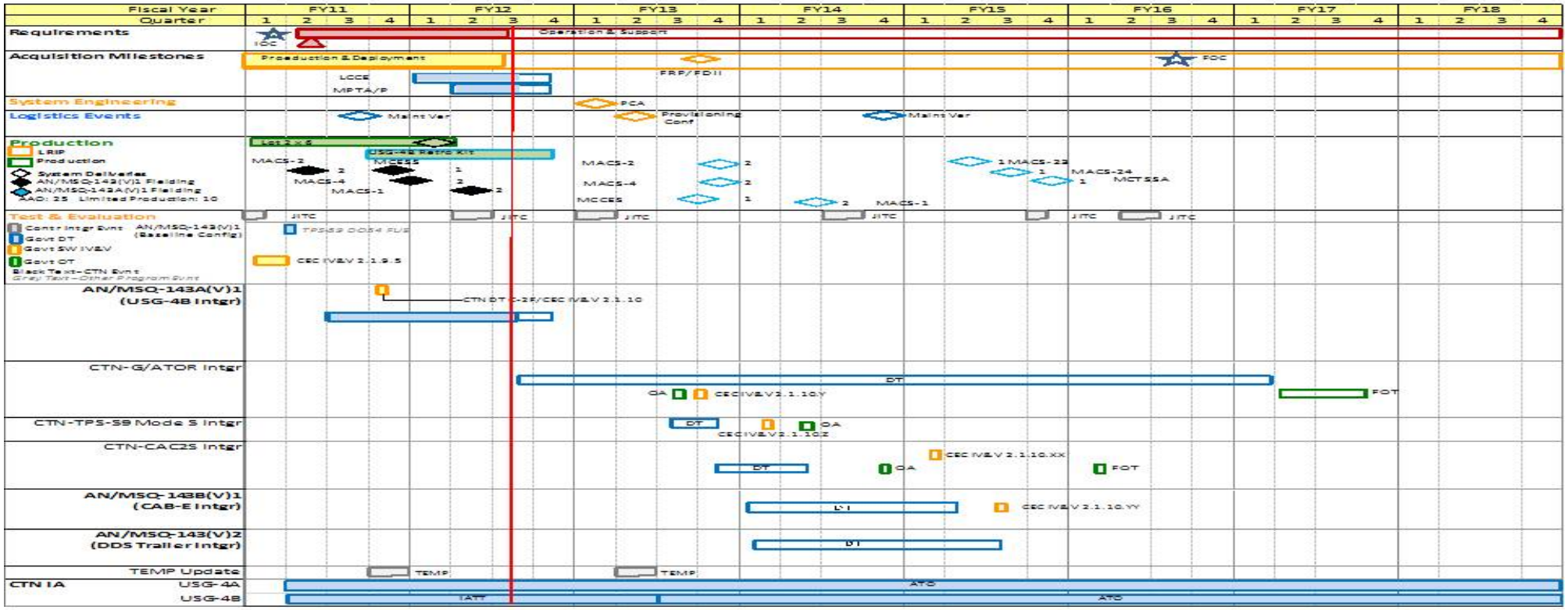
**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |



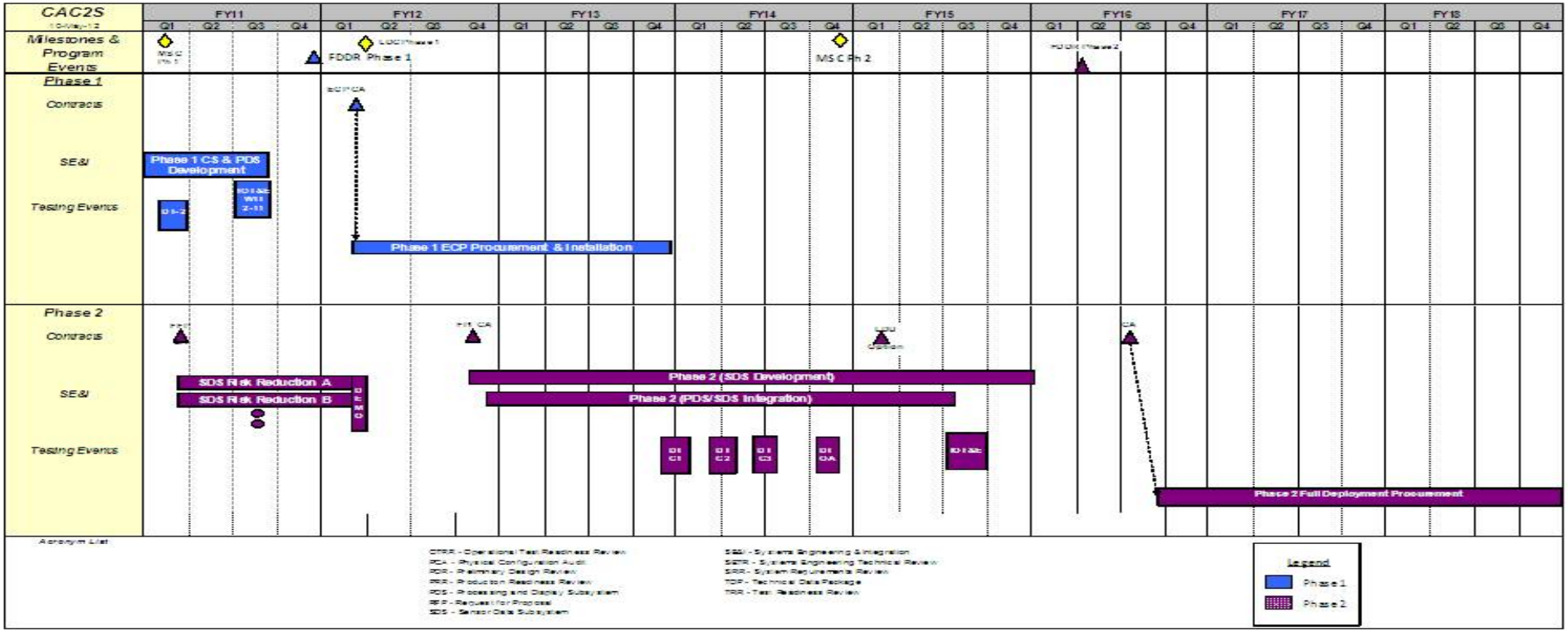
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2273: *Air Ops Cmd & Control (C2) Sys* |

# CTN - Program Schedule



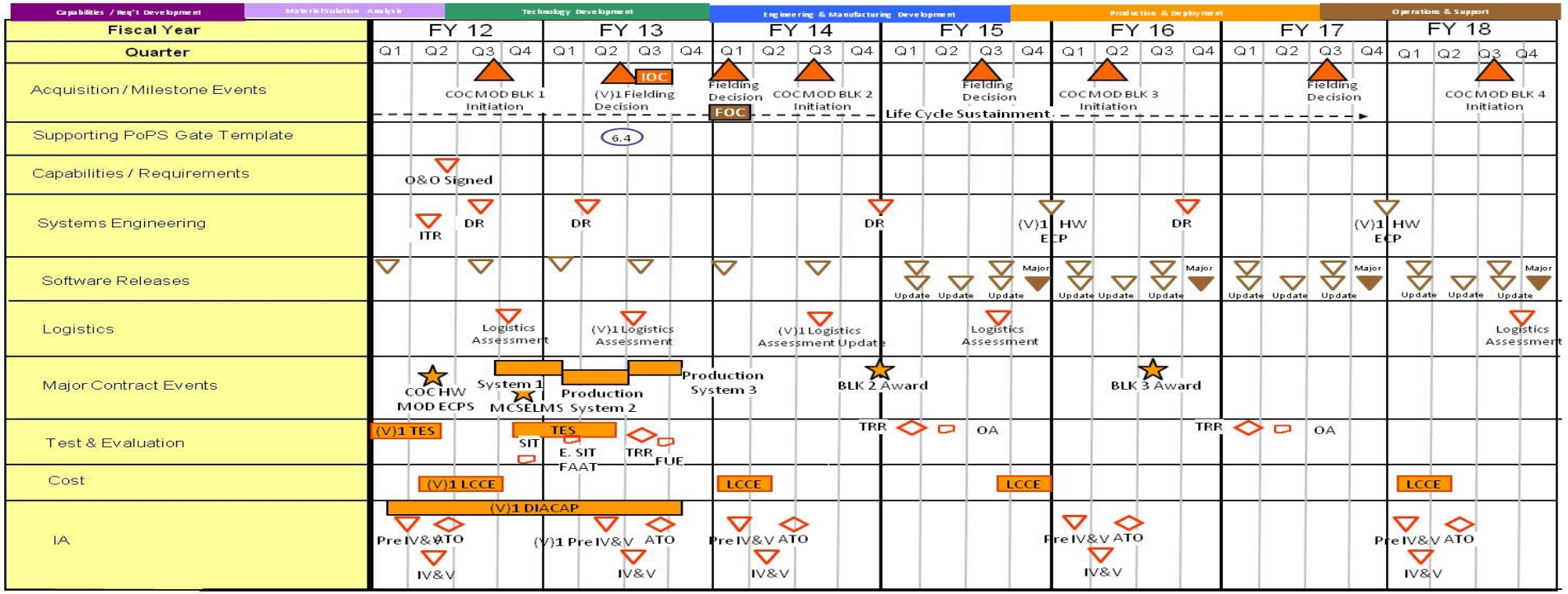
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

## CAC2S Program Schedule



| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

# COC Program Schedule

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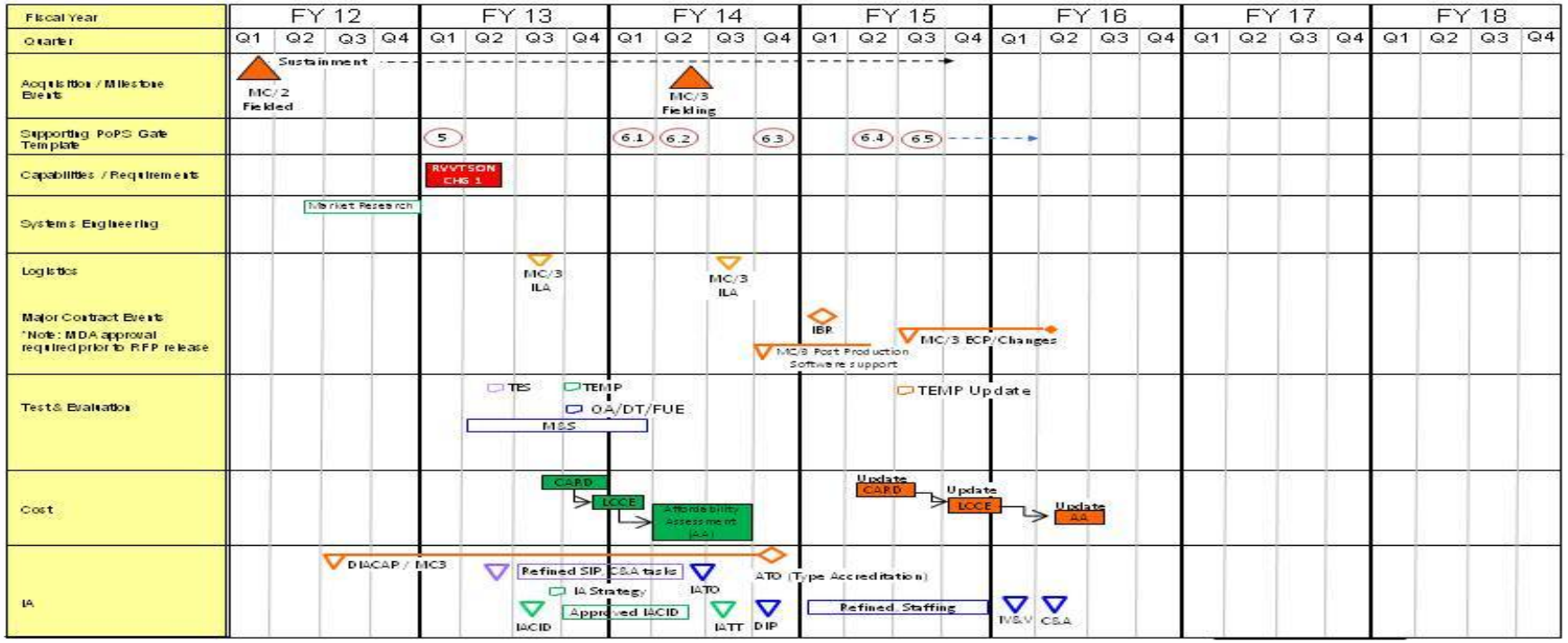
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

# RVVT Schedule



| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2273: *Air Ops Cmd & Control (C2) Sys* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2273*** | | | | |
| MACCS Sustainment | 1 | 2012 | 4 | 2018 |
| CTN FOC | 3 | 2016 | 3 | 2016 |
| CAC2S Phase 1 LDC | 1 | 2012 | 1 | 2012 |
| CAC2S Phase 2 IOT&E | 3 | 2015 | 3 | 2015 |
| CAC2S Phase 2 LDU | 1 | 2015 | 1 | 2015 |
| COC Life Cycle Sustainment | 1 | 2012 | 4 | 2017 |
| COC (V) 1 Limited Fielding Decision | 2 | 2013 | 2 | 2013 |
| COC (V)1 Field User Evaluation (FUE) | 2 | 2013 | 2 | 2013 |
| COC (V)1 IOC | 2 | 2013 | 2 | 2013 |
| COC (V) 1 Full Fielding Decision | 1 | 2014 | 1 | 2014 |
| COC (V)1 FOC | 1 | 2014 | 1 | 2014 |
| COC (V)2 Initiation | 3 | 2014 | 3 | 2014 |
| CAC2S Phase 2 Milestone C | 4 | 2014 | 4 | 2014 |
| RVVT MDD | 1 | 2013 | 1 | 2013 |
| RVVT MS B | 1 | 2015 | 1 | 2015 |
| RVVT DT | 1 | 2015 | 1 | 2015 |
| RVVT OT&E 2015 | 3 | 2015 | 3 | 2015 |
| RVVT LRIP | 2 | 2016 | 2 | 2017 |
| RVVT FRP | 4 | 2016 | 1 | 2018 |
| RVVT MC/3 FIELDING | 3 | 2013 | 3 | 2013 |
| RVVT MS C | 4 | 2015 | 4 | 2015 |

| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2273: *Air Ops Cmd & Control (C2) Sys* |

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| RVVT Next Generation FRP DR | 4 | 2016 | 4 | 2016 |
| RVVT Next Generation Fielding | 4 | 2017 | 4 | 2017 |
| RVVT OT&E 2018 | 2 | 2018 | 2 | 2018 |
| MACCS - MTAOM Fielding | 1 | 2012 | 1 | 2012 |
| MACCS - ARC/6100.7.5 Fielding | 1 | 2012 | 1 | 2012 |
| MACCS - CITRII Production Phase I | 4 | 2012 | 4 | 2012 |
| MACCS - CITRII Production Phase II | 2 | 2013 | 2 | 2013 |
| MACCS - CITR II Fielding | 2 | 2014 | 2 | 2014 |
| MACCS - BLOS GW 5.3.x Fielding (ADCP/MTAOM) | 1 | 2014 | 1 | 2014 |
| MACCS - BLOS GW 5.x.x ICP Fielding (ADCP/MTAOM) | 2 | 2016 | 2 | 2016 |
| CTN FRP | 4 | 2013 | 4 | 2018 |
| CTN DT | 3 | 2012 | 3 | 2012 |
| CTN AN/MSQ-142(V)1 Fielding | 4 | 2013 | 4 | 2013 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2274: *Command & Control Warfare Sys* | 19.071 | 25.624 | 32.052 | 11.234 | - | 11.234 | 10.397 | 10.209 | 10.206 | 10.363 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

COUNTER RADIO-CONTROLLED IMPROVISED EXPLOSIVE DEVICE (RCIED) ELECTRONIC WARFARE (USMC CREW) Systems are modular, programmable, multi-band radio-frequency jammers designed to deny enemy use of selected portions of the radio frequency spectrum to counter Radio-Controlled IEDs. CREW mounted systems are capable of being integrated into all Marine Corps Tactical Ground Vehicles. USMC CREW 2.1 CREW Vechicle Receiver/Jammer (CVRJ) mounted and 3.1 Thor III man portable systems are currently fielded to meet current threats in all theaters of operation. The 2.1 mounted systems are being upgraded to a Band C capability beginning with fielding commencing FY12. In FY12 the program will transition to the enduring requirement to support worldwide deployment of USMC CREW systems. The JCREW systems shall function as a single integrated system with common architecture that will counter the continued evolution of enemy threats. This program is an ongoing effort to develop new techniques, improve capabilities, enhance software and develop waveform load sets to counter evolving threats and prevent technology obsolescence. FY14 funding increases by $4.53M from FY13.

GROUND-BASED OPERATIONAL SURVEILLANCE SYSTEM (GBOSS) is an incremental development program currently providing persistent, multispectral surveillance sensor packages in Afghanistan. Three variants of G-BOSS exist; 80' tower mounted system (heavy), 20' trailer mounted system (medium/GBL), and man-portable, tripod mounted system (lite/CBL). Each tower employs multiple, self-contained detection and assessment technologies on a single trailer-mounted elevation platform with a multi-spectral sensor suite consisting of: daylight color & infrared imagery (StarSafire III and T-3000), Unattended Ground Sensors (UGS), Manportable Surveillance and Target Acquisition Radar (MSTAR), Communication suite for wireless point to point link, and unmanned aerial vehicle interface (VideoScout). The medium and lite systems provide a subset of the G-BOSS heavy capabilities. G-BOSS is a material solution in response to an Urgent Universal Needs Statement (UUNS) in support of OIF and OEF. FY14 funding reduced by $24M from FY13 as a result of the suspension of the G-BOSS(E) program.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** *USMC CREW - Product Development | 2.652 | 2.410 | 2.433 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Conducted efforts to develop waveform/load sets for the mounted CREW 2.1 CVRJ and Band C Upgrade kits; the dismounted CREW 3.1 Thor III; and the Universal Test Sets (UTS) which support each system variant (procured via Joint Improvised Explosive Device Defeat Organization (JIEDDO) and transitioned to USMC for sustainment in FY11). Continued efforts to develop vehicle installation kits for the Band C Upgrade in order to support the integration and installation of the upgrade kits into Marine | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Corps vehicle platform. Provided support for waveform/loadsets for Marine Expeditionary Unit Special Operations Capable (MEU (SOC)) systems in support of an Urgent Statement of Need dated 17 May 2011.<br>***FY 2013 Plans:***<br>In FY13 the USMC CREW program will continue the development of waveform/load sets for CREW Legacy systems and the UTS for current theater operations. Continue support efforts to provide loadsets for CREW systems for MEU/Marine Expeditionary Force (MEF) within a non-theater specific/non-wartime Operational TEMPO. Continue to develop vehicle installation kits for the Band C Upgrade in order to support the integration and installation of the upgrade kits into Marine Corps vehicle platform.<br>***FY 2014 Plans:***<br>In FY14 USMC CREW program will continue the development of waveform/load sets for CREW Legacy systems and the UTS for current theater operations. Continue support efforts to provide loadsets for CREW systems for MEU/Marine Expeditionary Force (MEF) within a non-theater specific/non-wartime Operational TEMPO. Continue to develop vehicle installation kits for the Band C Upgrade in order to support the integration and installation of the upgrade kits into Marine Corps vehicle platform. | | | |
| ***Title:*** *USMC CREW - Support | 1.106 | 1.145 | 1.163 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Conducted systems engineering and integration support required for continued system enhancements. Systems engineering activities included requirement definition, requirement allocation, requirement,traceability, system design, system testing, production support, fielding support, and system upgrade planning.<br>***FY 2013 Plans:***<br>Systems engineering and integration support required for continued system enhancements for CVRJ with Band C, Thor III, and support for the Universal Test Sets procured by JIEDDO and transitioned to USMC CREW in FY12.<br>***FY 2014 Plans:***<br>Systems engineering and integration support required for the CREW Legacy variants. | | | |
| ***Title:*** *USMC CREW - Test and Evaluation | 1.698 | 1.189 | 3.285 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Conducted efforts to include the required Marine Corps unique testing of capability enhancements to CREW 2.1 CVRJ (Band C Upgrades) and waveform loadsets for the entire USMC CREW portfolio of systems to include CREW 2.1, 3.1 and Universal Test Sets (UTS).<br>***FY 2013 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| FY13 efforts encompass the continued test events in support of the CREW Legacy (2.1, Band C and 3.1) systems and the Universal Test Set (UTS).<br>***FY 2014 Plans:***<br>FY14 efforts encompass continued test events in support of the CREW legacy (2.1, Band C and 3.1) systems and the UTS. | | | |
| ***Title:*** *USMC CREW - Management<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Completed program oversight, task scheduling, reports and study analysis.<br>***FY 2013 Plans:***<br>Program oversight, task scheduling, reports and study analysis.<br>***FY 2014 Plans:***<br>Program oversight, task scheduling, reports and study analysis. | 3.809<br>0 | 2.749<br>0 | 4.353<br>0 |
| ***Title:*** *GBOSS - Product Development<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Conducted Technology Readiness Assessments and certification of capability enhancements in support of the IA baseline.<br>***FY 2013 Plans:***<br>Continue Technology Readiness Assessments and integration of capability enhancements per acquisition strategy to update the existing G-BOSS 3.1 systems with a common operating system and equipment interface to increase operational availability. | 14.001<br>0 | 22.068<br>0 | 0.000 |
| ***Title:*** *GBOSS - Support<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Conducted Technical engineering services, analysis of alternatives, and research studies to include CARD and LCCE development. Continue the IA accreditation efforts, IA and software management, and associated engineering for incorporation of system enhancements.<br>***FY 2013 Plans:*** | 0.414<br>0 | 0.861<br>0 | 0.000 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Technical engineering services, analysis of alternatives, and research studies to include CARD and LCCE development. Continue the IA accreditation efforts, IA and software management, and associated engineering for incorporation as system enhancements. | | | |
| ***Title:*** *GBOSS - Test and Evaluation.<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Continue testing, evaluation and design verification/validation of G-BOSS version upgrades<br>***FY 2013 Plans:***<br>Continue testing, evaluation and design verification/validation of G-BOSS version upgrades | 0.760<br>0 | 1.080<br>0 | 0.000 |
| ***Title:*** *GBOSS - Management.<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Provided design oversight, task scheduling, estimate development, reports and test support<br>***FY 2013 Plans:***<br>Provide design oversight, task scheduling, estimate development, reports and test support for the program office | 1.184<br>0 | 0.550<br>0 | 0.000 |
| **Accomplishments/Planned Programs Subtotals** | 25.624 | 32.052 | 11.234 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC 6520: *USMC CREW* | 5.117 | 198.808 | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |
| • PMC 6438: *GBOSS* | 49.682 | 55.500 | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 279.907 |
| • PMC 7000: *USMC CREW SPARES* | 0.000 | 1.537 | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |

**Remarks**

**D. Acquisition Strategy**

COUNTER RADIO-CONTROLLED IMPROVISED EXPLOSIVE DEVICE (RCIED) ELECTRONIC WARFARE (USMC CREW): USMC CREW 2.1 mounted and 3.1 dismounted Legacy systems provide protection to combat elements in vehicle platforms and on foot. The 2.1 mounted systems are being upgraded to a Band C capability with fielding commencing FY12. The program will continue to develop new techniques, improve capabilities, enhance software and develop upgrades to counter evolving threats and prevent technology obsolescence. Activities include waveform development, non-recurring engineering for system enhancements,

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

capability upgrades, and installation kits, integration of the enhancements/Vehicle Installation Kits (VIKs) and the tests/government studies required to support these changes.

GBOSS. The acquisition approach has been to use existing government contracts (US Navy, US Army, US Air Force) for Commercial-Off-the-Shelf (COTS) and Government-Off-the-Shelf (GOTS) material and services that meet the basic requirements of the UUNS and give priority to materials and services already integrated into an existing or similar architecture. In FY13, the acquisition approach will be to maintain NSWC Crane as the system integrator to leverage their engineering and contracting vehicles for product development and test and evaluation. This approach is the most expeditious to deliver equipment and services to the forces in theater.

**E. Performance Metrics**

Milestone Reviews

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USMC CREW | MIPR | ARL/ MILTECH:WRIGHT-PATTERSON, OH | 0.000 | 0.393 | Feb 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.393 | |
| USMC CREW | C/BOA | NSWC CD:CRANE IN | 0.000 | 0.250 | Aug 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.250 | |
| USMC CREW | SS/FFP | NAVSEA:BALTIMORE, MD | 2.800 | 1.789 | Dec 2011 | 2.190 | Dec 2012 | 2.210 | Dec 2013 | - | | 2.210 | 0.000 | 8.989 | |
| USMC CREW | WR | SSC-A:CHARLESTON, SC | 0.323 | 0.220 | Dec 2011 | 0.220 | May 2013 | 0.223 | May 2014 | - | | 0.223 | 0.000 | 0.986 | |
| GBOSS | WR | NSWC CD:CRANE, IN | 6.550 | 14.001 | Nov 2012 | 7.068 | Nov 2012 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| G-BOSS | TBD | MCSC CONTRACT:QUANTICO, VA | 0.000 | 0.000 | | 15.000 | Aug 2013 | 0.000 | | - | | 0.000 | 0.000 | 15.000 | |
| | | **Subtotal** | 9.673 | 16.653 | | 24.478 | | 2.433 | | 0.000 | | 2.433 | | | |

**Remarks**

USMC CREW NAVSEA: FY12 - FY14 CREW will utilize Johns Hopkins University Applied Physics Laboratories to develop waveform load sets for all CREW systems to continue to counter the evolving RCIED Threats.
USMC CREW SSC-A (SPAWAR, Charleston): FY12 - FY14 CREW will utilize SSC-Atlantic to develop mounting solutions in order to integrate mounted systems into all Marine Corps Vehicle platforms
GBOSS (NSWC Crane) Systems Integration/Product Development and Systems Engineering Support

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USMC CREW | Various | MCSC:QUANTICO, VA | 1.562 | 1.106 | Mar 2012 | 1.145 | Mar 2013 | 1.163 | Mar 2014 | - | | 1.163 | 0.000 | 4.976 | |
| G-BOSS | WR | NSWC PH:POINT HUENEME, CA | 0.000 | 0.386 | Mar 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.386 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G-BOSS | WR | MCTSSA:CAMP PENDLETON, CA | 0.000 | 0.028 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.028 | |
| G-BOSS | C/FFP | CECOM/ MITRE:STAFFORD, VA | 0.861 | 0.000 | | 0.861 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.722 | |
| | | **Subtotal** | 2.423 | 1.520 | | 2.006 | | 1.163 | | 0.000 | | 1.163 | 0.000 | 7.112 | |

**Remarks**

USMC CREW MCSC: CEOss Contracts for a Life Cycle cost Estimate and PM subject Matter Expertise
USMC CREW NSWC CRANE: On and off-site direct systems engineering support, RF Modeling and Simulation, Independent Verification and Validation support for all increments
USMC CREW NSWC Dahlgren: RADHAZ (Radio Hazard) Studies, Safety and Configuration Management Support
G-BOSS NSWC Dahlgren: Hardware/Software engineering and System Safety Support

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USMC CREW | WR | SSC-A:CHARLESTON, SC | 0.550 | 0.565 | Sep 2012 | 0.335 | Dec 2012 | 0.340 | Dec 2013 | - | | 0.340 | 0.000 | 1.790 | |
| USMC CREW | Various | NSWC CD:CRANE, IN | 0.193 | 0.100 | Mar 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.293 | |
| USMC CREW | C/CPFF | MCSC/ MCOTEA:QUANTICO, VA | 0.327 | 0.318 | Mar 2012 | 0.324 | Jul 2013 | 2.412 | Nov 2013 | - | | 2.412 | 0.000 | 3.381 | |
| USMC CREW | MIPR | YPG:YUMA, AZ | 0.809 | 0.600 | May 2012 | 0.530 | Dec 2012 | 0.533 | Dec 2013 | - | | 0.533 | 0.000 | 2.472 | |
| USMC CREW | MIPR | SAF/ FMBIB:WASHINGTON, DC | 0.000 | 0.115 | Sep 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.115 | |
| G-BOSS | MIPR | ATEC:FT. AP HILL, VA | 0.010 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.010 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G-BOSS | C/CPFF | MCSC/ MCOTEA:QUANTICO, VA | 0.276 | 0.000 | Mar 2012 | 0.350 | May 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.626 | |
| G-BOSS | Various | NSWC CD:CRANE, IN | 0.000 | 0.760 | Jan 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.760 | |
| G-BOSS | WR | SSC-A:CHARLESTON, SC | 0.100 | 0.000 | | 0.730 | Aug 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.830 | |
| | | **Subtotal** | 2.265 | 2.458 | | 2.269 | | 3.285 | | 0.000 | | 3.285 | 0.000 | 10.277 | |

**Remarks**

USMC CREW MCOTEA: Provides OT/DT oversight and support for CREW 3.3 systems
USMC CREW YPG: Provides Test ranges and results analysis for all CREW systems
G-BOSS MCOTEA: provies oversight support for test events
G-BOSS NSWC CRANE: will provide testing and evaluation per GBOSS CDD requirements

**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USMC CREW | C/FFP | MCSC/ CEOSS:QUANTICO, VA | 0.274 | 1.271 | Mar 2013 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.545 | |
| USMC CREW | WR | NSWC CD:CRANE, IN | 0.967 | 2.106 | Feb 2012 | 1.511 | Nov 2012 | 3.095 | Nov 2013 | - | | 3.095 | 0.000 | 7.679 | |
| USMC CREW | WR | NSWC DD:DAHLGREN, VA | 0.651 | 0.432 | Jun 2012 | 1.238 | Dec 2012 | 1.258 | Dec 2013 | - | | 1.258 | 0.000 | 3.579 | |
| G-B0SS | C/FFP | MCSC:QUANTICO, VA | 2.432 | 0.798 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 3.230 | |
| G-B0SS | Various | NSWC DD:DAHLGREN, VA | 0.386 | 0.386 | Sep 2012 | 0.550 | Nov 2012 | 0.000 | | - | | 0.000 | 0.000 | 1.322 | |
| | | **Subtotal** | 4.710 | 4.993 | | 3.299 | | 4.353 | | 0.000 | | 4.353 | 0.000 | 17.355 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

**Management Services ($ in Millions)**

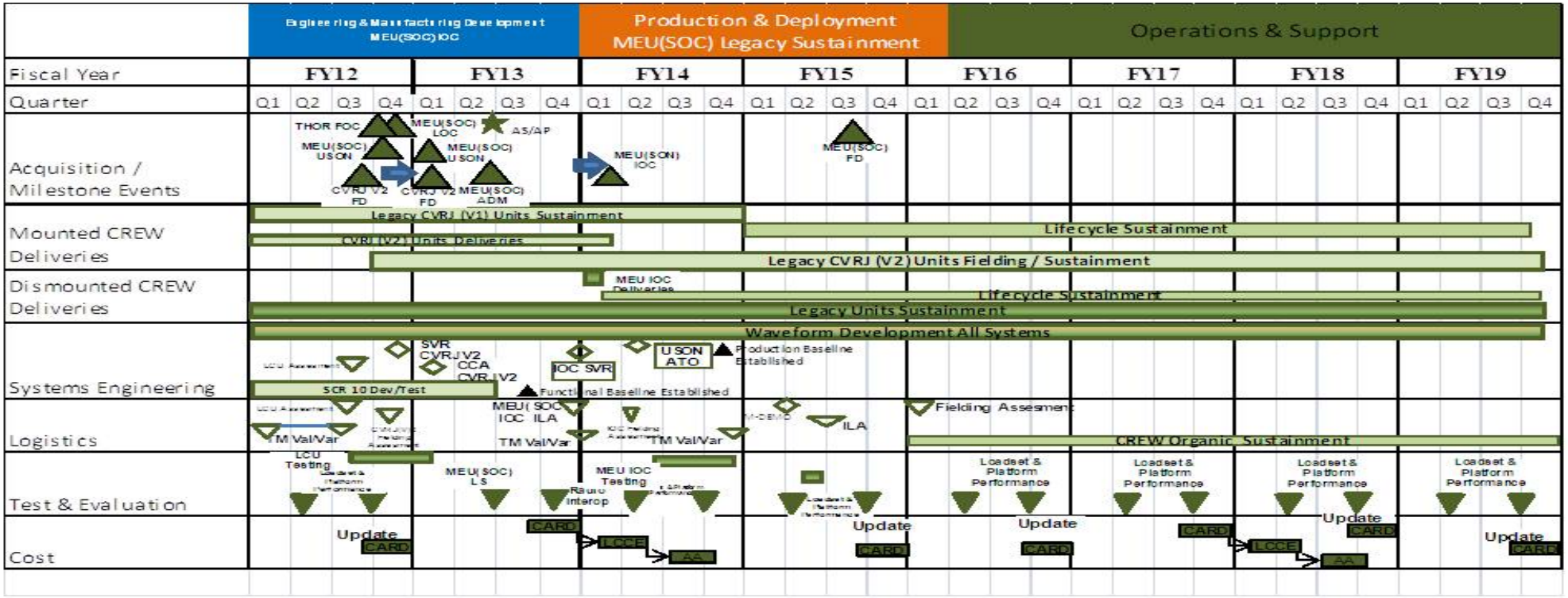
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Remarks**<br>USMC CREW MCSC: Provides Program Management support to USMC CREW Program<br>G-BOSS MCSC: Program management Support<br>G-BOSS NSWC Dahlgren: Program management Support | | | | | | | | | | | | | | | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 19.071 | 25.624 | | 32.052 | | 11.234 | | 0.000 | | 11.234 | | | |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

# USMC CREW Program Schedule

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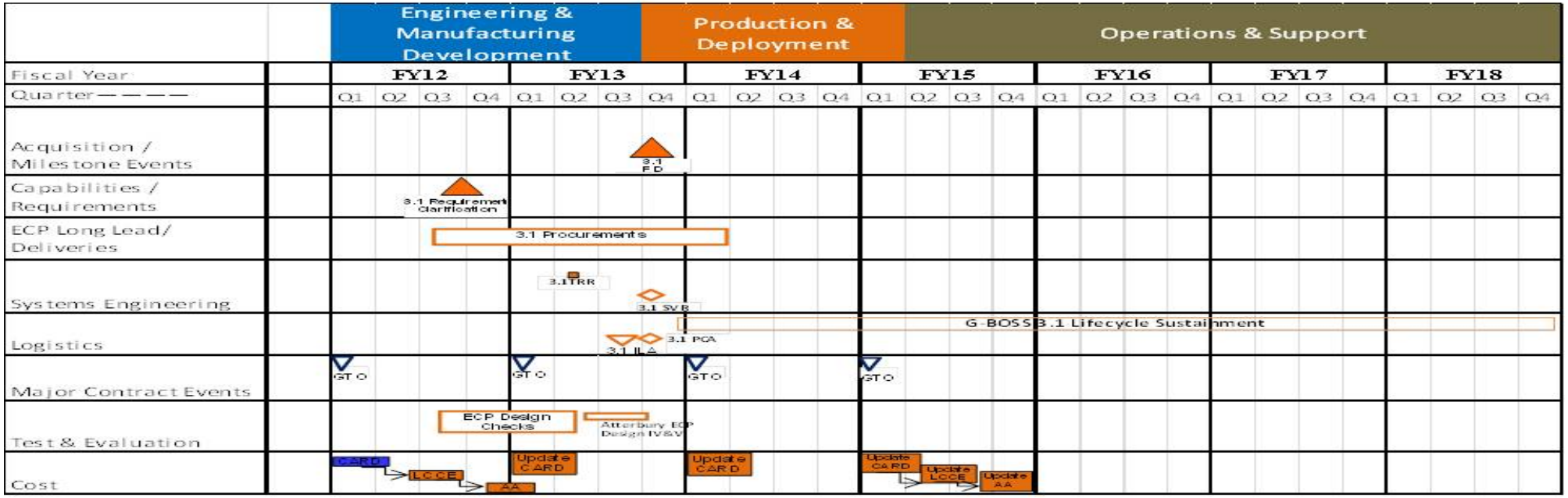
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2274: *Command & Control Warfare Sys* |

# G-BOSS PROGRAM SCHEDULE

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| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2274: *Command & Control Warfare Sys* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2274*** | | | | |
| USMC CREW Waveform Development | 1 | 2012 | 4 | 2018 |
| USMC CREW MEU(SOC) SYSTEM ACQUISITION STRATEGY | 2 | 2013 | 2 | 2013 |
| USMC CREW MEU(SOC) IOC | 2 | 2014 | 2 | 2014 |
| G-BOSS 3.1 Requirements Clarification | 3 | 2012 | 3 | 2012 |
| G-BOSS 3.1 Fielding Decision | 4 | 2013 | 4 | 2013 |
| USMC CREW MEU(SOC) FIELDING DECISION | 3 | 2015 | 3 | 2015 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2275: *Joint Tactical Radio System* | 7.426 | 5.280 | 4.413 | 21.923 | - | 21.923 | 5.353 | 2.383 | 3.072 | 6.176 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

(U) Tactical Communications Modernization (TCM): TCM was established to procure interim radio systems to bridge the gap between legacy systems and forecasted deliveries from the Joint Tactical Radio System (JTRS) program. The program schedule and budget profile for TCM procures leading edge radio systems to support the primary operational voice and data communications requirements for mounted and dismounted forces. TCM procurements enable an initial joint networking capability and support National Security Agency (NSA) Communications Security (COMSEC) ModernizatNext generation solutions for the Warfighter due to urgent communications requirements and Joint Tactical Radio System (JTRS) schedule delays. Funding provides engineering and test support for both the Wideband Tactical Handheld Radio (THHR), AN/MRC-145B service life extension program and programmatic and technical support to complete an AOA for Terrestrial Wideband Transmission System. Increase of $1.1M from FY13 to FY14 to purchase test articles and testing for a new requirements document for Wideband Tactical Handheld Radio. This is expected to become a new acquisition program (Wideband THHR).

(U) Networking on the Move (NOTM): Networking-on-the-Move (NOTM) provides the Marine Air-Ground Task Force (MAGTF) communications and networking capabilities On-the-Move (OTM), On-the-Halt (OTH), and the beginning capability for self-forming/self healing, ad hoc moblie networking. NOTM will enable mobile forces to collaborate and access information resources for the exchange of voice, data, and video information. This capability will allow tactical forces to maintain situational awareness by extending data network connectivity while OTM. In addition, NOTM will provide crucial network management capabilities to simplify the planning, configuring, and monitoring of the MAGTF networks, waveforms, and spectrum. FY13 to FY14 increase of $8.7M will support the incorporation of Ka- and X-band satellite communications capabilities in addition to Network Operations Security Center (NOSC) requirements.

(U) Very Small Aperture Terminal (VSAT): Very Small Aperture Terminal (VSAT) is an integrated Commercial Off-the-Shelf (COTS) satellite communications terminal with a modular architecture that supports drop and insert architecture through scalable and flexible applications. VSAT uses commercial Ku and military Ka frequency bands to provide beyond line-of-sight (BLOS) connectivity to support intra-MAGTF communications (NIPRNET, SIPRNET, and telephony) down to the battalion/squadron level. The primary variant of VSAT is the Support Wide Area Network Terminal Version D (SWAN-D), which itself comes in three modular variants, dependent on MAGTF-size and mission.

(U) Tactical Satellite Comm Terminal (TSCT): Lightweight Multiband Satellite Terminal (LMST)/PHOENIX are quad-band Super High Frequency (SHF) satellite terminals mounted in transit cases and High Mobility Multipurpose Wheeled Vehicles (HMMWVs). With the signing of the SATCOM Collapse (20 May 2011) a dynamic transition will take place to consolidate (3) programs, Lightweight Multiband Satellite Terminal (LMST), Phoenix Tactical SHF Satellite Terminal (TSST), and the Very

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

Small Aperture Terminal Large (VSAT-L) into (1) requirement defined as the Universal Satellite Access Tactical Terminal (UnSATT). RDT&E funding will be utilized to research/integrate Joint IP Modems as mandated by DISA to ensure interoperability during the transition process.

(U) Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T): SMART-T provides tactical users with protected data and voice via Extremely High Frequency (EHF) satellite communications. The SMART-T system is transported on High Mobility Multipurpose Wheeled Vehicles (HMMWVs), providing MAGTF Commanders a secure, survivable, long-haul, low/medium data rate communications link not subject to terrain masking and horizon limitations. The SMART-T is also capable of operation when removed from the HMMWV. SMART-T will be undergoing an upgrade to be interoperable with the new Advanced Extremely High Frequency (AEHF) constellation and will require certification testing and a Multi-service Operational Test and Evaluation (MOT&E).
(U) Terrestrial Wideband Transmission Systems (TWTS): Increase in FY14 for Terrestrial Wideband Transmission Systems (TWTS), a capabilities portfolio of terrestrial based wideband transmission systems (formerly known as an TRC-170). Portfolio includes Beyond Line Of Sight (BLOS) system (AN/TRC-170) and Line Of Sight (LOS) systems (AN/MRC-142 (FOS), Troposcatter Support Radio (TSSR), and Wireless Point- to-Point- Link version D (WPPL-D).- The AN/TRC-170 is a transportable BLOS, terrestrial, self-enclosed troposcatter terminal (multichannel) capable of transmitting and receiving digital data over varying distances up to 100 miles. - AN/MRC-142 FoS consists of the AN/MRC-142B (ship to shore) and C variants to provide LOS, two-way, secure voice and data communications up to 35 miles. - WPPL-D is an integrated communications system consisting of Commercial Off-the-Shelf (COTS) radios, antennas, and IP networking equipment that provides NIPR/SIPRNet data connectivity, voice and video services. - TSSR is a multi-channel LOS wireless cable replacement communication system. The TSSR is commonly used in-place of fiber optic or coaxial cable at expeditionary airfields. - TEAMS is a 34-meter telescopic mast system, extending support to various organic LOS systems (AN/MRC142, EPLRS, TAOM, and TSSR) by increasing operational reach by overcoming obstacles to communications.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** TCM : Tactical Communications Modernization | 1.239 | 0.562 | 1.734 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Provided engineering support and preliminary test support for the AN/MRC-145-B and programatic and technical support for development of an AOA for Terrestrial Wideband Transmission System (TWTS).<br>***FY 2013 Plans:***<br>RDTE funding is planned for the MRC 145B engineering support and test and evaluation support.<br>***FY 2014 Plans:***<br>RDT&E funding is planned for the engineering and test and evaluation support for the Wideband Tactical Handheld Radio. | | | |
| ***Title:*** NOTM: Product Development | 0.435 | 0.802 | 9.544 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Proof of concept development.<br>***FY 2013 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Proof of concept development.<br>***FY 2014 Plans:***<br>Increase in funds will provide development of A/B kits for new vehicle variants and development of Network Operations Security Center (NOSC) for remote operations of the NOTM system. | | | |
| ***Title:*** NOTM: Test and Evaluation Support | 0.200 | 0.350 | 0.750 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Test and evaluation support of prototype systems and equipment.<br>***FY 2013 Plans:***<br>Funds will provide for engineering and program support.<br>***FY 2014 Plans:***<br>Funds will provide support for proof of concept testing for NOTM Inc 2, and development of test plans. | | | |
| ***Title:*** NOTM: Engineering Program Support | 1.283 | 1.922 | 2.675 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Development efforts included required acquisition documentation and technical support.<br>***FY 2013 Plans:***<br>Funds will continue to support development efforts and engineering and program support.<br>***FY 2014 Plans:***<br>Funds will provide test and evaluation support from MCOTEA and MCTSSA and continued engineering and program support. | | | |
| ***Title:*** LMST: Engineering Program Support | 0.992 | 0.316 | 0.312 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Funds for program support, MCOTEA travel to test events, and VSAT X-band development for the SATCOM collapse.<br>***FY 2013 Plans:***<br>Funds will support SATCOM collapse research and testing, MCOTEA support, and continued program engineering support.<br>***FY 2014 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Funds will continue to provide program engineering support and MCOTEA support. | | | |
| ***Title:*** VSAT: Test and Evaluation Support | 0.939 | 0.363 | 0.374 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Continued Development and integration efforts, including DISA Modem Certification and engineering support for VSAT. | | | |
| ***FY 2013 Plans:***<br>Continue development and integration efforts, including DISA Modem Certification and engineering support at MITRE and JITC. | | | |
| ***FY 2014 Plans:***<br>Funds will continue to provide program engineering support at MITRE. Funds also will support testing at JITC and JSEC for ARTSTRAT. | | | |
| ***Title:*** SMART-T - Program Support | 0.192 | 0.098 | 0.194 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Provided Science & Technology Engineering support for Secure, Mobile, Anti-jam, Reliable Tactical Terminal (SMART-T). | | | |
| ***FY 2013 Plans:***<br>Funding will support test and engineering activities through MCOTEA and MITRE. | | | |
| ***FY 2014 Plans:***<br>Funding will support Multi-service Operational Test and Evaluation (MOT&E) in addition to continued test and engineering support through MCOTEA and MITRE. | | | |
| ***Title:*** TWTS: Test and Evalution Support | 0.000 | 0.000 | 2.140 |
| ***Articles:*** | | | 0 |
| ***FY 2014 Plans:***<br>Funds will provide supoort for MRC-142 testing, validation, and verification in addition to TRC-170 design and test. These activities will support the mitigation of obsolence of both systems. | | | |
| ***Title:*** TWTS: Product Development | 0.000 | 0.000 | 4.200 |
| ***Articles:*** | | | 0 |
| ***FY 2014 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| These funds are to support designs to mitigate the obsolesence issues and design service life extension plans for TRC-170 and MRC-142. | | | |
| **Accomplishments/Planned Programs Subtotals** | 5.280 | 4.413 | 21.923 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/463300-1: *Tactical Satellite LMST* | 1.389 | 6.009 | 1.444 | | 1.444 | 1.470 | 1.493 | 1.511 | 1.538 | 0.000 | 22.248 |
| • PMC/463300-3: *Very Small Aperture Terminal (VSAT)* | 32.000 | 18.300 | 0.688 | | 0.688 | 5.814 | 1.526 | 1.537 | 1.565 | Continuing | Continuing |
| • PMC/463300-4: *TCM* | 112.002 | 66.619 | 55.537 | | 55.537 | 89.311 | 77.983 | 4.680 | 4.876 | Continuing | Continuing |
| • PMC/463300-5: *SMART-T* | 1.665 | 3.463 | 0.928 | | 0.928 | 1.417 | 1.642 | 1.051 | 1.072 | Continuing | Continuing |
| • PMC/463300-6: *TWTS* | 0.136 | 3.000 | 7.280 | | 7.280 | 5.979 | 7.464 | 9.206 | 9.372 | Continuing | Continuing |
| • PMC/463100-7: *NOTM* | 0.000 | 0.000 | 7.963 | | 7.963 | 1.000 | 1.515 | 9.176 | 6.287 | Continuing | Continuing |
| • PMC/700000-1: *SMART-T* | 0.000 | 0.188 | 0.174 | | 0.174 | 0.197 | 0.200 | 0.203 | 0.207 | Continuing | Continuing |

**Remarks**

**D. Acquisition Strategy**

(U) D. ACQUISITION STRATEGY:

(U) Tactical Communications Modernization (TCM): - Provides for the testing and evaluation of next generation tactical radio systems supporting the AN/MRC-145 service life extension program.

(U) Networking on the Move (NOTM): NOTM will use an evolutionary acquisition strategy and pursue a competitive firm fixed price contract that leverages Commercial-Off-The-Shelf (COTS) and Government-Off-The-Shelf (GOTS) technology to procure, sustain and meet emerging requirements of the system. The design of the system provides for internal growth capability through an open system architecture enabling technology refresh to extend the system's life, maintain interoperability, Information Assurance (IA) compliance, and reduce costs due to Diminishing Manufacturing Sources and Material Shortages (DMSMS). It is envisioned that technology refresh will occur on the NOTM hardware and software periodically due to component obsolescence, user-driven requests for improvements, IA compliance, and mission-related requirements. Refresh will include investments to incorporate evolving capability to ensure compatibility with other systems, create lighter more efficient equipment, and keep pace with evolving software requirements. End-of-life equipment refresh is expected throughout the program's life cycle and may be managed through kit purchases, replacement through Engineering Change Proposals (ECPs), or as replacement parts as equipment is repaired.

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

(U) Very Small Aperture Terminal (VSAT): VSAT systems are currently in fielding and sustainment phases. VSAT systems primarily support operations on costly commercial SATCOM bandwidth. Some additional military SATCOM frequencies (Ka-band) have already been incorporated into the large, trailer mounted VSAT systems to alleviate reliance on commercial SATCOM bandwidth procurements. Additional military Ka-band upgrades to smaller variants of VSAT systems are pending. Additionally, VSAT systems have been recently identified as the platform required to support operations on military X-band SATCOM frequencies as other X-band capable systems reach obsolescence. In order to subsume the capabilities lost in the phase out of the obsolete systems, VSAT systems require ECPs to incorporate X-band capability in addition to upgrading ancillary subsystems. ECPs will involve procurement of COTS upgrade kits that are designed and integrated in accordance with government owned drawings and specifications. Contract delivery orders will be awarded to competent bidders on US Army PM Warfighter Information Network-Tactical multi-award IDIQ contracts on a FFP basis. The majority of candidate upgrade kits and components exist as previously awarded CLINs on current contracts. Upon determination of final configuration of upgraded SATCOM terminal, program office will use the same US Army contracting vehicles to procure the approved quantity of new terminals to replace the obsolete terminals being phased out.

(U) Tactical Satellite Comm Terminal (TSCT) - LIGHTWEIGHT MULTIBAND SATELLITE TERMINAL (LMST)/PHOENIX: With the signing of the SATCOM Collapse (20 May 2011), the Marine Corps will consolidate (3) programs, Lightweight Multiband Satellite Terminal (LMST), Phoenix Tactical SHF Satellite Terminal (TSST), and the Very Small Aperture Terminal Large (VSAT-L) into (1) requirement defined as the Universal Satellite Access Tactical Terminal (UnSATT). The acquisition strategy for the Lightweight Multi-band Satellite Terminal (LMST) and Phoenix program is to sustain terminals to maintain joint interoperability through FY17.

(U) Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T): SMART-T is an Army led, ACAT II program. The Program Manager MC3 is the Marine Corps Program Decision Authority (PDA). The Marine Corps SMART-T has fielded the full Authorized Acquisition Objective (AAO) of 42 terminals and 32 AN/PSQ-17 Network Planning tools. SMART-T will be upgraded for compatibility with Advanced Extremely High Frequency (AEHF) waveforms and data rates. The SMART-T AEHF upgrade kits were procured in 2007. The required AN/PYQ-19 network planning tools will be procured in June 2012 and 2Q FY13. The AEHF capable SMART-Ts and planning tools will replace the legacy SMART-Ts; the AEHF SMART-T AAO will remain the same as that of the legacy system. MCLC is the Depot Level Source of Repair for SMART-T terminals as well as the warranty administrator for the AEHF upgrade kit components and the AN/PYQ-19 network planning tools. Terminal out of warranty repair for legacy components will be executed, when necessary, using the Army National Maintenance Contract.

(U) Tactical Wideband Communication Systems (TWTS): - Require R&D to proceed with development of modern Beyond Line Of Sight (BLOS) system to replace the TRC-170. These funds are identified to cover system developmental activities along with different test activities to include durability (life), interoperability, performance and operational activities.

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOTM Development | C/FFP | MCSC, QinetiQ NA:Stafford, VA | 0.000 | 0.860 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.860 | |
| NOTM Development | C/FFP | SPAWAR:Charleston, SC | 0.000 | 0.000 | | 0.450 | May 2013 | 2.325 | Dec 2013 | - | | 2.325 | 0.000 | 2.775 | |
| NOTM NOSC Development | TBD | TBD:TBD | 0.000 | 0.000 | | 0.000 | | 7.219 | Feb 2014 | - | | 7.219 | Continuing | Continuing | Continuing |
| TWTS (MRC-142 design) | C/FFP | SPAWAR:Charleston,SC | 0.000 | 0.000 | | 0.000 | | 2.200 | Jan 2014 | - | | 2.200 | 0.000 | 2.200 | |
| TWTS (TRC-170) | C/FFP | SPAWAR:Charleston,SC | 0.000 | 0.000 | | 0.000 | | 2.000 | Mar 2014 | - | | 2.000 | 0.000 | 2.000 | |
| | | **Subtotal** | 0.000 | 0.860 | | 0.450 | | 13.744 | | 0.000 | | 13.744 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOTM Engineering Support | FFRDC | US Army, MITRE:Stafford, VA | 0.000 | 0.000 | | 1.236 | Dec 2012 | 1.400 | Dec 2013 | - | | 1.400 | 0.000 | 2.636 | |
| LMST Contractor Support | C/FFP | MCSC, QinetiQ NA:Stafford, VA | 0.000 | 0.805 | Aug 2012 | 0.100 | Apr 2013 | 0.100 | Apr 2014 | - | | 0.100 | 0.000 | 1.005 | |
| VSAT Development and Integration | FFRDC | US Army, MITRE:Stafford, VA | 4.337 | 0.270 | Jan 2012 | 0.293 | Dec 2012 | 0.034 | Dec 2013 | - | | 0.034 | 0.000 | 4.934 | |
| TCM-Engineering Support | SS/UCA | US Army, MITRE:Stafford,VA | 0.181 | 0.181 | Feb 2012 | 0.181 | Dec 2012 | 0.181 | Dec 2013 | - | | 0.181 | 0.000 | 0.724 | |
| TCM Progamatic and Development Support | C/FFP | SSC-Atlantic:Charleston, SC | 0.000 | 0.824 | Oct 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.824 | |
| LMST Engineering Support | FFRDC | US Army, MITRE:Stafford, VA | 2.606 | 0.000 | | 0.166 | Dec 2012 | 0.212 | Dec 2013 | - | | 0.212 | 0.000 | 2.984 | |
| NOTM Contract Support | C/FFP | MCSC, QinetiQ NA:Stafford, VA | 0.000 | 0.858 | Mar 2012 | 0.938 | Apr 2013 | 1.250 | Apr 2014 | - | | 1.250 | 0.000 | 3.046 | |
| VSAT Contractor Support | C/FFP | MCSC, QinetiQ NA:Stafford, VA | 0.043 | 0.270 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.313 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMART-T Contractor Support | FFRDC | US Army, MITRE:Stafford, VA | 0.000 | 0.192 | Mar 2012 | 0.068 | Dec 2012 | 0.154 | Dec 2013 | - | | 0.154 | 0.000 | 0.414 | |
| | | **Subtotal** | 7.167 | 3.400 | | 2.982 | | 3.331 | | 0.000 | | 3.331 | 0.000 | 16.880 | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VSAT Test Support | MIPR | JITC:Ft. Huachuca, AZ | 0.000 | 0.399 | Mar 2012 | 0.070 | Mar 2013 | 0.210 | Mar 2014 | - | | 0.210 | 0.000 | 0.679 | |
| NOTM Test Support | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.200 | Dec 2011 | 0.450 | Feb 2013 | 0.500 | Feb 2014 | - | | 0.500 | 0.000 | 1.150 | |
| SMART-T | WR | MCOTEA:Quantico, VA | 0.000 | 0.000 | | 0.030 | Nov 2012 | 0.020 | Nov 2013 | - | | 0.020 | 0.000 | 0.050 | |
| SMART-T | SS/FFP | US Army, PM WIN-T:Aberdeen, MD | 0.000 | 0.000 | | 0.000 | | 0.020 | Feb 2014 | - | | 0.020 | 0.000 | 0.020 | |
| LMST | MIPR | JITC:Ft Huachuca, AZ | 0.000 | 0.000 | | 0.050 | Aug 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.050 | |
| VSAT Test Support | MIPR | JSEC:APG, MD | 0.000 | 0.000 | | 0.000 | | 0.130 | Oct 2013 | - | | 0.130 | 0.000 | 0.130 | |
| NOTM | WR | MCOTEA:Quantico, VA | 0.000 | 0.000 | | 0.000 | | 0.275 | Nov 2013 | - | | 0.275 | 0.000 | 0.275 | |
| TCM WIDEBAND Handheld | TBD | TBD:TBD | 0.000 | 0.000 | | 0.000 | | 1.553 | Apr 2014 | - | | 1.553 | 0.000 | 1.553 | |
| TWTS (MRC-142) | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.000 | | 0.500 | Jan 2014 | - | | 0.500 | 0.000 | 0.500 | |
| TWTS (MRC-142) | WR | MCOTEA:Quantico, VA | 0.000 | 0.000 | | 0.000 | | 0.080 | Mar 2014 | - | | 0.080 | 0.000 | 0.080 | |
| LMST | WR | MCOTEA:Quantico, VA | 0.000 | 0.187 | Sep 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.187 | |
| TWTS (MRC-142) | MIPR | JITC:Ft. Huachuca, AZ | 0.000 | 0.000 | | 0.000 | | 0.546 | Jul 2014 | - | | 0.546 | 0.000 | 0.546 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* | |

**Test and Evaluation ($ in Millions)**

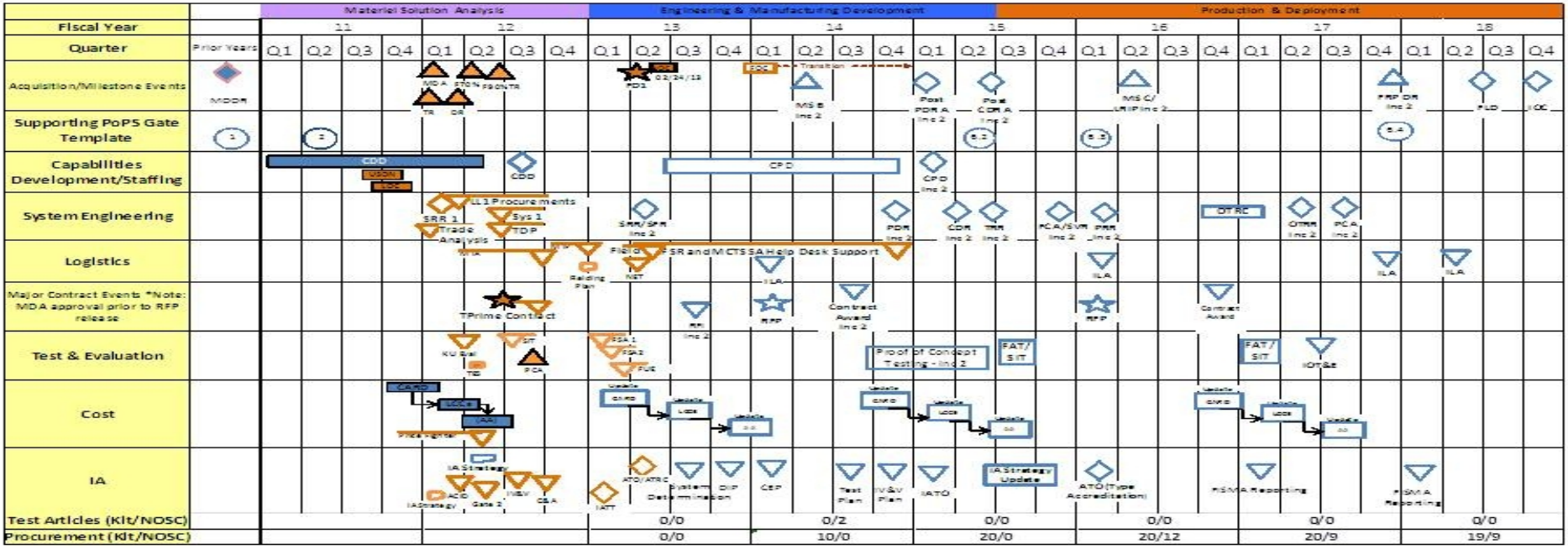
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TWTS (TRC-170) | MIPR | US Airforce, PMO:Warren Robbins, GA | 0.000 | 0.000 | | 0.000 | | 0.381 | Jan 2014 | - | | 0.381 | 0.000 | 0.381 | |
| TWTS (TRC-170) | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.000 | | 0.633 | Dec 2013 | - | | 0.633 | 0.000 | 0.633 | |
| TCM MRC-145B Test Support | C/FFP | SPAWAR:Charleston, VA | 0.259 | 0.234 | Sep 2012 | 0.381 | Mar 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.874 | |
| | | **Subtotal** | 0.259 | 1.020 | | 0.981 | | 4.848 | | 0.000 | | 4.848 | 0.000 | 7.108 | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 7.426 | 5.280 | | 4.413 | | 21.923 | | 0.000 | | 21.923 | | | |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

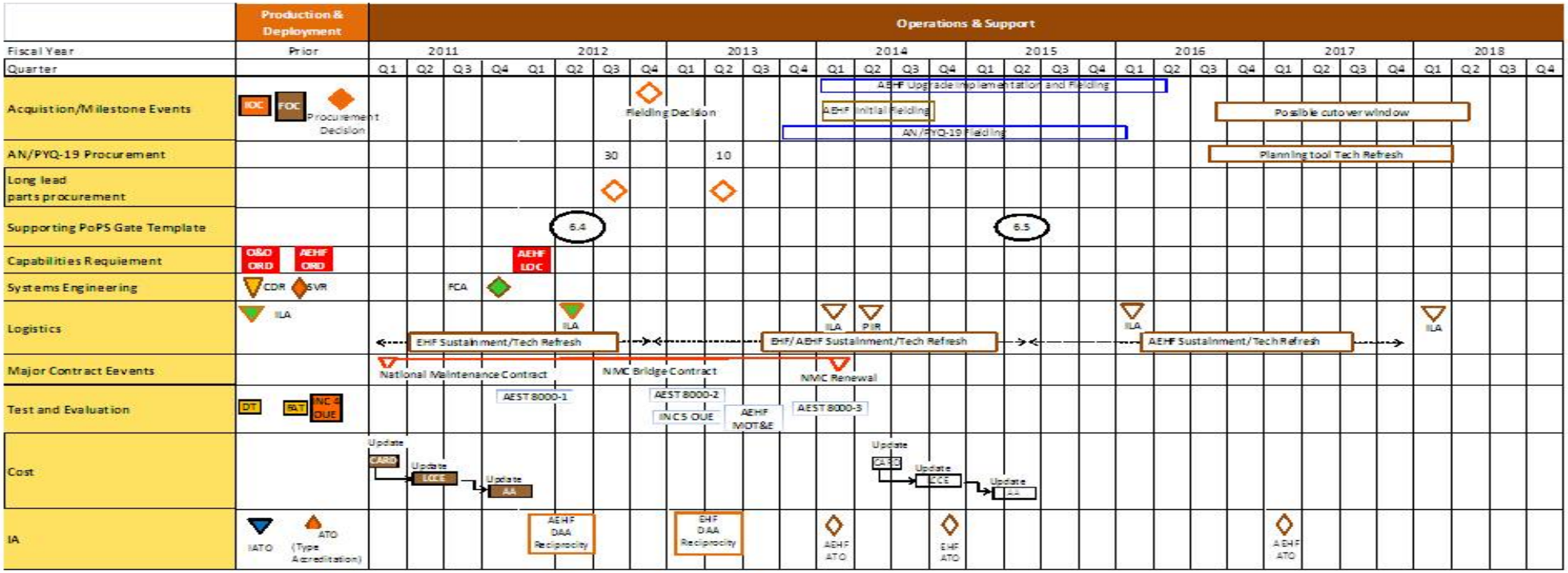
# NOTM Program Schedule




1

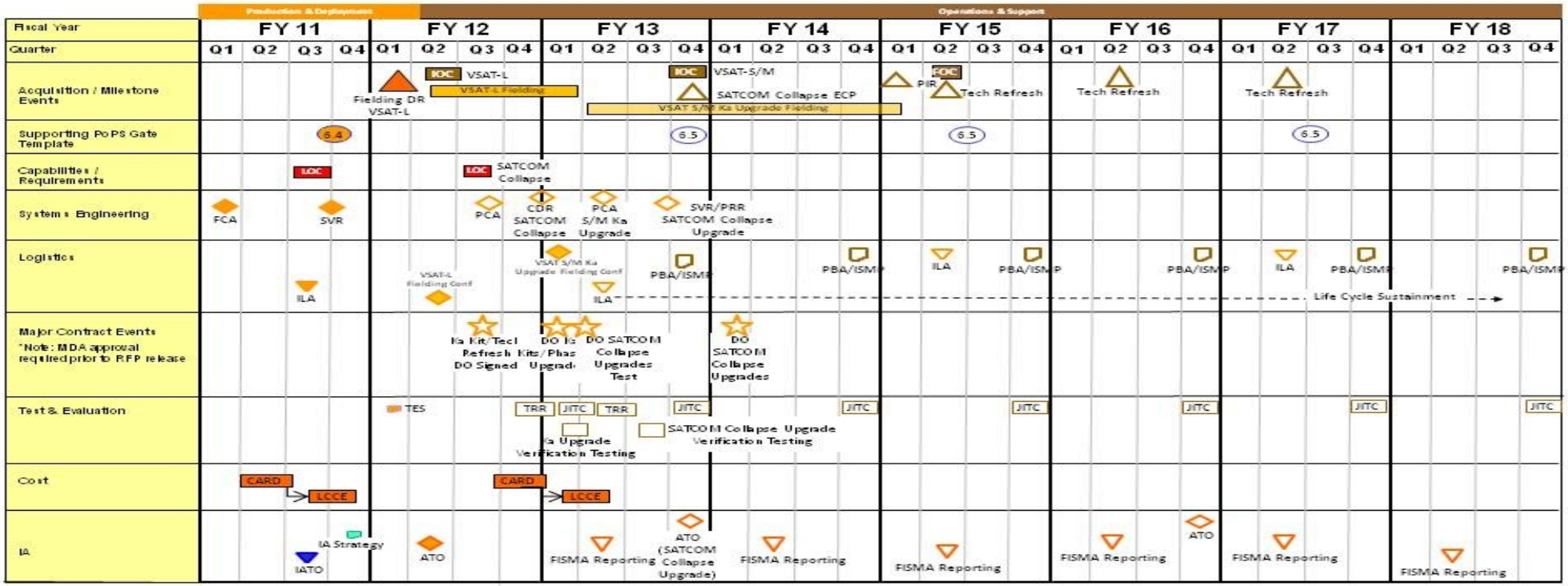
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2275: *Joint Tactical Radio System* |

# AEHF SMART-T SCHEDULE



| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

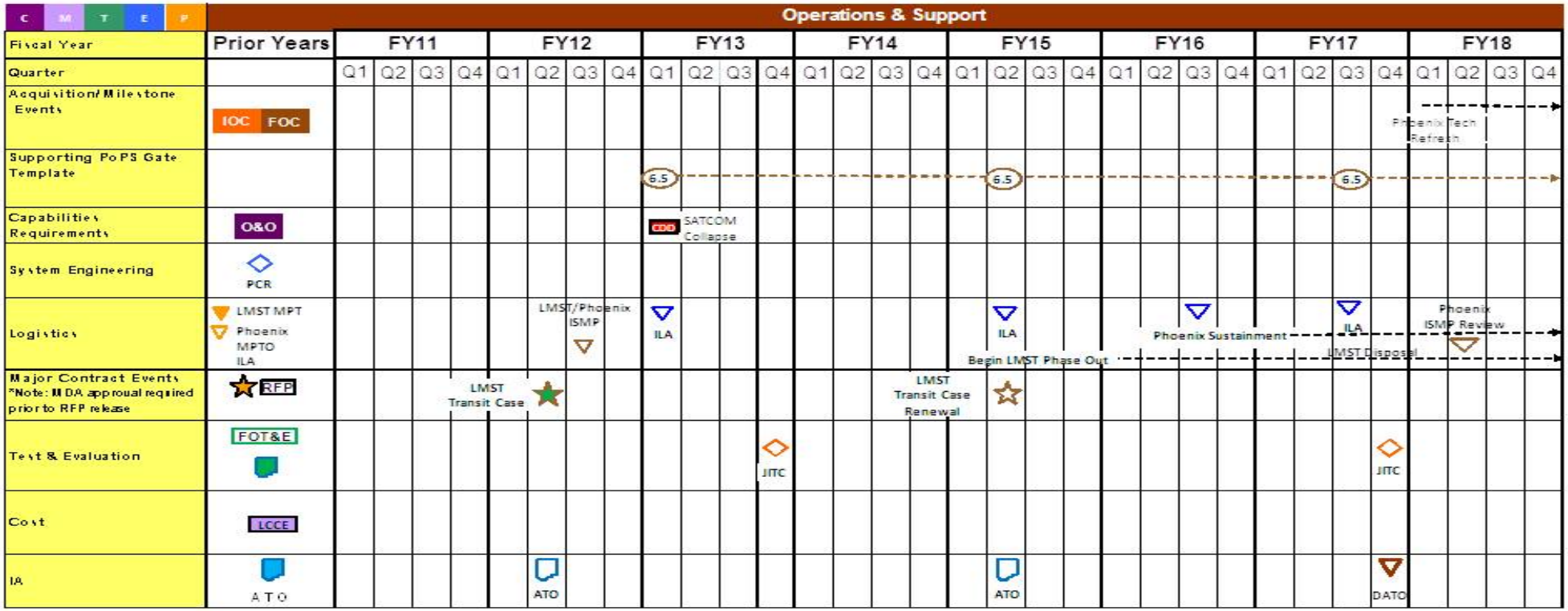
# VSAT Program Schedule




1

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

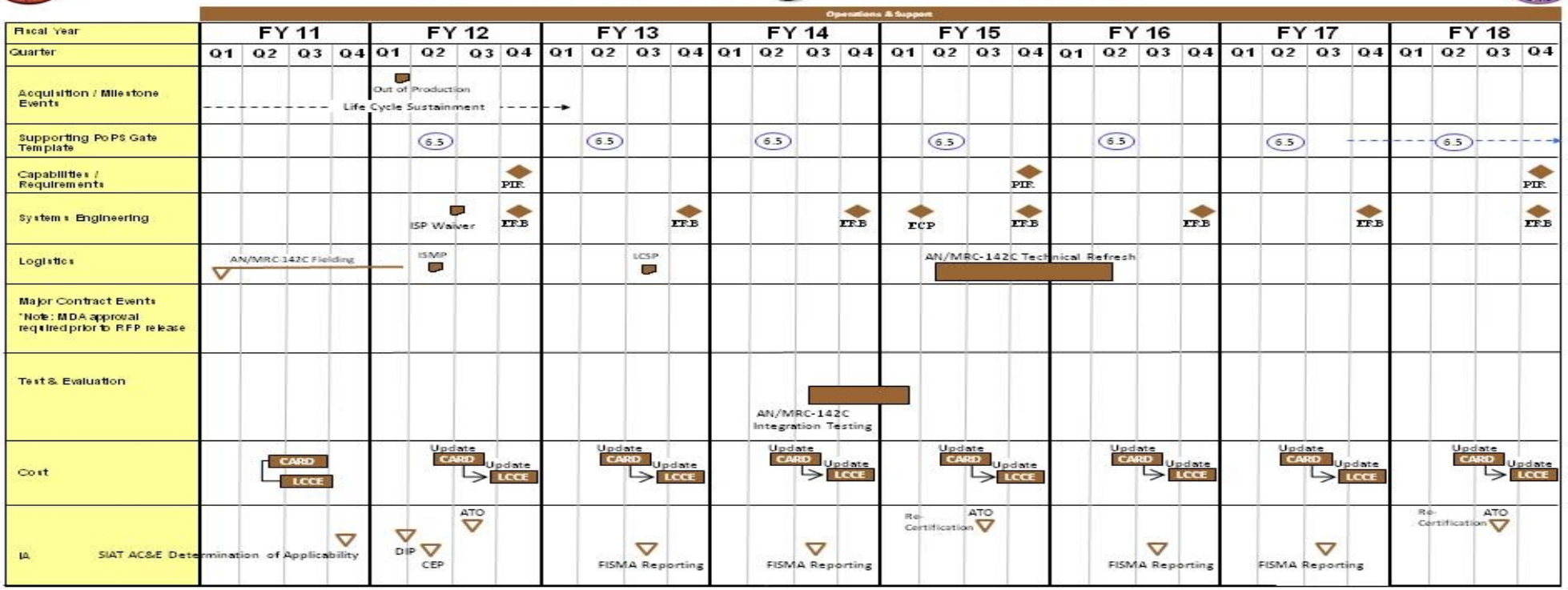
# LMST/Phoenix Program Schedule




1

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

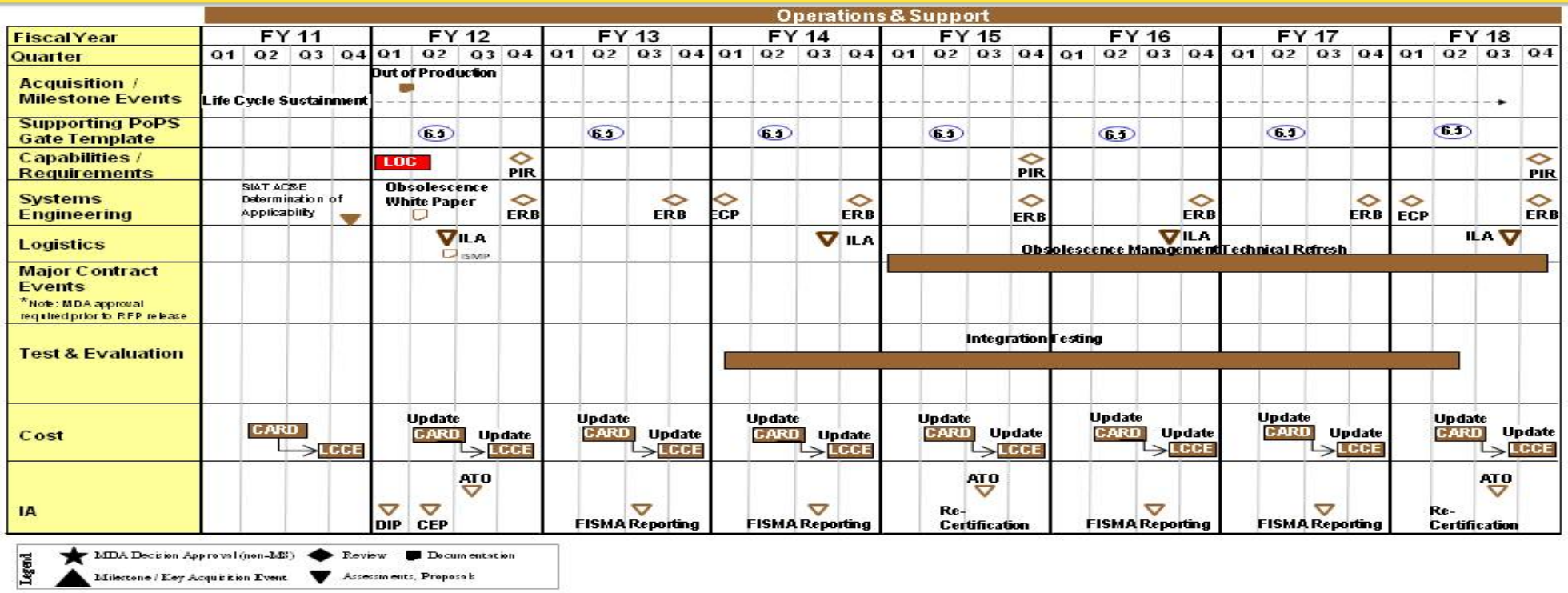
# MRC-142 Program Schedule




5

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

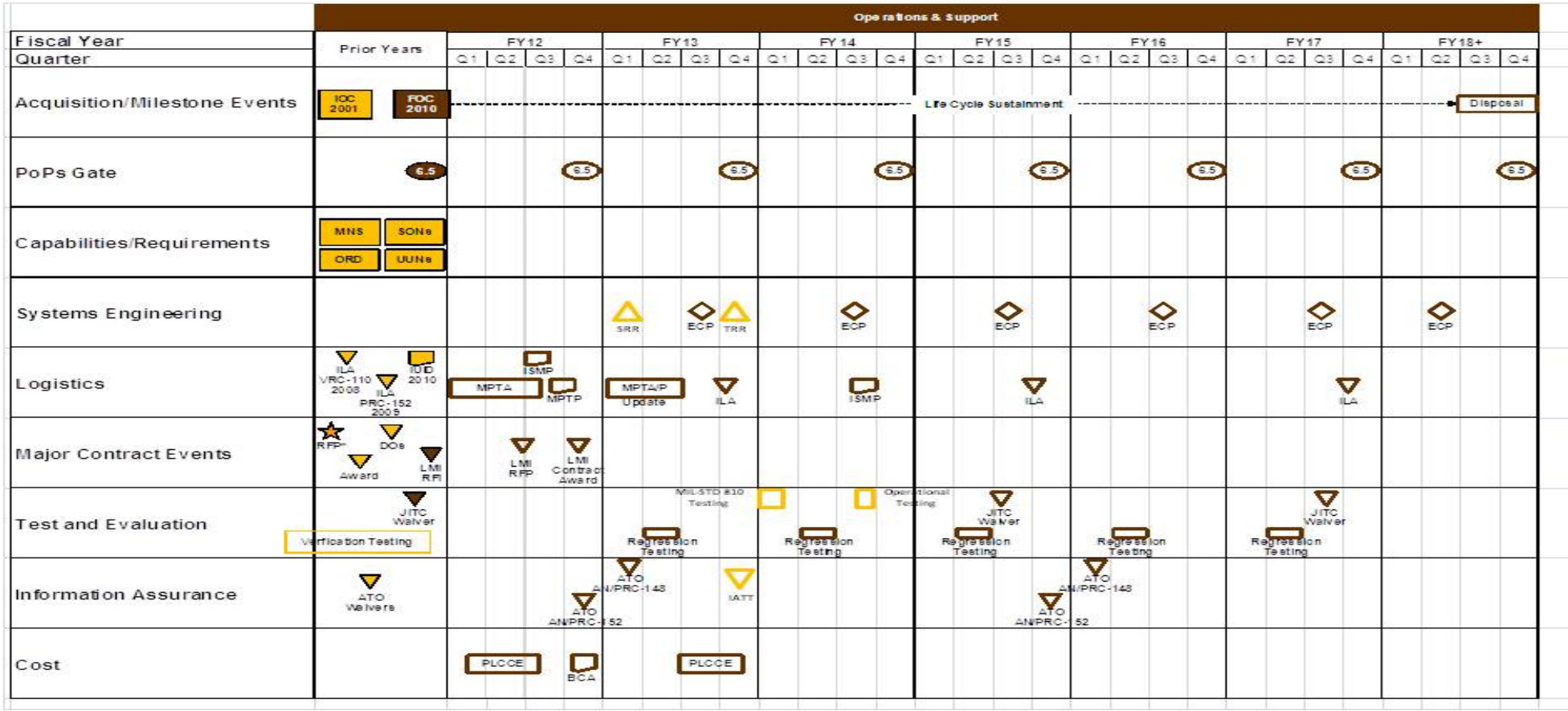
# TWTS TRC-170 Program Schedule




11

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

# THHR Program Schedule



| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2275: *Joint Tactical Radio System* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2275*** | | | | |
| TCM-WB THHR Life Cycle Sustainment | 1 | 2012 | 2 | 2018 |
| TCM-WB THHR SRR | 1 | 2013 | 1 | 2013 |
| TCM-WB THHR TRR | 1 | 2013 | 1 | 2013 |
| TCM-WB THHR ECP | 3 | 2014 | 3 | 2014 |
| TCM-WB THHR MIL-STD 810 Testing | 1 | 2014 | 1 | 2014 |
| TCM-WB THHR Operational Testing | 3 | 2014 | 3 | 2014 |
| NOTM CDD | 3 | 2012 | 3 | 2012 |
| NOTM CARD/LCCE/Affordability Assessment | 1 | 2013 | 1 | 2014 |
| NOTM Proof of Concept Testing Increment 2 | 3 | 2014 | 2 | 2015 |
| NOTM PDR Increment 2 | 4 | 2014 | 4 | 2014 |
| NOTM MS B Increment 2 | 2 | 2014 | 2 | 2014 |
| NOTM EMD RFI | 3 | 2013 | 3 | 2013 |
| NOTM EMD RFP | 1 | 2014 | 1 | 2014 |
| NOTM EMD Contract Award | 3 | 2014 | 3 | 2014 |
| NOTM LRIP Increment 2 RFP | 1 | 2016 | 1 | 2016 |
| NOTM LRIP Increment 2 Contract Award | 4 | 2016 | 4 | 2016 |
| NOTM LRIP Increment 2 FRP | 4 | 2017 | 4 | 2017 |
| VSAT Large IOC | 2 | 2012 | 2 | 2012 |
| VSAT Large Fielding | 2 | 2012 | 1 | 2013 |
| VSAT S/M Ka-band FRP/Fielding | 2 | 2013 | 1 | 2015 |
| VSAT Small/Medium IOC | 4 | 2013 | 4 | 2013 |

| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| VSAT SATCOM Collapse Upgrades Test Articles Award | 2 | 2013 | 2 | 2013 |
| VSAT JITC Test Event (DICE 3) | 4 | 2013 | 4 | 2013 |
| VSAT SATCOM Collapse Ka Kits/ Phase IV Upgrades Award | 1 | 2013 | 1 | 2013 |
| VSAT Ka-band FOC | 2 | 2015 | 2 | 2015 |
| VSAT Tech Refresh | 2 | 2015 | 2 | 2015 |
| VSAT SATCOM Collapse ECP Award | 1 | 2014 | 1 | 2014 |
| LMST SATCOM Collapse LOC | 3 | 2012 | 3 | 2012 |
| LMST JITC Certifications | 4 | 2013 | 4 | 2013 |
| LMST (Phoenix) JITC Certifications | 4 | 2013 | 4 | 2013 |
| LMST & Phoenix ATO | 2 | 2015 | 2 | 2015 |
| LMST Phase-out | 1 | 2016 | 4 | 2017 |
| LMST (Phoenix) Tech Refresh | 1 | 2018 | 4 | 2018 |
| SMART-T Inc 5 Operational User Evaluation | 4 | 2012 | 2 | 2013 |
| SMART-T AEST-2 Launch | 4 | 2012 | 2 | 2013 |
| SMART-T AEST 3 Launch | 4 | 2013 | 2 | 2014 |
| SMART-T AEHF Planning Tool (PYQ-19) Fielding | 4 | 2013 | 1 | 2016 |
| SMART-T AEHF Terminal Fielding | 1 | 2014 | 2 | 2016 |
| SMART-T AEHF MOT&E | 2 | 2013 | 4 | 2013 |
| TWTS (MRC-142) Intergration Testing | 3 | 2014 | 1 | 2015 |
| TWTS (MRC-142) ERB (4th qtr each year) | 4 | 2012 | 4 | 2018 |
| TWTS (MRC-142) ECP | 1 | 2015 | 1 | 2015 |
| TWTS (MRC-142) Tech Refresh | 2 | 2015 | 2 | 2016 |
| TWTS (MRC-142) ATO (3rd qtr every 3 years) | 3 | 2012 | 3 | 2018 |
| TWTS (TRC-170) PIR (3rd qtr every 3 years) | 4 | 2012 | 4 | 2018 |
| TWTS (TRC-170) ECP | 1 | 2014 | 1 | 2014 |

| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2275: *Joint Tactical Radio System* |

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| TWTS (TRC-170) ILA | 3 | 2014 | 3 | 2014 |
| TWTS (TRC-170) Intergration Testing | 1 | 2014 | 2 | 2018 |
| TWTS (TRC-170) Obsolescence Management Techinal Refresh | 1 | 2015 | 4 | 2018 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2276: *Comms Switching and Control Sys* | 24.280 | 4.121 | 8.327 | 15.405 | - | 15.405 | 11.114 | 7.767 | 5.083 | 5.171 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

(U) Network Planning & Management (NPM), formerly Joint Network Management System (JNMS), is a portfolio of communications planning and Network Management applications for use throughout the Marine Air-Ground Task Force (MAGTF). NPM includes the Systems Planning Engineering and Evaluation Device (SPEED). NPM provides the MARFOR (Marine Forces) component planners with the ability to conduct high-level planning; detailed planning and engineering; monitoring; control and reconfiguration; and spectrum planning and management in support of Combatant Commander (COCOM) and Commander, Joint Task Force (CJTF) operations. SPEED provides High Frequency (HF) predictions, Line of Site (LOS) propagation, Radio Coverage Analysis (RCA), Satellite planning, Command and Control Personal Computer (C2PC) track interface, interference and de-confliction analysis, spectrum management, Radio Guard Charts, Comm-On-The-Move (COTM), and T/E (training & education) and force structure management.

(U) Transition Switch Module (TSM): consists of three systems that provide a flexible Unit Level Switch that replaces legacy Tri-Tac switches with current commercial technology, providing maneuver elements with improved voice/data switching, data transport and bandwidth management capabilities. This program maintains USMC joint interoperability as all Services transition to Commercial Off-The-Shelf (COTS) switching technologies.

(U) Expeditionary Command and Control Suite (ECCS): Will provide reach back capability to the Global Information Grid (GIG) to access the Defense Switch Network (DSN), Defense Information System Network (DISN) Secret Internet Protocol Router Network (SIPRNET), Non-secure Internet Protocol Router Network (NIPRNET), and DISN Video Services (DVS), enabling a small advance force/liaison team to communicate with a Marine Air-Ground Task Force (MAGTF), Joint Task Force (JTF) or other Joint Force Commander, and to maintain situational awareness.

(U) Tactical Data Network (TDN) Data Distribution System - Modular (DDS-M): The DDS-M provides the commander a modular, integrated, and interoperable Internet Protocol (IP)- based LAN and WAN data networking capability that forms the data communications backbone and data communications support to organizations within a MAGTF. The DDS-M provides extension of the Defense Information System Network (DISN), Secret Internet Protocol Router Network (SIPRNet), and Sensitive But Unclassified (SBU) Non-secure Internet Protocol Router Network (NIPRNet) as well as a Coalition networking capability and access to strategic, supporting establishments, joint and other service component tactical data networks for Marine Corps Tactical Data Systems (TDSs) and other DDS-Ms. The DDS-M provides Marine Corps maneuver elements with a modular and scalable IP data transport capability that will replace, supplement and be used with existing legacy data systems through the integration of computers, routers, data switches and cabling, Enhanced Position Location and Reporting System (EPLRS) radio net interface units, MODEMS, link encryption devices, and patch panels. Uninterrupted Power Supplies (UPS) provide for emergency power and continuity of operations. The DDS-M can

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

operate from the SBU up to the TOP SECRET (TS)/SENSITIVE COMPARTMENTED INFORMATION (SCI) level and contains integral In-line Network Encryption (INE) device supporting IP Security (IPSec) and Virtual Private Networking (VPN).

(U) Joint Enhanced Core Communications System (JECCS): Formerly known as First In Command and Control System (FICCS). JECCS is the Joint Task Force (JTF) enabler "first in" integrated, processor-controlled communications and management system that provides C2 capabilities supporting a Marine Expeditionary Unit (MEU) deployment ashore of the early phases of a deployment by a larger command element such as a Marine Air-Ground Task Force (MAGTF) or JTF Commander's mission into an Area of Operation. The JECCS is easily scalable and capable of "fly-away" deployment. It is a system of systems composed of Commercial Off-the-Shelf (COTS) and Government Off-the-Shelf (GOTS) equipment. It provides the primary interface between subscriber equipment/systems and the long-haul multi-channel transmission systems. The JECCS facilitates secure and non-secure voice and data communications, switching functions, network routing, and management functions. The JECCS augments the current and planned communications architectures and provides technical control and network management services for the broad range of switching and radio connectivity requirements.

(U) Digital Technical Control (DTC): DTC and other communications are a switch network infrastructure which provides voice, SIPR, NIPR, coalition, data, and video services. DTC provides the deployed warfighter with a standard data and voice architecture that is interoperable with joint and other services' communications systems.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** NPM: SPEED Development and Enhancements | 0.695 | 0.978 | 1.940 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Continued future enhancements to software to maintain relevancy with emerging communication technology.<br>***FY 2013 Plans:***<br>Funds will support recompete of SPEED contract for software development and program support.<br>***FY 2014 Plans:***<br>Funds will provide additional enhancements and capabilities within the SPEED software (Spectrum 21 online), testing through MCTSSA, and research on additional software applications to be utlitized within NPM. | | | |
| ***Title:*** NPM: Program Management Support | 0.000 | 0.000 | 0.400 |
| ***Articles:*** | | | 0 |
| ***FY 2014 Plans:***<br>Funds provide for program support. | | | |
| ***Title:*** TSM: Engineering and Program Support | 0.408 | 0.317 | 0.324 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Provided support for Engineer Change Proposal (ECP) integration and development testing, and continued engineering and program support efforts.<br>***FY 2013 Plans:***<br>Funds will provide for Information Assurance, Interoperability testing, and continued engineering and program support.<br>***FY 2014 Plans:***<br>Funds will provide for Voice Over IP (VoIP) testing, and continued engineering and program support. | | | |
| ***Title:*** ECCS: Product Development<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Funds are being used to purchase ECCS Production Representative Units for Test and Evaluation (T&E) purposes. Performing activity will be responsible for associated Information Assurance and Evironmental Safety and Occupational Health (ESOH) tasks.<br>***FY 2013 Plans:***<br>Funds will provide for development of the Block 1 Consolidated Base Station (CBS). | 0.500<br>0 | 0.770<br>0 | 0.000 |
| ***Title:*** ECCS: Test and Evaluation Support<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Funds will support ECCS Block 1 creation of Test Plan, Procedures, and Test Reports.<br>***FY 2013 Plans:***<br>Funds will provide support for testing of the Block 1 Consolidated Base Station (CBS) at MCTSSA and participation in Joint Interoperability Test Center (JITC) test events.<br>***FY 2014 Plans:***<br>Funds will continue to provide support for testing of the Block 1 CBS and participation in Joint Interoperability Test Center (JITC) test events. | 0.500<br>0 | 0.409<br>0 | 0.500<br>0 |
| ***Title:*** ECCS: Engineering and Program Support<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Conducted engineering and program support.<br>***FY 2013 Plans:*** | 0.037<br>0 | 0.934<br>0 | 1.405<br>0 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Funds will support development of the Block 1 Consolidated Base Station (CBS) documentation , and continued engineering and program support.<br>***FY 2014 Plans:***<br>Funds will support integration and testing of the Block 1 CBS, and continued engineering and program support. | | | |
| ***Title:*** DDS-M: Program Engineering Support<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Provided program engineering support for DDS-M systems.<br>***FY 2013 Plans:***<br>Funds will support the IPV6 MCTSSA lab which provides interoperability validation of networking components within the IPV6 arena.<br>***FY 2014 Plans:***<br>Funds will support the Edge Boundary Controller initiative (DISA mandated) that provides a proxy service for real-time services which include VTC and Voice Over IP (VoIP) in addition to continued engineering program support. | 0.514<br>0 | 0.517<br>0 | 3.732<br>0 |
| ***Title:*** DDS-M: Test and Evaluation Support<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>JITC Joint Interoperability Testing and MCOTEA participation in DT events; First Article Testing (FAT) and Systems Integration Testing (SIT) in support of independent user evaulations.<br>***FY 2013 Plans:***<br>Continue Joint Interoperability Testing Command (JITC) and MCOTEA participation in DT events (2 DoD Interoperability Communications Exercises (DICE)).<br>***FY 2014 Plans:***<br>Funds will provide support for JITC and MCOTEA participation in OT events, (2 DoD Interoperability Communications Exercises (DICE)). | 0.338<br>0 | 0.510<br>0 | 0.500<br>0 |
| ***Title:*** DDS-M Program Management Support<br>***Articles:***<br>***FY 2012 Accomplishments:*** | 1.128<br>0 | 1.444<br>0 | 1.300<br>0 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Funds will support research and development at MCTSSA for virtualization initiative Engineering Change Proposal (ECP) which includes modifications to the ASM and DSM modules of the DDS-M Core.<br>***FY 2013 Plans:***<br>Funds will support research at MCTSSA/MITRE on the effects of collapsing the networking capability in the VSAT and absorbing the requirement into the DDS-M. The research will include ensuring the current routers within the modules can support the increased payload required of the VSAT equipment.<br>***FY 2014 Plans:***<br>Funds will provide research and development at MCTSSA for concept of employment/operations for the implementation of the Edge Controller Boundary (EBC) capability within the IAM modules. | | | |
| ***Title:*** JECCS: Engineering and Program Support<br>***Articles:***<br>***FY 2013 Plans:***<br>Funds will support development of Engineering Change Proposal (ECP) packages and continued engineering and program support.<br>***FY 2014 Plans:***<br>Funds will support research, development, and implementation of required crypto hardware/wiring; software regression testing; and continued engineering and program support. | 0.000<br>0 | 0.077<br>0 | 2.755<br>0 |
| ***Title:*** JECCS: Test and Evaluation Support<br>***Articles:***<br>***FY 2013 Plans:***<br>Funds will support testing activities at MCTSSA.<br>***FY 2014 Plans:***<br>Funds will support participation in Joint Interoperability Testing Center (JITC) DoD Interoperability Communications Exercise (DICE) events in accordance with Joint Staff requirements and continued testing activities at MCTSSA. | 0.000<br>0 | 0.040<br>0 | 0.689<br>0 |
| ***Title:*** DTC: Engineering and Development Support<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Continued engineering program support efforts.<br>***FY 2013 Plans:*** | 0.001<br>0 | 2.180<br>0 | 1.360<br>0 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Funds will support Engineering Change Proposals (ECPs), software integration, and continued engineering and program support.<br>***FY 2014 Plans:***<br>Funds will support engineering and further development of additional IP/Black Core routing, ECPs, and continued engineering and program support. | | | |
| ***Title:*** DTC: Test and Evaluation Support | 0.000 | 0.151 | 0.500 |
| ***Articles:*** | | 0 | 0 |
| ***FY 2013 Plans:***<br>Funds provide for Information Assurance updates and Joint Interoperability Testing.<br>***FY 2014 Plans:***<br>Funds will provide engineering and program support, IV&V testing, system verification review, and Authority to Operate re-accreditation. | | | |
| **Accomplishments/Planned Programs Subtotals** | 4.121 | 8.327 | 15.405 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/4634-1: *TSM* | 18.205 | 22.100 | 18.103 | | 18.103 | 1.307 | 0.869 | 0.000 | 0.000 | 0.000 | 169.052 |
| • PMC/4634-2: *ECCS* | 0.000 | 0.300 | 4.777 | | 4.777 | 12.657 | 4.420 | 3.020 | 2.983 | 0.000 | 38.436 |
| • PMC/4634-5: *DDS-M* | 98.153 | 32.353 | 12.980 | | 12.980 | 73.681 | 63.225 | 44.785 | 47.521 | 0.000 | 372.698 |
| • PMC/4634-6: *DTC* | 16.695 | 3.295 | 3.656 | | 3.656 | 3.329 | 4.519 | 6.591 | 6.709 | 0.000 | 44.794 |
| • PMC/4634-7: *JECCS* | 0.000 | 5.200 | 5.192 | | 5.192 | 1.746 | 1.776 | 9.913 | 10.091 | 0.000 | 33.918 |
| • PMC/4634-8: *NPM* | 0.000 | 0.000 | 0.750 | | 0.750 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.750 |
| • PMC/4630-1: *TSM/CCR* | 0.000 | 0.000 | 1.838 | | 1.838 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.838 |

**Remarks**

**D. Acquisition Strategy**

(U) Network Planning and Management (NPM), formerly Joint Network Management Systems (JNMS): The NPM acquisition strategy emphasizes the use of Commercial Off-The-Shelf (COTS) and Government Off-The-Shelf (GOTS) products. The USMC GOTS SPEED acquisition strategy is for incremental development with the goal of releasing one new version of software annually. The SPEED contract method is through a sole source Blanket Purchase Agreement (BPA) using Fixed Price Task Orders based on the developer's GSA schedule for man-hours. FY13 to FY14 increase will support the award of a new contract and incorporation of additional capabilities and functionality into the SPEED software in accordance with user requirements.

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

(U) Transition Switch Module (TSM): TSM calls for the identification, integration, and testing of commercial switching technologies of sufficient maturity to improve system performance or meet emerging user requirements. Seeks commercial solutions that are fully compatible and interoperable with other Communication Networking Systems (CNS) programs that are fielded and/or being fielded e.g., DTC, TDN, Joint Enhanced Core Communication System (JECCS) etc.

(U) Expeditionary Command and Control Suite (ECCS): ECCS will use an evolutionary acquisition strategy and pursue a competitive firm fixed price contract. Major focus will be on interoperability and compatibility with existing systems and components. R&D effort will focus on integrating and testing 'miniaturized' versions of existing components. Emerging technologies such as VoIP and Secure Wireless will also be addressed in the out year R&D effort.

(U) TDN Data Distribution System - Modular (DDS-M): DDS-M is an evolutionary acquisition strategy that will modify existing and legacy programs to add emerging capabilities for interoperability. The tenets of the WFN-T acquisition strategy are Commercial Off-The-Shelf (COTS) and Government Off-The-Shelf (GOTS), firm fixed-price competitive contracts for material solutions to meet emerging requirements. WFN-T may reuse other Services' development and ride external contracts that satisfy requirements and analysis of alternatives. FY13 to FY14 increase will support Edge Boundary Controller initiative which supports information assurance concerns when implementing voice-over-ip (VoIP) solutions. In addition, funds will be used to research technology obsolescense replacement end items.

(U) Joint Enhanced Core Communications System-Refresh (JECCS-R): The JECCS-R acquisition strategy is based upon an evolutionary acquisition where most components are Commercial Off-the-Shelf (COTS). As an evolutionary acquisition, the JECCS will continue to be upgraded and improved as technology advances. Software version upgrades will be included. COTS and GOTS will be used to the maximum extent possible. The task order recipient will be responsible for updating the JECCS-R system operations and maintenance manual, which provides an integrated view of the equipment and interoperation of all components. FY13 to FY14 increase will support the Windows 7 and laptop upgrades, system integration testing, crypto testing and upgrades, fiber optic modem testing and enhancements, and server hardware/software testing and upgrades.

(U) Digital Technical Control (DTC): DTC uses an an evolutionary acquisition strategy. As new products and industry standards are produced, they are to be tested and integrated into DTC equipment. Major focus will be on interoperability and compatibility with existing systems and components in the Marine Corps, as well as Joint and Coalition forces. R&D effort will focus on developing and integrating improved versions of existing components, while working toward the end-state of IPV6.

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NPM (SPEED S/W Development) | C/FFP | MCSC, Northrop Grumman:VA, FL | 7.329 | 0.695 | Mar 2012 | 0.928 | Jan 2013 | 1.773 | Nov 2013 | - | | 1.773 | Continuing | Continuing | Continuing |
| ECCS Block 1 Integration | RO | NSWC:Panama City, FL | 7.231 | 0.500 | Oct 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 7.731 | |
| ECCS IA Certifications | WR | MCOTEA:Quantico, VA | 6.412 | 0.000 | | 0.215 | Dec 2012 | 0.215 | Mar 2014 | - | | 0.215 | 0.000 | 6.842 | |
| JECCS | C/FFP | SPAWAR:Charleston, SC | 0.000 | 0.000 | | 0.000 | | 1.551 | Feb 2014 | - | | 1.551 | 0.000 | 1.551 | |
| | | **Subtotal** | 20.972 | 1.195 | | 1.143 | | 3.539 | | 0.000 | | 3.539 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TSM Engineering Support | FFRDC | US Army, MITRE:Stafford, VA | 0.526 | 0.108 | Jan 2012 | 0.100 | Dec 2012 | 0.100 | Dec 2013 | - | | 0.100 | 0.000 | 0.834 | |
| ECCS Engineering Support | FFRDC | US Army, MITRE:Stafford, VA | 0.000 | 0.037 | Jan 2012 | 0.734 | Dec 2012 | 0.430 | Dec 2013 | - | | 0.430 | Continuing | Continuing | Continuing |
| ECCS Engineering Support | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.100 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.100 | |
| DDS-M Engineering Support | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.300 | Feb 2013 | 0.250 | Feb 2014 | - | | 0.250 | 0.000 | 0.550 | |
| DDS-M Engineering Support | TBD | TBD:TBD | 0.000 | 0.000 | | 0.000 | | 3.306 | Mar 2014 | - | | 3.306 | Continuing | Continuing | Continuing |
| DDS-M Engineering Support | C/FFP | SPAWAR:Charleston, SC | 0.000 | 1.355 | Sep 2012 | 0.217 | Dec 2012 | 0.250 | Dec 2013 | - | | 0.250 | 0.000 | 1.822 | |
| DTC Engineering Support | FFRDC | US Army, MITRE:Stafford, VA | 0.000 | 0.001 | Jan 2012 | 2.180 | Dec 2012 | 1.490 | Dec 2013 | - | | 1.490 | 0.000 | 3.671 | |
| WFN-T Engineering Support | FFRDC | US Army, MITRE:Stafford, VA | 1.882 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.882 | |
| | | **Subtotal** | 2.408 | 1.501 | | 3.631 | | 5.826 | | 0.000 | | 5.826 | | | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NPM T&E | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.050 | Mar 2013 | 0.200 | Mar 2014 | - | | 0.200 | Continuing | Continuing | Continuing |
| TSM | C/FFP | SPAWAR:Charleston, SC | 0.000 | 0.000 | | 0.217 | Mar 2013 | 0.224 | Mar 2014 | - | | 0.224 | 0.000 | 0.441 | |
| ECCS T&E | WR | MCOTEA:VA | 0.000 | 0.000 | | 0.315 | Jan 2013 | 0.280 | Jan 2014 | - | | 0.280 | 0.000 | 0.595 | |
| ECCS T&E | MIPR | JITC:Ft. Huachuca, AZ | 0.000 | 0.000 | | 0.094 | Jan 2013 | 0.080 | Mar 2014 | - | | 0.080 | 0.000 | 0.174 | |
| DDS-M T&E | WR | MCOTEA:VA | 0.000 | 0.000 | Mar 2012 | 0.100 | Mar 2013 | 0.100 | Mar 2014 | - | | 0.100 | 0.000 | 0.200 | |
| DDS-M T&E | MIPR | JITC:Ft. Huachuca, AZ | 0.000 | 0.080 | May 2012 | 0.410 | Mar 2013 | 0.400 | Mar 2014 | - | | 0.400 | 0.000 | 0.890 | |
| JECCS | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.047 | Jan 2013 | 0.308 | Jan 2014 | - | | 0.308 | 0.000 | 0.355 | |
| JECCS | MIPR | JITC:Ft. Huachuca, AZ | 0.000 | 0.000 | | 0.000 | | 0.100 | Feb 2014 | - | | 0.100 | 0.000 | 0.100 | |
| DTC | WR | MCOTEA:Quantico, VA | 0.000 | 0.000 | | 0.051 | Mar 2013 | 0.170 | Mar 2014 | - | | 0.170 | 0.000 | 0.221 | |
| DTC T&E | MIPR | JITC:Ft. Huachuca, AZ | 0.000 | 0.000 | | 0.100 | May 2013 | 0.100 | May 2014 | - | | 0.100 | 0.000 | 0.200 | |
| DTC | Allot | MCTSSA:Camp Pendleton, CA | 0.000 | 0.000 | | 0.000 | | 0.100 | Feb 2014 | - | | 0.100 | 0.000 | 0.100 | |
| WFN-T T&E | MIPR | JITC:Ft. Huachuca, AZ | 0.900 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.900 | |
| ECCS T&E | WR | NSWC:Panama City, FL | 0.000 | 0.500 | Oct 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.500 | |
| | | **Subtotal** | 0.900 | 0.580 | | 1.384 | | 2.062 | | 0.000 | | 2.062 | | | |

**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NPM Program Support | C/FFP | MCSC, QinetiQ:VA | 0.000 | 0.000 | | 0.000 | | 0.367 | Apr 2014 | - | | 0.367 | Continuing | Continuing | Continuing |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

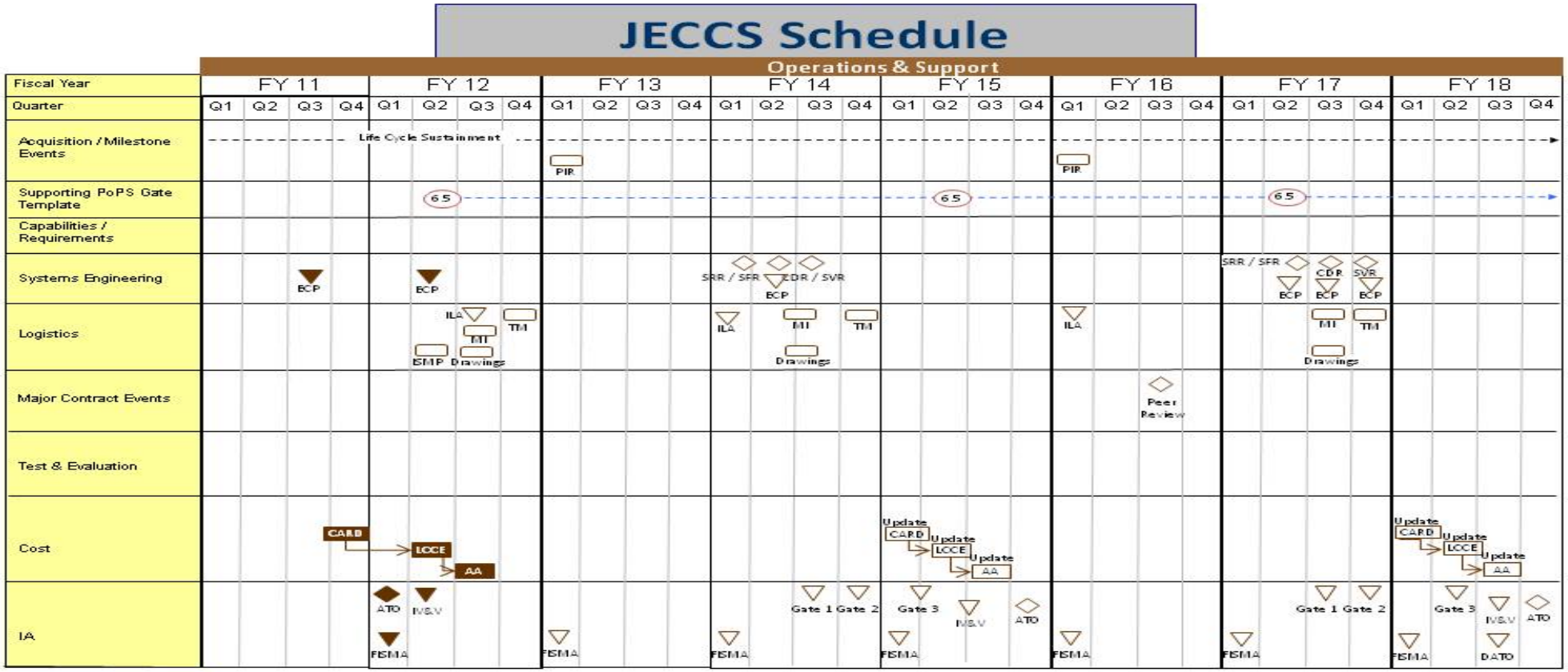
**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ECCS Program Support | C/FFP | MCSC, QinetiQ:VA | 0.000 | 0.000 | | 0.655 | Apr 2013 | 0.900 | Apr 2014 | - | | 0.900 | Continuing | Continuing | Continuing |
| DDS-M Program Support | C/FFP | MCSC, QinetiQ:VA | 0.000 | 0.545 | Sep 2012 | 1.444 | Apr 2013 | 1.226 | Apr 2014 | - | | 1.226 | Continuing | Continuing | Continuing |
| JECCS Program Support | C/FFP | MCSC, QinetiQ:VA | 0.000 | 0.000 | | 0.070 | Apr 2013 | 1.485 | Apr 2014 | - | | 1.485 | 0.000 | 1.555 | |
| TSM Program Support | C/FFP | MCSC, QinetiQ:VA | 0.000 | 0.300 | Sep 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.300 | |
| | | **Subtotal** | 0.000 | 0.845 | | 2.169 | | 3.978 | | 0.000 | | 3.978 | | | |

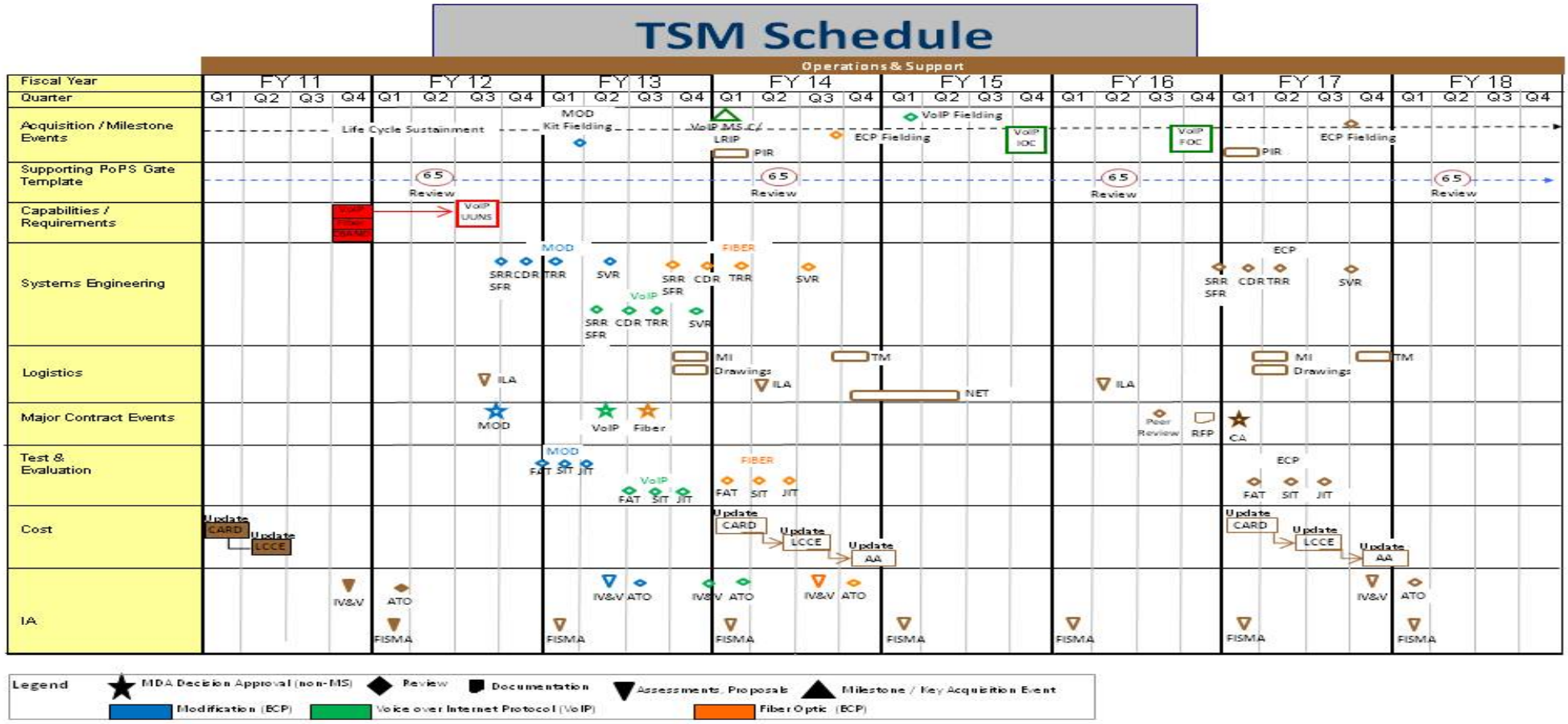
| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 24.280 | 4.121 | | 8.327 | | 15.405 | | 0.000 | | 15.405 | | | |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |



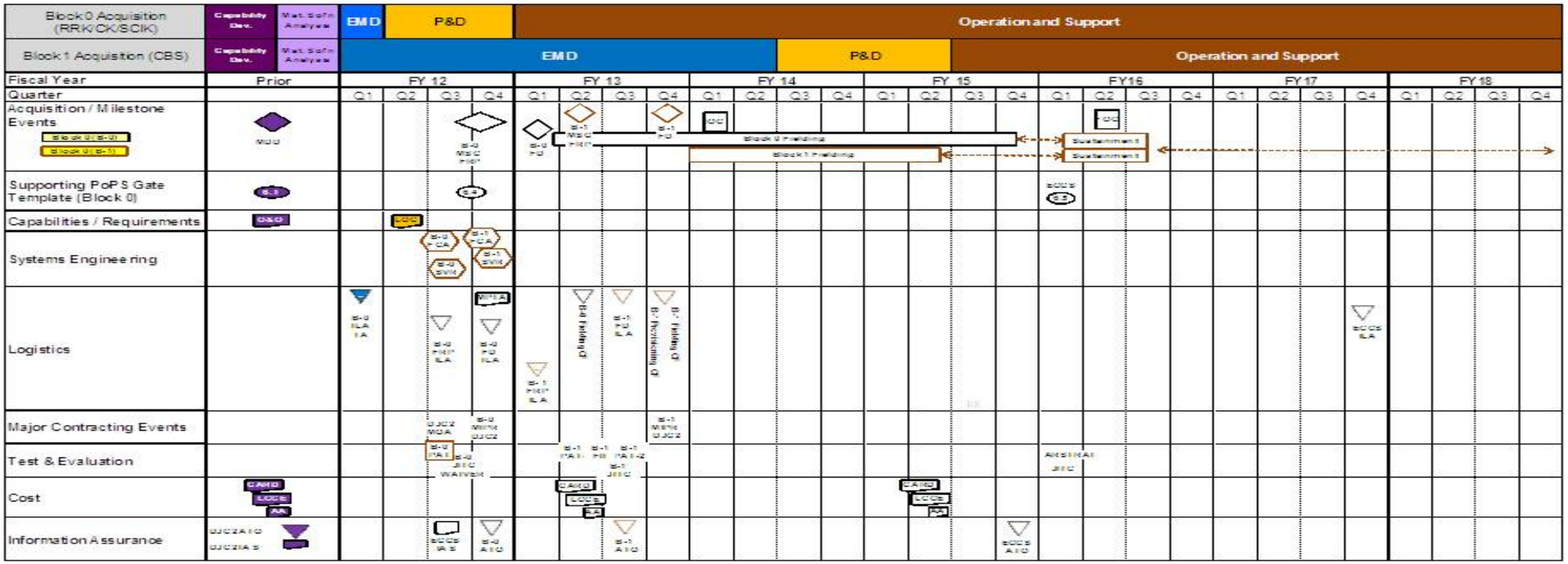
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |



| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

*As of 4 May 2012

# ECCS Program Schedule

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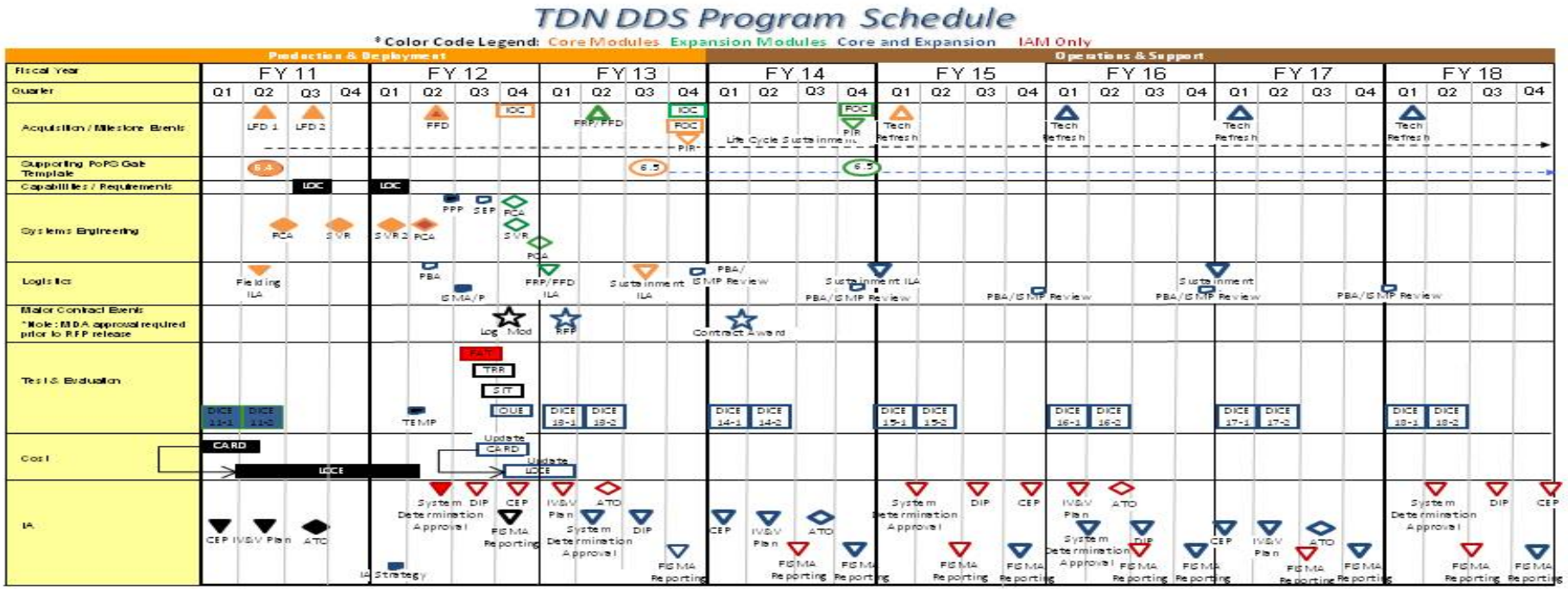
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2276: *Comms Switching and Control Sys* |

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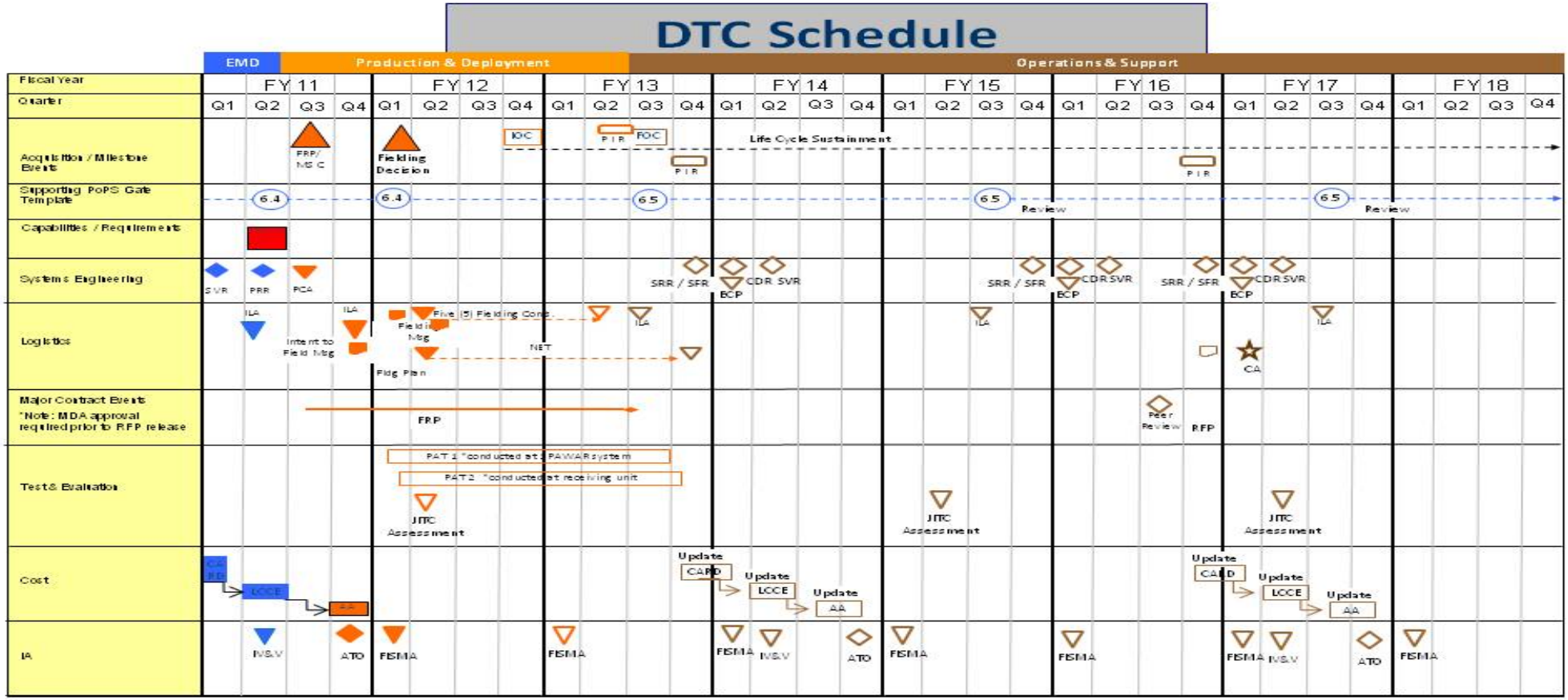
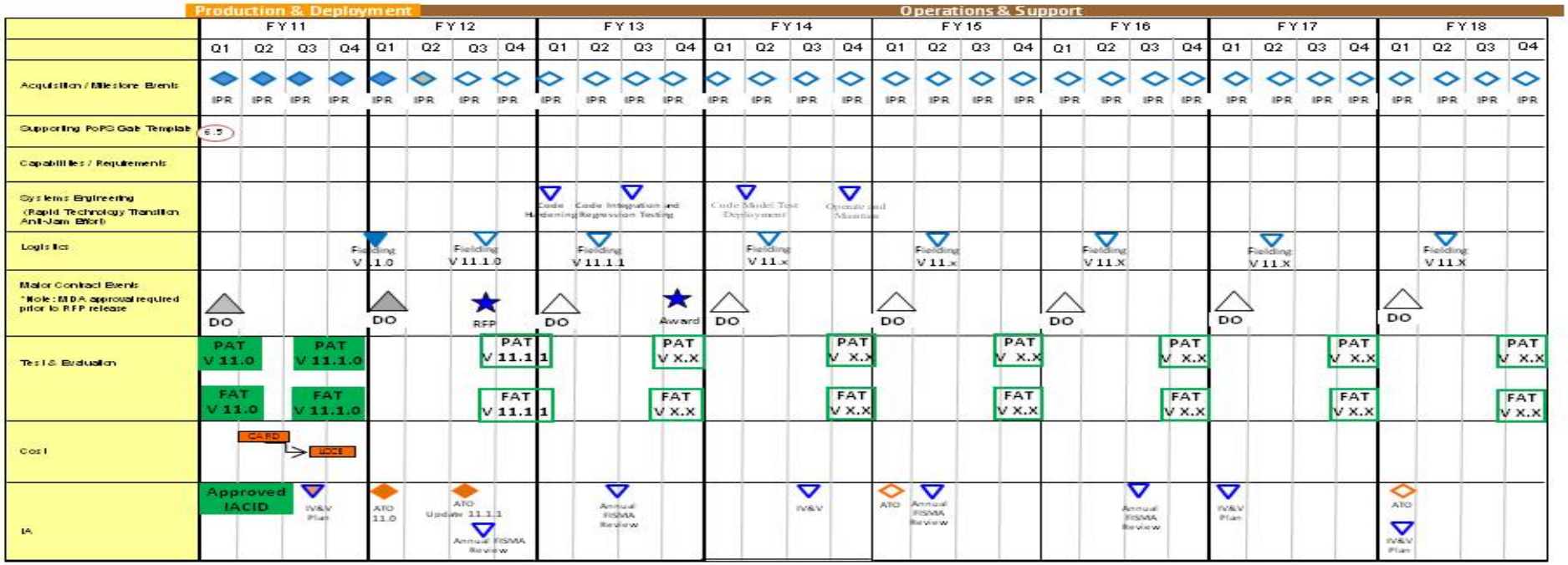
| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2276: *Comms Switching and Control Sys* |



| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2276: *Comms Switching and Control Sys* |

# NPM Program Schedule

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| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2276: *Comms Switching and Control Sys* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2276*** | | | | |
| NPM/SPEED IPR (one per quarter) | 1 | 2012 | 4 | 2018 |
| NPM/SPEED Fielding - Ver 11.1.1 | 2 | 2013 | 2 | 2013 |
| NPM/SPEED Fielding - Ver 11.X (one new version per FY) | 2 | 2014 | 2 | 2018 |
| NPM/SPEED RFP | 3 | 2012 | 3 | 2012 |
| NPM/SPEED Contract Award | 4 | 2013 | 4 | 2013 |
| NPM/SPEED Developmental Test - PAT (4th QTR each FY) | 4 | 2012 | 4 | 2018 |
| NPM/SPEED Operational Test - FAT 1 (1st QTR each FY) | 4 | 2012 | 4 | 2018 |
| NPM/SPEED ATO for 11.1.1 | 3 | 2012 | 3 | 2012 |
| TSM SRR/SFR VoIP | 2 | 2013 | 2 | 2013 |
| TSM CDR VoIP | 3 | 2013 | 3 | 2013 |
| TSM Contract Award VoIP | 2 | 2013 | 2 | 2013 |
| TSM FAT/SIT/JITC VoIP | 3 | 2013 | 4 | 2013 |
| TSM SVR VoIP | 4 | 2013 | 4 | 2013 |
| TSM MSC VoIP | 1 | 2014 | 1 | 2014 |
| TSM Contract Award Fiber | 3 | 2013 | 3 | 2013 |
| TSM SRR/SFR Fiber | 4 | 2013 | 4 | 2013 |
| TSM CDR Fiber | 4 | 2013 | 4 | 2013 |
| TSM FAT/SIT/JITC Technology Fiber | 1 | 2014 | 2 | 2014 |
| TSM SVR Fiber | 3 | 2014 | 3 | 2014 |
| ECCS Block 0 MS C/FRP | 4 | 2012 | 4 | 2012 |
| ECCS Block 0 Fielding Decision | 1 | 2013 | 1 | 2013 |

| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ECCS Block 0 SVR | 4 | 2012 | 4 | 2012 |
| ECCS Block 0 ATO | 4 | 2012 | 1 | 2017 |
| ECCS Block 1 MS C/FRP | 2 | 2013 | 2 | 2013 |
| ECCS Block 1 Fielding Decision | 4 | 2013 | 4 | 2013 |
| ECCS Block 1 ATO | 3 | 2013 | 3 | 2013 |
| ECCS IOC | 1 | 2014 | 1 | 2014 |
| ECCS FOC | 2 | 2016 | 2 | 2016 |
| TDN DDS-M Core Modules - IOC | 4 | 2012 | 4 | 2012 |
| TDN DDS-M - Core Modules - FOC | 4 | 2013 | 4 | 2013 |
| TDN DDS-M - Recompete RFP | 1 | 2013 | 1 | 2013 |
| TDN DDS-M - Contract Award | 1 | 2014 | 1 | 2014 |
| TDN DDS-M - Core Module Tech Refresh/Fielding | 1 | 2015 | 1 | 2015 |
| DDS-M Expansion Module Production Decision | 2 | 2013 | 2 | 2013 |
| DDS-M Expansion Module Fielding Decision | 2 | 2013 | 2 | 2013 |
| DDS-M Expansion Module IOC | 4 | 2013 | 4 | 2013 |
| DDS-M Expansion Module FOC | 4 | 2014 | 4 | 2014 |
| JECCS ECP (laptop ugrades) | 2 | 2012 | 2 | 2012 |
| JECCS SRR | 1 | 2014 | 1 | 2014 |
| JECCS CDR | 2 | 2014 | 2 | 2014 |
| JECCS SVR | 3 | 2014 | 3 | 2014 |
| JECCS ECP (promina 800 software upgrades) | 2 | 2014 | 2 | 2014 |
| DTC NET | 4 | 2012 | 1 | 2013 |
| DTC IOC | 4 | 2012 | 4 | 2012 |
| DTC FOC | 3 | 2013 | 3 | 2013 |
| DTC PIR OPFOR | 2 | 2013 | 2 | 2013 |

| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2276: *Comms Switching and Control Sys* |

| | Start | | End | |
|---|---|---|---|---|
| Events by Sub Project | Quarter | Year | Quarter | Year |
| DTC CDR | 1 | 2014 | 1 | 2014 |
| DTC ECP | 1 | 2014 | 1 | 2014 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2277: *System Engineering and Integration* | 9.434 | 10.923 | 6.171 | 11.626 | - | 11.626 | 6.637 | 6.648 | 6.588 | 6.692 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

This project provides funds for engineering, test, and evaluation activity, which ensures that the systems being developed within the Program Element (PE) employ consistent standards for interoperability and to the maximum extent feasible use of hardware and software which is uniform and standard across programs.

Expeditionary Energy Office (E2O): Energy is a top priority for the USMC and one of the six pillars of Modernization for the Corps identified by the Commandant. In 2009 the Commandant established the USMC Expeditionary Energy Office (E2O), with the mission to analyze, develop, and direct the Marine Corps' energy strategy in order to optimize expeditionary capabilities across all warfighting functions. E2O's role is to advise the Marine Requirements Oversight Council (MROC) on all energy and resource related requirements, acquisitions, and programmatic decisions. This office and funding directly support execution of the USMC Expeditionary Energy Strategy and Implementation Plan (Mar 2011), and priorities identified in the USMC Expeditionary Energy Water and Waste Initial Capabilities Document/Capabilities Based Assessment (Sept 2011), as well as Science and Technology Objectives identified in the 2012 USMC S&T Strategic Plan. The Marine Corps program aligns with Commandant's Planning Guidance 2010, the National Defense Authorization Act 2009, DoD directives and SECNAV goals. This funding will support the achievement of the Strategy, and the activities of the USMC Experimental Forward Operating Base process, managed by the E2O.

Joint Interoperability of Tactical Command and Control Systems (JINTACCS) is a Joint Chiefs-of-Staff (JCS)/DoD-mandated program for joint development, implementation, and testing of tactical data links and US Message Text Format (MTF) under the direction of the Defense Information Systems Agency (DISA) and Office of the Secretary of Defense/Networks and Information Integration (OASD/NII) per the Commander Joint Chiefs of Staff (CJCSI) 6610.01C and CJCS16241.04 for US Military Tactical Forces (USMTF). This effort also covers interoperability and testing of tactical message standards such as MILSTD 6017 Variable Message Format used between the US Army and USMC; and Coalition message formats the Joint Command, Control, Consultation Information Exchange Data Model (JC3IEDM).

Marine Air-Ground Task Force Command, Control, Communications, Computers, and Intelligence Systems Engineering and Integration, and Coordination (MAGTF C4I SEI&C) provides for the centralized planning and execution of Marine Corps Enterprise Information Technology and National Security Systems. It develops, certifies, and manages the configurations of the Marine Corps Enterprise Systems and Technical Architecture products and uses these to support enterprise-level systems engineering. It supports unified technical representation to joint and coalition communities for Marine Corps Systems and provides top-tier system engineering support to address system of systems technical issues. It is used to conduct direct Marine Expeditionary Unit/Marine Expeditionary Force (MEU/MEF) support in system integration testing with USN. This is part of Deploying Group Systems Integration Testing (DGSIT) and workups supporting Marine Expeditionary Force (MEF)

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* |

deployments. It is also used to support Marine Corps systems coordination and involvement in DoD initiatives to include ForceNet, Global Information Grid Enterprise Services (GIGES), and other Deployable Information Systems Architecture DISA/NETWARCOM efforts.

Marine Civil Information Management (MARCIM) is a discipline of information management comprised of people, process, and technology. Civil information managers leverage the process of Planning, Collection, Consolidation, Analysis, Production, and Sharing of civil information with technology to support the visualization and understanding of the civil environment to the military commander's decision making process. This program is a new start in FY14.

Joint Distributed Engineering Plant (JDEP) directly supports DoD mandated directive CJCSI 6212.01F, to evaluate the interoperability of the holistic Marine Air Ground Task Force (MAGTF) Command Control Communications Intelligence (C4I) Capability produced by Marine Corps Systems Command (MARCORSYSCOM). This evaluation will be accomplished via the MAGTF C4I Capability Certification (MC3) process. Using MC3, composite capabilities are evaluated for their collective interoperability with joint forces; support integration of emergent systems with systems aleady fielded, and to conduct critical engineering analysis capable of isolating and correcting capability deficiencies and optimize system of systems performance.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** Expeditionary Energy Office (E2O) | 2.583 | 2.448 | 2.128 |
| ***Articles:*** | 0 | 0 | 0 |

***FY 2012 Accomplishments:***
This funding directly supported execution of the USMC Expeditionary Energy Strategy and Implementation Plan, and priorities identified in the USMC Expeditionary Energy Water and Waste Initial Capabilities Document/Capabilities Based Assessment, as well as Science and Technology Objectives identified in the 2012 USMC S&T Strategic Plan. FY12 major funding activities included the design, integration, and fabrication of the MTVR Auxiliary Power Unit (APU) and heating, ventilation, and air conditioning (HVAC). FY12 funding activities also included the experimentation, development, and demonstration of the Mobile Power Solar (MSP) system, follow-on technology support for ExFOB , and the Analysis of Alternatives (AoA) for MAGTF Expeditionary Hybrid Power Systems (MeHPS).

***FY 2013 Plans:***
FY13 funds will support the USMC Expeditionary Energy Strategy and Implementation Plan, and priorities identified in the USMC Expeditionary Energy Water and Waste Initial Capabilities Document/Capabilities Based Assessment, as well as Science and Technology Objectives identified in the 2012 USMC S&T Strategic Plan. Using these priority roadmaps, E2O will invest in R&D programs to advance Strategy goals. Priority areas for investment include, but are not limited to: Energy harvesting; hybrid power; efficient heating and cooling of people, equipment and water; energy storage; energy efficient vehicles; energy metering and monitoring and decision tools; energy efficient shelters and sustainment.

***FY 2014 Plans:***
FY14 funds will support the USMC Expeditionary Energy Strategy and Implementation Plan, and priorities identified in the USMC Expeditionary Energy Water and Waste Initial Capabilities Document/Capabilities Based Assessment, as well as Science and

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Technology Objectives identified in the 2012 USMC S&T Strategic Plan. Using these priority roadmaps, E2O will invest in R&D programs to advance Strategy goals. Priority areas for investment include, but are not limited to: Energy harvesting; hybrid power; efficient heating and cooling of people, equipment and water; energy storage; energy efficient vehicles; energy metering and monitoring and decision tools; energy efficient shelters and sustainment. | | | |
| ***Title:*** JINTACCS: JCS and OASD/NII Data Links Testing. | 1.049 | 1.007 | 1.056 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>JINTACCS: DC SIAT and MCTSSA completed the review and update of all IT Standards applicable to the USMC and maintained the data environment to ensure all developed solution architectures associated the appropriate technical IT standards in their DODAF Standards View. DC SIAT led the Army - Marine Corps C2 interoperability Systems Engineering IPT to align the use of JVMF and VMF messaging standards to create interoperability between the DoD ground force systems (FBCB2 (VMF), JTCW (JVMF), GCCS (OTH Gold), TBMCS/AFATDS (USMTF), and aviation tactical data links. DC SIAT also led the development of a data model converter application to create interoperability between the NATO JC3IEDM data model to theC2PC (VMF) system allowing coalition interoperability at the dismounted level. | | | |
| ***FY 2013 Plans:***<br>JINTACCS: DC SIAT and MCTSSA will continue to review and update all IT Standards applicable to the USMC and maintain the architectural data environment to ensure all developed solution architectures are associated with the appropriate technical IT standards in their DODAF Standards View. DC SIAT will continue to lead the Army - Marine Corps C2 interoperability Systems Engineering IPT to align the use of JVMF and VMF messaging standards to create interoperability between the DoD ground force systems (FBCB2 (VMF), JTCW (JVMF), GCCS (OTH Gold), TBMCS/AFATDS (USMTF), and aviation tactical data links. This effort will expand to incorporate the ability to use Tactical Service Oriented approaches to mediate data across multiple environments / domains (Air/Mobile platform/Dismounted/Stationary command posts). DC SIAT will continue to lead the development of data model converter applications to create Standard Agreement 4677 on interoperability between the NATO JC3IEDM data model to the C2PC (VMF) system allowing coalition interoperability at the dismounted level. | | | |
| ***FY 2014 Plans:***<br>JINTACCS: DC SIAT and MCTSSA will continue to review and update all IT Standards applicable to the USMC and maintain the architectural data environment to ensure all developed solution architectures are associated with the appropriate technical IT standards in their DODAF Standards View. DC SIAT will continue to lead the Army - Marine Corps C2 interoperability Systems Engineering IPT to align the use of JVMF and VMF messaging standards to create interoperability between the DoD ground force systems (FBCB2 (VMF), JTCW (JVMF), GCCS (OTH Gold), TBMCS/AFATDS (USMTF), and aviation tactical data links. This effort will expand to incorporate the ability to use Tactical Service Oriented approaches to mediate data across multiple environments / domains (Air/Mobile platform/Dismounted/Stationary command posts). DC SIAT will continue to lead the | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| development of data model converter applications to create Standard Agreement 4677 on interoperability between the NATO JC3IEDM data model to the C2PC (VMF) system allowing coalition interoperability at the dismounted level. | | | |
| ***Title:*** SEIC: Engineering and Technical Support | 5.634 | 2.716 | 7.617 |
| ***Articles:*** | 0 | 0 | 0 |

***FY 2012 Accomplishments:***

MAGTF SEI&C:

Mode 5/S - Coordinated across multiple stakeholders to include CD&I (C2ID, FPID), DC/Aviation, PEO-LS, PG-11, NAVAIR, etc. to define a Service-wide engineering strategy to deliver mode 5/S capability for the Marine Corps. Products included study analysis paper and briefings. Programs affected included: TPS-59, G/ATOR, CTN, CAC2S, MACCS Sustainment, ATNAVICS, etc.

MOWASP (Mechanization of Warehousing and Storage Procedures)- MOWASP is an IBM 370 hosted application. Based on LOGCOM claims that an emerging IBM operation system upgrade would render the program inoperable unless critical changes were made with an estimated cost of ~$5M, the LCE War Room technical team investigated the impact of the operating system upgrade and determined that no impact would result, and provided actionable decision-quality data to support a coordinated SES position between LOGCOM, I&L and MCSC. MOWASP was determined to be viable until the capabilities it provides are replaced by GCSS-MC Increment II.

MAGTF Chat- The divergence of Chat applications across the Marine Corps enterprise was becoming epidemic with obvious cost, interoperability and IA implications: there are over a dozen duplicative instantiations across MCSC programs. The GCE War Room coordinated across the Marine Corps enterprise to neck down to a single application that met IA requirements and reduced cost throughout.

2011 MAGTF C2 Road Map- Provided foundational support and technical leadership necessary to initiate and publish the HQMC's CD&I C2 Road Map in concert with C2ID. Based upon the interdependency analysis, the MAGTF C2 baseline, and other cross-syscom products provided by SE&IC, the roadmap successfully advocated a system of systems perspective and positively influenced key funding decisions across the warfighting PEB for POM 14.

CAC2S-MACCS Sustainment- Based on C2ID initiative to maintain the MACCS Family of Systems to 2025 and cancel CAC2S Increment I, Phase 2 as an affordability measure. The ACE War Room led the analysis to determine the feasibility of maintaining the software and refreshing the hardware configuration out to 2025. Independent Cost Analysis of sustaining and upgrading MACCS is on-going. Results briefed to DC/Aviation and ASN-RDA.

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Deploying Group System Integration Test (DGSIT)- Coordinated across programs/systems to provide SMEs and technical expertise directly to MEUs, and in some cases the MEFs, during their pre-deployment work-ups to ensure their fielded Tier 1 and Tier 2 systems are fully functional/interoperable. These efforts support either 7 or 8 pre-deployments exercises per year and have successfully indentified, isolated and resolved several hundred technical integration/interoperable issues that would have potentially been discovered during real-world operations. DGSIT coordinators and SMEs routinely receive accolades by MEF/ MEU commanders or their staffs for not only resolving interoperability issues but also for the intrinsic training benefits associated with working through the issues.<br><br>GCSS-MC- Based on MROC tasking to define off ramps for GCSS-MC R1.2, The LCE War Room identified a series of potential solutions to achieve R1.2 functionality with much less risk. Cost analysis of potential solutions is ongoing as detailed configurations their system architectures are documented.<br><br>***FY 2013 Plans:***<br>MAGTF SEI&C: Engineering and technical support for configuration management of MAGTF C4I systems. Review and submittal of multiple Integration Support Plans (ISPs) and Tactical ISPs (TISPs). Pre-deployment assistance to I MEF and multiple MEUs. Participation in ForceNet, NCES, GIGES, and other Joint DoD initiatives. Plans are for continued activities to support the interoperability and jointness of the USMC Enterprise IT/NSS systems. FY13 level of funding is needed to accomplish the technical objectives for integration and interoperability between MAGTF systems and systems of systems. Provide support to establish and execute a MAGTF Integration War Room which will serve as a forum for aligning and integrating capability development activities. Alignment and integration activities will extend to Naval and Joint processes and will reinforce existing capability development processes via systems engineering, operational architecture, requirements transition, and knowledge management methodologies.<br><br>***FY 2014 Plans:***<br>MAGTF SEI&C: Engineering and technical support for configuration management of MAGTF C4I systems. Review and submittal of multiple Integration Support Plans (ISPs) and Tactical ISPs (TISPs). Pre-deployment assistance to I MEF and multiple MEUs. Participation in ForceNet, NCES, GIGES, and other Joint DoD initiatives. Plans are for continued activities to support the interoperability and jointness of the USMC Enterprise IT/NSS systems. FY 14 increased level of funding is needed to provide MAGTF Systems Integration and System of Systems Engineering expertise in support of delivering integrated MAGTF capabilities for the Marine Corps. | | | |
| ***Title:*** MARCIM: Marine Civil Information Management<br>***Articles:***<br><br>***FY 2014 Plans:*** | 0.000 | 0.000 | 0.825<br>0 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Develop new technology through various research efforts at the MAGTF Experimentation Center. | | | |
| ***Title:*** JDEP: Develop Certifications and Conduct MAGTF C4I Capability | 1.657 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>JDEP: Conducted development of the MAGTF C4I Capability Certification process which involved the creation of capability based test threads. Additionally, created Joint Test Threads and participated in a JFCOM sponsored joint distributed test event. | | | |
| **Accomplishments/Planned Programs Subtotals** | 10.923 | 6.171 | 11.626 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • 462000: *MARCIM* | 0.000 | 0.256 | 0.499 | | 0.499 | 0.256 | 0.264 | 0.264 | 0.268 | 0.000 | 1.807 |

**Remarks**

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MARCIM | WR | MEC:HI | 0.000 | 0.000 | | 0.000 | | 0.825 | Oct 2013 | - | | 0.825 | 0.000 | 0.825 | |
| Experimental Forward Operating Base | WR | NSWC:Various | 1.300 | 1.654 | Aug 2012 | 1.280 | Oct 2012 | 1.182 | Oct 2013 | - | | 1.182 | Continuing | Continuing | Continuing |
| Experimental Forward Operating Base | WR | NRL:Wash, DC | 0.270 | 0.250 | Aug 2012 | 0.265 | Jan 2013 | 0.224 | Jan 2014 | - | | 0.224 | Continuing | Continuing | Continuing |
| JINTACCS | C/FP | NSWC:Dahlgren, VA | 0.070 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.070 | |
| | | **Subtotal** | 1.640 | 1.904 | | 1.545 | | 2.231 | | 0.000 | | 2.231 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JINTACCS | C/FFP | NSWC:Dahlgren, VA | 0.000 | 0.000 | | 0.557 | Apr 2013 | 0.571 | Apr 2014 | - | | 0.571 | Continuing | Continuing | Continuing |
| MAGTF SEI&C | C/FP | SPAWAR:Charleston, SC | 0.000 | 0.500 | Aug 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| MAGTF SEI&C | C/FP | QNA:Stafford, VA | 3.680 | 0.000 | | 1.313 | Apr 2013 | 4.600 | Apr 2014 | - | | 4.600 | Continuing | Continuing | Continuing |
| MAGTF SEI&C | C/FP | MCSC:Quantico, VA | 0.800 | 0.000 | Apr 2012 | 0.440 | Apr 2013 | 1.600 | Apr 2014 | - | | 1.600 | Continuing | Continuing | Continuing |
| MAGTF SEI&C | WR | NSWC:Dahlgren, VA | 0.449 | 0.835 | Apr 2012 | 0.413 | Apr 2013 | 1.417 | Apr 2014 | - | | 1.417 | Continuing | Continuing | Continuing |
| JDEP | C/FP | NSWC:Dahlgren, VA | 1.152 | 0.813 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.965 | |
| JDEP | C/FP | OSEC:Carlsbad, CA | 0.300 | 0.000 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.300 | |
| JINTACCS | C/FP | MCTSSA:Cmp Pendlton CA | 0.513 | 0.709 | Apr 2012 | 0.450 | Apr 2013 | 0.485 | Apr 2014 | - | | 0.485 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 6.894 | 2.857 | | 3.173 | | 8.673 | | 0.000 | | 8.673 | | | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JINTACCS | WR | SPAWAR:Chartleston, SC | 0.000 | 0.340 | Jul 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2277: *System Engineering and Integration* | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAGTF SEI&C | C/FP | NRL:Wash, DC | 0.000 | 0.400 | Jun 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| Experimental Forward Operating Base | WR | MCWL:Quantico, VA | 0.600 | 0.100 | Aug 2012 | 0.603 | Oct 2012 | 0.491 | Oct 2013 | - | | 0.491 | Continuing | Continuing | Continuing |
| Experimental Forward Operating Base | WR | ATC:Aberdeen, MD | 0.300 | 0.379 | Sep 2012 | 0.300 | Jan 2013 | 0.231 | Jan 2014 | - | | 0.231 | Continuing | Continuing | Continuing |
| Experimental Forward Operating Base | C/FP | MCSC:Quantico, VA | 0.000 | 0.100 | Aug 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| Experimental Forward Operating Base | C/FP | NAVFAC:Port Hueneme, CA | 0.000 | 0.100 | Sep 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| JDEP | WR | SSCC:Charleston, SC | 0.000 | 0.844 | Jul 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.844 | |
| MAGTF SEI&C | MIPR | CECOM:Aberdeen, MD | 0.000 | 3.899 | Apr 2012 | 0.550 | Apr 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 0.900 | 6.162 | | 1.453 | | 0.722 | | 0.000 | | 0.722 | | | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 9.434 | 10.923 | | 6.171 | | 11.626 | | 0.000 | | 11.626 | | | |

**Remarks**

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2278: *Air Defense Weapons System* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2278: *Air Defense Weapons System* | 33.700 | 2.129 | 1.993 | 3.041 | - | 3.041 | 3.498 | 3.475 | 3.499 | 3.555 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

Ground Based Air Defense Transformation (GBAD-T) - Based upon the deployment of the Low Altitude Air Defense (LAAD) Battalions and their employment of the Stinger Missile, GBAD-T transforms Air Defense equipment through technology insertion and equipment repackaging to address capability gaps as the result of equipment obsolescence and the emergent and evolving threats to the Marine Air Ground Task Force (MAGTF).

GBAD-T consists of three efforts: 1) systems engineering support of currently fielded LAAD equipment/assets; 2) fielding of the Advanced Man-Portable Air Defense System (A-MANPADS) that replaces the Avenger Weapon System and existing MANPADS vehicles; 3) replacing the Remote Terminal Unit (RTU), an effort that replaces an 18 pound laptop computer that provides Situational Awareness and Command and Control to the Stinger and A-MANPAD teams. The RTU replacement will interface with and be capable of receiving a Common Aviation Command and Control Systems (CAC2S) broadcasted link. It will also be capable of interfacing with legacy MACCS.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** *GBAD TRANSFORMATION: Program Management Services | 1.063 | 0.705 | 0.398 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Continued Information Assurance and research into Optics. | | | |
| ***FY 2013 Plans:***<br>Complete Information Assurance and research into Optics. | | | |
| ***FY 2014 Plans:***<br>N/A | | | |
| ***Title:*** *GBAD TRANSFORMATION: Product Development | 0.075 | 0.297 | 2.400 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2278: *Air Defense Weapons System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Researched advanced Identification Friend or Foe Identification.<br>***FY 2013 Plans:***<br>Research into follow on weapon system.<br>***FY 2014 Plans:***<br>Research and demonstration of follow on weapon system. | | | |
| ***Title:*** *GBAD TRANSFORMATION: Integration Development (Missile Integration)<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Multiple vendor and Government participation in a Government sponsored GBAD capabilities demonstration.<br>***FY 2013 Plans:***<br>Develop ECP's for A-MANPADS Increment I hardware/software upgrades.<br>Develop Mounted Optics replacement. | 0.791<br>0 | 0.791<br>0 | 0.000 |
| ***Title:*** *GBAD TRANSFORMATION: Support Costs (MCTSSA/MCCDC/Crane/Dahlgren support)<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>GBAD-T conducted Health Assesments at the LAAD Battalions and the Stinger School house, ensuring Operational Readiness is maintained.<br>***FY 2013 Plans:***<br>GBAD-T will continue Health Assessments at the LAAD Battalions and the Stinger School house, ensuring Operational Readiness is maintained.<br>***FY 2014 Plans:***<br>GBAD-T will continue Health Assessments at the LAAD Battalions and the Stinger School house, ensuring Operational Readiness is maintained. | 0.200<br>0 | 0.200<br>0 | 0.243<br>0 |
| **Accomplishments/Planned Programs Subtotals** | 2.129 | 1.993 | 3.041 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/300600: *GBAD-T* | 12.287 | 11.054 | 15.713 | | 15.713 | 25.723 | 11.580 | 10.481 | 10.666 | Continuing | Continuing |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2278: *Air Defense Weapons System* |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Remarks**

**D. Acquisition Strategy**

GBAD TRANSFORMATION: A-MANPADS Increment I is an Abbreviated Acquisition Program (AAP), GBAD-T affects the rapid transition from the Avenger/MANPADS weapon system to the more mobile, flexible, and maintainable Advanced MANPADS. The AAP is principally comprised of integrating Government Off The Shelf (GOTS) equipment and Non-developmental Items (NDI).

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2278: *Air Defense Weapons System* |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBAD-T | WR | NSWC:Crane.IN | 3.424 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 3.424 | |
| GBAD-T | MIPR | Army:AMRDEC | 4.991 | 0.000 | | 0.000 | | 0.500 | Dec 2013 | - | | 0.500 | Continuing | Continuing | Continuing |
| GBAD-T | MIPR | PMA-259:China Lake | 2.375 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.375 | |
| GBAD-T | Various | VARIOUS:VARIOUS | 5.548 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 5.548 | |
| GBAD-T | WR | NSWC:Crane,IN (PAS-13 HW) | 1.469 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.469 | |
| GBAD-T | C/FP | EG&G:Stafford, VA | 0.489 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.489 | |
| GBAD-T | C/FP | DRS Tech:Palm Bay, FL | 0.215 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.215 | |
| GBAD-T | C/FP | Raytheon:San Diego, CA | 3.700 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 3.700 | |
| GBAD-T | C/FP | GDIT:Stafford, VA | 0.539 | 0.075 | Nov 2011 | 0.297 | Nov 2012 | 1.900 | Dec 2013 | - | | 1.900 | Continuing | Continuing | Continuing |
| GBAD-T | C/FP | L3:San Diego, CA | 1.473 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.473 | |
| | | **Subtotal** | 24.223 | 0.075 | | 0.297 | | 2.400 | | 0.000 | | 2.400 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBAD-T | WR | NSWC:Crane, IN | 0.726 | 0.200 | Jan 2012 | 0.200 | Jan 2013 | 0.243 | Dec 2013 | - | | 0.243 | Continuing | Continuing | Continuing |
| GBAD-T | C/FP | MCCDC:Quantico, VA | 1.910 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.910 | |
| GBAD-T | WR | MCTSSA:Camp Pendleton, CA | 0.220 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.220 | |
| GBAD-T | WR | MCSC:Quantico, VA | 0.128 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.128 | |
| GBAD-T | C/FP | MCOTEA:Quantico, VA | 0.257 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.257 | |
| JFIIT | SS/FP | RNB:Stafford, VA | 1.425 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.425 | |
| JFIIT | WR | MCSC:Quantico, VA | 0.130 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.130 | |
| | | **Subtotal** | 4.796 | 0.200 | | 0.200 | | 0.243 | | 0.000 | | 0.243 | | | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2278: *Air Defense Weapons System* | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBAD-T | C/FFP | MCSC:Quantico, Va | 0.791 | 0.791 | Oct 2011 | 0.791 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 2.373 | |
| GBAD-T | MIPR | WSMR:NM | 0.872 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.872 | |
| GBAD-T | MIPR | Not Specified:Aberdeen, MD | 0.047 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.047 | |
| GBAD-T | C/FP | MCOTEA:Quantico, VA | 0.672 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.672 | |
| GBAD-T | MIPR | NATC:NM | 0.710 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.710 | |
| | | **Subtotal** | 3.092 | 0.791 | | 0.791 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 4.674 | |

**Management Services ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBAD-T | C/FFP | SPAWAR:Charleston SC | 0.659 | 0.659 | Oct 2011 | 0.320 | Dec 2012 | 0.200 | Dec 2013 | - | | 0.200 | Continuing | Continuing | Continuing |
| GBAD-T | C/FP | MCSC:Quantico, VA | 0.930 | 0.404 | Oct 2011 | 0.385 | Dec 2012 | 0.198 | Dec 2013 | - | | 0.198 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 1.589 | 1.063 | | 0.705 | | 0.398 | | 0.000 | | 0.398 | | | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 33.700 | 2.129 | | 1.993 | | 3.041 | | 0.000 | | 3.041 | | | |

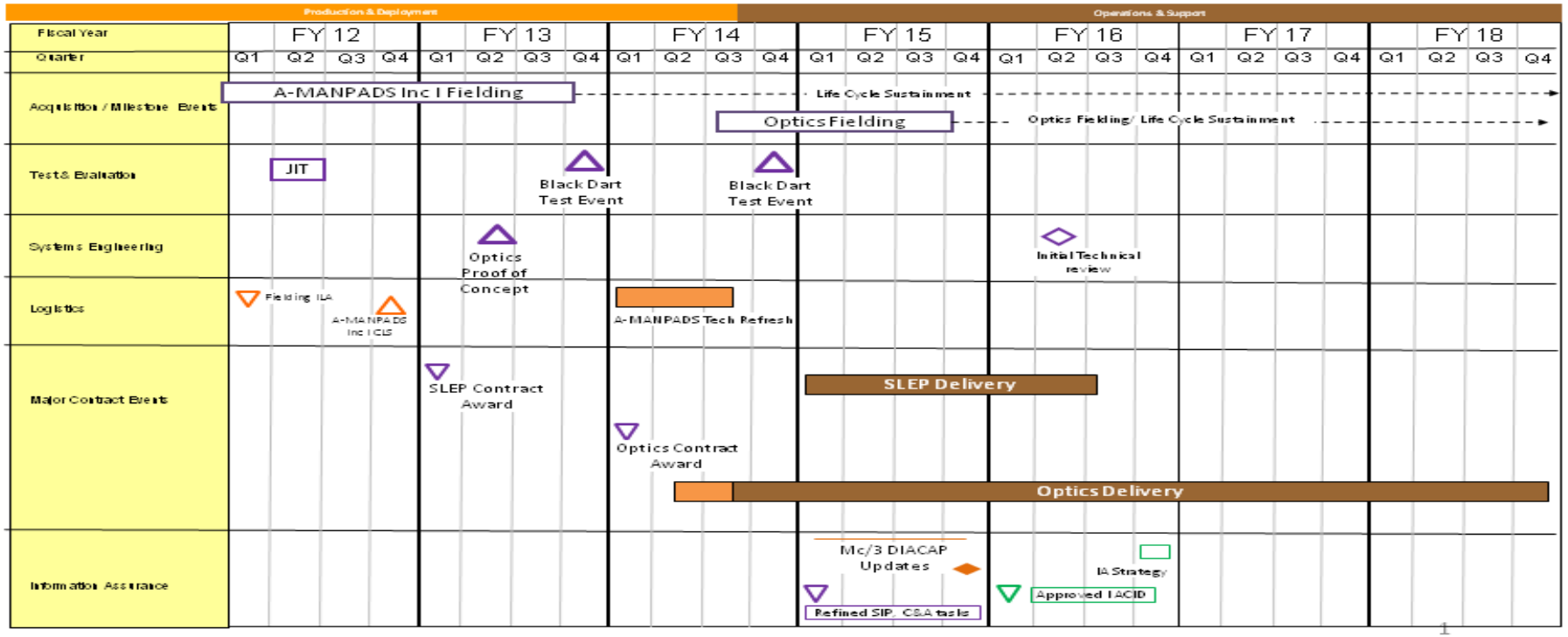
**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2278: *Air Defense Weapons System* |

MARINE CORPS SYSTEMS COMMAND

EQUIPPING THE WARFIGHTER TO WIN

# Ground Base Air Defense-Transformation (GBAD-T) Acquisition Schedule



| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2278: *Air Defense Weapons System* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2278*** | | | | |
| AMANPADS FIELDING | 1 | 2012 | 4 | 2013 |
| SLEP CONTRACT AWARD | 1 | 2013 | 1 | 2013 |
| OPTICS PROOF OF CONCEPT | 2 | 2013 | 2 | 2013 |
| AMANDPADS TECH REFRESH | 1 | 2014 | 3 | 2014 |
| BLACK DART JOINT TEST EVENT FY13 | 4 | 2013 | 4 | 2013 |
| OPTICS CONTRACT AWARD | 1 | 2014 | 1 | 2014 |
| OPTICS DELIVERY | 2 | 2014 | 4 | 2018 |
| BLACK DART JOINT TEST EVENT FY14 | 4 | 2014 | 4 | 2014 |
| SLEP DELIVERY | 1 | 2015 | 3 | 2016 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2510: *MAGTF CSSE & SE* | 214.097 | 40.415 | 25.231 | 3.526 | - | 3.526 | 4.176 | 3.668 | 3.048 | 3.381 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

(U) The Marine Air Ground Task Force (MAGTF) Combat Service Support Element & Supporting Establishment (CSSE & SE) consists of mutually supporting Logistics Information Technology (IT) programs that support force deployment, planning, and execution; sustainment and distribution; and contributes to the Combatant Commander's Common Operating Picture to support rapid accurate decision making.

MARINE CORPS COMMON HARDWARE SUITE (MCHS) provides Commercial-Off-The-Shelf (COTS) workstations (desktop/laptop), servers and other IT hardware to support the Operating Force and other non-Navy Marine Corps Intranet (NMCI) Marine Corps customers. MCHS provides support for two principal groups: 1) Approximately 50 United States Marine Corps (USMC) Tactical and Functional Programs of Record that use COTS IT hardware as part of their fielded systems; and 2) Tactical and other Marine Corps customers not supported by NMCI such as Marine Corps Forces, Europe/Marine Corps Forces, Korea and stand-alone Marine Corps units and schoolhouses. The goal of the program is to enhance overall IT system interoperability and lower the total cost of ownership by centralizing procurement of COTS IT hardware, reducing the number of different configurations of computers, and providing worldwide integrated logistics support for all fielded MCHS hardware. Rapid technology insertion provides ability to develop, test, and evaluate COTS hardware and software configurations for rapid fielding purposes.

GLOBAL COMBAT SUPPORT SYSTEM-MARINE CORPS (GCSS-MC) is the physical implementation of the enterprise Information Technology (IT) architecture designed to support both improved and enhanced Marine Air Ground Task Force (MAGTF) Combat Support Services (CSS) functions and MAGTF Commander and Combatant Commanders/Joint Task Force (CC/JTF) combat support information requirements. The initial program includes all transactional CSS systems related to Supply Chain Management (SCM) and Enterprise Asset Management (EAM) functionality enabled with Service Management functions. When combined, these capabilities are referred to as Logistics Chain Management (LCM) or GCSS-MC/LCM. The primary goal of GCSS-MC/LCM is to provide the capabilities specified in the Logistics Operational Architecture (Log OA). The result of enabling the Log OA is the retirement of legacy applications. The GCSS-MC/LCM exposes timely mission information to Marine Corps operational and CSS commanders, CC/JTF commanders and their staffs and other authorized users. It exposes information interoperability and common logistics information applications and services across functional areas. GCSS-MC/LCM allows operating forces commanders to base decisions on complete logistics information and make decisions in concert with specific operational tasks.

The GCSS-MC/LCM program is procuring capabilities by increments. GCSS-MC/LCM Increment 1 is a subset of the total requirement that focuses on Logistics Management and Execution with Logistics Command and Control requirements necessary to perform those functions in a deployed environment. GCSS-MC/LCM Increment 1 is global in scope and it can be deployed under any circumstances, during peace or war, independent of geographical location. The GCSS-MC/LCM Increment 1 Capability Development Document (CDD), dated 25 May 2005 and approved in December 2005, establishes the requirements for the entire GCSS-MC

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

portfolio. Key objectives of the CDD include the following: (1) Deliver integrated functionality across supply, maintenance, transportation, finance, engineering, health, acquisition and manpower systems in accordance with the Marine Corps Logistics Operational Architecture; (2) Provide timely information to Marine Corps operational and CSS commanders, CCs and Joint JTF commanders and their staffs and other authorized users; (3) Allow Operating Forces (OPFORS) commanders to base decisions on complete logistics information and make decisions in concert with specific operational tasks; and (4) Provide users and operators of logistics processes access to information and applications across the spectrum of conflict regardless of location.

TRANSPORTATION SYSTEMS PORTFOLIO (TSP) supports the various ongoing and continuing efforts to modernize legacy USMC logistics systems including joint interoperability testing and certification and development to ensure compliance with information assurance testing and certification requirements. Legacy systems include joint programs supporting deployment and sustainment of theater assets as well as existing USMC legacy systems. Joint interoperability testing and certification is an ongoing and continuous requirement that is critical to ensuring all TSP applications are interoperable with other Department of Defense and Joint Services systems. There are also ongoing and continuing efforts to ensure that the legacy TSP applications comply with the latest information assurance requirements. TSP applications are continually updating their security posture through software enhancements based upon the latest cyber threats. Also, mandatory DOD compliance with software patches ensure TSP systems are in compliance with new information assurance vulnerability assessments and ensure data integrity, confidentiality and availability.

JOINT FORCE REQUIREMENTS GENERATOR II (JFRG II) is a Global Command and Control System (GCCS) software application designed to provide DOD with a Joint Services, state-of-the-art, integrated, and deployable Automated Information System (AIS) that supports strategic force movements. JFRG II provides rapid development of force data to satisfy operational planning and execution requirements. It serves as the essential link between service force requirements and validated/sourced unit data. JFRG II permits multi-level planning with entry of equipment and personnel data, transportation/movement data, and the phasing of the total force throughout the entire movement timeline. JFRG II contains an exhaustive joint data library and interfaces directly with the Joint Operation Planning and Execution System (JOPES). JFRG II can generate standard, executive, and ad hoc reports, perform database queries, and export or import data from Transportation Coordinators' Automated Information for Movement System (TC-AIMS) II, MAGTF Deployment Support System (MDSS) II, War Reserve System (WRS) and JOPES. JFRG II operates and functions in a classified environment.

PUBLIC KEY INFRASTRUCTURE (PKI) provides security objects and mechanisms used by Public Key (PK)-enabled systems and applications. The primary products of PKI are PK certificates and other certified objects used in conjunction with PK certificates. In addition to PK certificates, PKI provides on-line services (e.g. on-line certificate status checking), and supplies authenticated attributes in PK certificates and/or attribute certificates. PKI is one of a number of security solutions used to protect information and provide attributes to enable critical resources in the Global Information Grid, and is used concurrently with other solutions (e.g. in-line network encryptors to implement the defense-in-depth concept). In conjunction with PK-enabled applications, PKI is used for identification, authentication, data confidentiality and integrity, and non-repudiation security services. Additionally, PKI functionally will be expanded to the Secret Internet Protocol Router Network (SIPRNET).

AUTOMATED IDENTIFICATION TECHNOLOGY (AIT) conducts research and development capabilities testing to expand and enhance options necessary to provide today's Commanders accurate information that allows better communication, coordinating, synchronization, and real-time logistics data transfer capabilities to programs that influence Warfighting evolutions. AIT devices, hardware and software's are continually evolving and RDT&E provides the necessary modernization progression to ensure that technologies deployed today meet the demands of the Commander's by providing faster, more reliable, increase data reliability and expedited logistics'

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

architecture for Marine Corps-unique transportation, distribution and supply systems/software and applications. AIT forecast and plans to focus Web-basing, Web-enablement and Web Services software technology [i.e., machine-to-machine information exchanges between, our customers in the Military Services and Defense agencies, and the Defense industry, based upon the open-standard Extensible Markup Language (XML), Simple Object Access Protocol (SOAP), Military-Standard (MIL-STD) formatted protocols]. There are three primary reasons why AIT is pursuing this direction:

1. Web-based applications dramatically reduce the costs associated with fielding new software mission capabilities. (Only a limited handful of central servers need to be updated rather than thousands of local implementations.)
2. Web-basing and Web Services make AITs software applications much more adaptable to the ongoing and future changes in the Marine Corps procurement and financial management systems that are being implemented in accordance with the Department's Business Enterprise Architecture.
3. A centralized infrastructure will allow for greater data sharing, allowing one AIT data read to be re-used multiple times to support multiple Automated Information Systems (AIS).

BASE TELECOMMUNICATIONS INFRASTRUCTURE (BTI) provides all Marine Corps installations with the base area network communications infrastructure that connects the end-user to the Defense Information Systems Agency (DISA) network. BTI sustains upgrades and enhances the telecommunications systems infrastructure for all Marine Corps Installations in order to meet the demands required to support the 5th Element of the MAGTF. BTI is designed to maintain industry currency as it relates to technological capabilities for all voice, video and data transport services via each installation's infrastructure. These data services include support for but are not limited to: telephony (including voice over internet protocol), video-teleconferencing, integrated services digital network, Marine Corps enterprise network, energy monitoring control systems, intrusion detection systems, access control systems, fire alarm control networks and fleet training systems. This includes supporting systems such as optical networks, telecommunications management systems, primary power, voice mail, teleconferencing, and outside plant infrastructure.

ELECTRONIC MAINTENANCE SUPPORT SYSTEM (EMSS) is composed of several main components including Electronic Maintenance Devices (EMD), regional servers, deployment servers, charger racks, and ruggedized deployment cases. EMSS is a rugged organizational-level (O-level), light-weight, one-man portable maintenance device capable of supporting multiple platforms and systems across maintenance communities. EMSS provides a Commercial Off-The-Shelf (COTS) hardware device equipped with network interfaces, Built-In-Test/Built-In-Test Equipment (BIT/BITE) interfaces, and Software Defined Test Instrument (SDTI) General Purpose Electronic Test Equipment (GPETE) capabilities. These hardware capabilities will enable commercial or custom DoD and USMC software capabilities including Interactive Electronic Technical Manuals (IETMs), Computer Based Training (CBT), access to Subject Matter Experts (SMEs) over USMC networks, and other maintenance applications to be hosted on EMSS. With these capabilities, maintainers will make more informed decisions, thereby sustaining force readiness over time.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** BASE TELECOM (BTI) | 0.445 | 0.460 | 0.473 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Provided test and evaluation (T&E) engineering support for unique systems such as multiplexing technology or other Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems. This support provided | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| designs for telecommunications systems modification and solutions to complex problems, calculations, and research standards in support of system modernization.<br>***FY 2013 Plans:***<br>Continue test and evaluation (T&E) engineering support for unique systems such as multiplexing technology or other Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems. This support will provide designs for telecommunications systems modification and solutions to complex problems, calculations, and research standards in support of system modernization. Additionally, these funds will be utilized for optical domain test equipment to support testing efforts.<br>***FY 2014 Plans:***<br>Participate in the DISA Unified Capabilities (voice, video, collaboration, and data) pilot is critical to BTI modernization strategy. The RDT&E funds will be utilized for testing efforts in support of the DISA Unified Communications Everything over Ethernet effort. After the testing is reviewed by the Joint Interoperability Test Command (JITC), successfully evaluated products will be placed on the DISA Approved Products List (APL). | | | |
| ***Title:*** MARINE CORPS COMMON HARDWARE SUITE (MCHS)<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Conducted trend analysis on reported failures of fielded COTS hardware and rapid technology insertion. Developed, tested and evaluated COTS hardware and software configurations for rapid fielding purposes. | 1.578<br>0 | 0.000 | 0.000 |
| ***Title:*** GCSS-MC LOGISTICS CHAIN MANAGEMENT (GCSS-MC)<br>***Articles:***<br>***FY 2012 Accomplishments:***<br>Completed Increment 1, Deployed Release 1.2 SIDT&E, Government Development Test & Evaluation (GDT&E) and FOT&E. Began the start of the GCSS-MC baseline upgrade from Oracle eBusiness Suite Release 11 to Release 12.<br>***FY 2013 Plans:***<br>GCSS-MC/LCM Increment 1 reported a critical change based on schedule as defined by 10 U.S.C. Chapter 144A. The Full Deployment Decision event has slipped more than a year past the Program Manager's estimate based on the 31 December 2011 MAR (Dec 2012). The Increment 1 program schedule critical change was caused by significant technical challenges surrounding Release 1.2 Deployed capability requirements. While the Release 1.2 hardware/software baseline continued to mature throughout FY12, additional Development and Operational Test (D&OT) events required to validate the automated Task Organization and Data Synchronization functionalities of the deployed capability were not successful. The critical change team kickoff meeting occurred on 29 Jan 2013 and the evaluation is ongoing. | 33.743<br>0 | 21.326<br>0 | 0.000 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Continue the GCSS-MC baseline upgrade from Oracle eBusiness Suite Release 11 to Release 12 with the award of the system integrator contract. | | | |
| ***Title:*** TRANSPORTATION SYSTEMS PORTFOLIO (TSP)<br>***Articles:***<br><br>***FY 2012 Accomplishments:***<br>Validated the force deployment planning and execution requirements based on a letter of clarification received from CD&I; drafted a performance work statement for a consolidated support contract. Started a business case analysis for the consolidated contract strategy to be awarded by 2ndqtr FY13. | 1.112<br>0 | 0.000 | 0.000 |
| ***Title:*** JOINT FORCES REQUIREMENT GENERATION II (JFRG II)<br>***Articles:***<br><br>***FY 2012 Accomplishments:***<br>FY12 funds supported JFRG Engineering Change Proposals (ECP) development. Contract planned to award by AUG 2013.<br><br>***FY 2013 Plans:***<br>FY13 funds will be utilized to implement Global Force Management Data Initiatives (GFMDI)<br><br>***FY 2014 Plans:***<br>FY14 funds will continue the GFMDI efforts. | 0.255<br>0 | 0.175<br>0 | 0.185<br>0 |
| ***Title:*** PUBLIC KEY INFRASTRUCTURE (PKI)<br>***Articles:***<br><br>***FY 2012 Accomplishments:***<br>FY12 funding provided for continued testing, correction of deficiencies, and implementation of PKI requirements for tactical applications as well as MCEITS and SIPRNET capabilities.<br><br>***FY 2013 Plans:***<br>FY13 funding will provide for continued testing, correction of deficiencies, and implementation of PKI requirements for tactical applications as well as MCEITS and SIPRNET capabilities<br><br>***FY 2014 Plans:***<br>FY14 funding will provide for continued testing, correction of deficiencies, and implementation of PKI requirements for tactical applications as well as MCEITS and SIPRNET capabilities | 1.517<br>0 | 1.214<br>0 | 0.262<br>0 |
| ***Title:*** AUTOMATED IDENTIFICATION TECHNOLOGY (AIT) | 1.765 | 0.000 | 0.000 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>During FY12 AIT upgraded the aRFID consolidated server infrastructure to be able to demonstrate the receipt and processing of passive RFID (pRFID) reader input, as well as implemented a dashboard capability to monitor the devices on the edge and produce metrics and reports. | | | |
| ***Title:*** ELECTRONIC MAINTENANCE SUPPORT SYSTEM (EMSS) | 0.000 | 2.056 | 2.606 |
| ***Articles:*** | | 0 | 0 |
| ***FY 2013 Plans:***<br>Commence Research and Development for the Block II version of the Electronic Maintenance Support Systems to include all subcomponents. The program office will conduct studies and initiate the transition to the Block II using a Pre-Planned Product Improvement (P3I) version of EMSS. Focus areas will be deployed wireless capability, advanced diagnostics software applications, and IETM software development. | | | |
| ***FY 2014 Plans:***<br>Will continue Research and Development to establish interfaces with built in test systems residing on various weapon system platforms. The program office will conduct studies and research using a Pre-Planned Product Improvement (P3I) version of EMSS. Focus areas will be deployed wireless capability, advanced diagnostics software applications, and IETM software development. | | | |
| **Accomplishments/Planned Programs Subtotals** | 40.415 | 25.231 | 3.526 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/BLI 463000 MCHS: *MCHS* | 9.072 | 19.570 | 2.288 | | 2.288 | 2.079 | 2.166 | 2.245 | 2.285 | Continuing | Continuing |
| • PMC/BLI 461700 GCSS: *GCSS-MC* | 13.897 | 24.034 | 0.541 | | 0.541 | 3.228 | 16.565 | 7.519 | 7.654 | Continuing | Continuing |
| • PMC/BLI 463000 PKI: *PKI* | 0.001 | 0.001 | 0.000 | | 0.000 | 0.000 | 0.428 | 0.000 | 0.000 | Continuing | Continuing |
| • PMC/BLI 461700 AIT: *AIT* | 3.990 | 0.157 | 0.163 | | 0.163 | 0.351 | 0.163 | 0.246 | 0.250 | Continuing | Continuing |
| • PMC/BLI 463500 BTI: *BTI* | 21.151 | 22.135 | 14.593 | | 14.593 | 25.231 | 23.947 | 20.467 | 20.591 | Continuing | Continuing |
| • PMC/BLI 418100: *EMSS* | 1.915 | 7.425 | 5.974 | | 5.974 | 4.696 | 4.604 | 4.367 | 4.446 | Continuing | Continuing |
| • PMC/BLI 463500 PKI: *PKI* | 0.392 | 1.318 | 1.304 | | 1.304 | 1.450 | 1.494 | 1.607 | 1.636 | Continuing | Continuing |
| • PMC/BLI 463000 TSP: *TSP* | 0.873 | 0.000 | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Continuing | Continuing |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Remarks**

**D. Acquisition Strategy**

MARINE CORPS HARDWARE SUITE (MCHS) ensures computer hardware in the Operating Forces keeps pace with industry computer hardware technical improvements. Analyses of technical alternatives are periodically required in order to determine how to best meet emerging customer requirements.

GLOBAL COMBAT SUPPORT SYSTEM-MARINE CORPS (GCSS-MC) is pursuing an Evolutionary Acquisition (EA) strategy in order to field operationally suitable and supportable capabilities in the shortest time possible that meets the Logistics Advocate goals. EA offers the fastest method to field this highest of advocate priorities and allows for requirements to be time-phased as the users become more familiar with the strengths and weaknesses of the fielded system. In addition to quicker fielding, an EA approach is particularly well suitable for software intensive programs and offers these benefits: rapid delivery of an initial capability with the explicit intent of delivering continuously improving capabilities in the future and a reduction in the "cycle time" from identification of emergent user requirements, priorities and fielding. The GCSS-MC acquisition strategy will deliver capabilities in increments. Each increment capability will follow a complete acquisition process in accordance with the DOD 5000 publications and OSD's Enterprise Integration roadmap. Increments will include emergent user priorities, advanced technology improvements and expanded functionality. Each increment will repeat the complete acquisition program cycle going through a milestone (MS) C Full Rate Production Decision Review. Increment 1 is divided into two major independent releases: Enterprise Release 1.1 and Deployed Access Release 1.2. This approach differs from the original plan of delivering one release due to the technical complexities related to the overall scope of the solution. More substantial software improvement/system upgrades will be fielded with each Increment as required and prioritized by the user community.

TRANSPORTATION SYSTEMS PORTFOLIO (TSP) conducts research and development currently executed under multiple contracts ending at various times across the FYDP. These contracts support the testing of the joint deployment and sustainment systems along with the USMC legacy systems.

JOINT FORCES REQUIREMENT GENERATOR II (JFRG II) conducts research and development currently executed under a three-year contract ending November 2013.

PUBLIC KEY INFRASTRUCTURE (PKI) is a DOD ACAT IAM Program. At the service level, the USMC PKI program is being managed as an Abbreviated Acquisition Program. Based on an Assistant Secretary of Defense Acquisition Decision Memorandum, DOD PKI development will be conducted through a series of block upgrades. The functional enhancement, changes will result in increased capability and functionality for PKI and increase the levels of security and assurance which affects mitigation of identified risks. There are thirteen functional and five assurance enhancements. Additionally, PKI functionality will be expanded to the SIPRNET.

AUTOMATED IDENTIFICATION TECHNOLOGY (AIT) hardware in the Operating Forces keeps pace with industry computer hardware technical improvements. AIT will support all aspects of active Radio Frequency Identification (aRFID) and passive RFID (pRFID). AIT evaluates emerging technologies, new equipment, and performs integration analysis and testing.

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

BASE TELECOMMUNICATIONS INFRASTRUCTURE (BTI) provides all Marine Corps installations with the base area network communications infrastructure that connects the end-user to the DISA network. BTI sustains upgrades and enhances the telecommunications systems infrastructure for all Marine Corps Installations in order to meet the demands required to support the 5th Element of the Marine Air Ground Task Force (MAGTF). Participation in the DISA Unified Capabilities (voice, video, collaboration, and data) pilot is critical to BTI modernization strategy. The RDT&E funds will be utilized for testing efforts in support of the DISA Unified Communications Everything over Ethernet effort. After the testing is reviewed by the JITC, successfully evaluated products will be placed on the Approved Products List (APL).

ELECTRONIC MAINTENANCE SUPPORT SYSTEM (EMSS) will conduct technology development, market research, and prototype product improvement capability to support additional MOS requirements.

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Technology Development (EMSS) | TBD | TBD:TBD | 0.000 | 0.000 | | 0.500 | Jul 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| JFRG II | C/FFP | TBD:TBD | 0.000 | 0.255 | Aug 2013 | 0.175 | Mar 2014 | 0.185 | Mar 2014 | - | | 0.185 | 0.000 | 0.615 | |
| Research and Development (EMSS) | TBD | TBD:TBD | 0.000 | 0.000 | | 0.000 | | 2.106 | Feb 2014 | - | | 2.106 | 0.000 | 2.106 | |
| GCSS LCM Increment 1 Application | C/T&M | Oracle USA:Reston, VA | 178.985 | 15.118 | Oct 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 194.103 | |
| GCSS LCM Increment 1 Training Development | C/FP | EDO:Stafford, VA | 2.500 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.500 | |
| PKI | C/FFP | Various:Various | 6.815 | 1.517 | Aug 2012 | 1.214 | Sep 2013 | 0.262 | Sep 2014 | - | | 0.262 | Continuing | Continuing | Continuing |
| AIT | C/FFP | Northrop Grumman IT:Williamsburg, VA | 6.983 | 1.765 | Aug 2012 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| VAR | Various | Various:Various | 17.601 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| GCSS LCM Oracle eBusiness Suite Release 12 Upgrade | C/FP | SPAWAR:Charleston, SC | 0.000 | 17.700 | Sep 2012 | 21.326 | Jul 2013 | 0.000 | | - | | 0.000 | 0.000 | 39.026 | |
| | | **Subtotal** | 212.884 | 36.355 | | 23.215 | | 2.553 | | 0.000 | | 2.553 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Program Software Support (EMSS) | WR | NSWC, Crane:Crane, Indiana | 0.000 | 0.000 | | 0.563 | Jul 2013 | 0.500 | Dec 2013 | - | | 0.500 | Continuing | Continuing | Continuing |
| Various Studies (EMSS) | Various | Various:Various | 0.000 | 0.000 | | 0.993 | Jul 2013 | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| VAR (TSP) | Various | Various:Various | 1.213 | 1.112 | Mar 2013 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 1.213 | 1.112 | | 1.556 | | 0.500 | | 0.000 | | 0.500 | | | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |

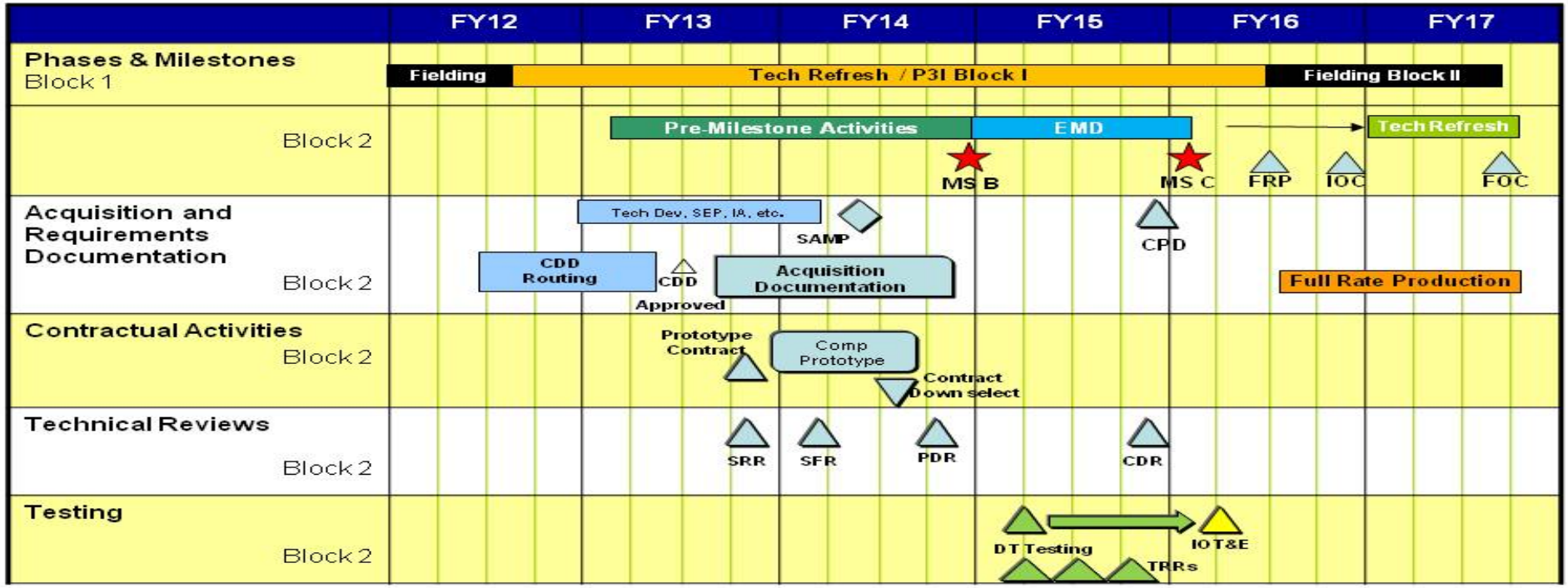
**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCHS | MIPR | SPAWAR:Charleston, SC | 0.000 | 1.578 | Mar 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.578 | |
| GCSS LCM Increment 1 DT/OT | MIPR | MCTSSA:Oceanside, CA | 0.000 | 0.225 | Jan 2013 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.225 | |
| GCSS LCM Increment 1 DT/OT | MIPR | JTIC:Fort Huachuca, AZ | 0.000 | 0.700 | Nov 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.700 | |
| BTI | WR | ISEC:Fort Detrick, MD | 0.000 | 0.445 | Sep 2012 | 0.460 | Jun 2013 | 0.473 | Jun 2014 | - | | 0.473 | Continuing | Continuing | Continuing |
| | | **Subtotal** | 0.000 | 2.948 | | 0.460 | | 0.473 | | 0.000 | | 0.473 | | | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 214.097 | 40.415 | | 25.231 | | 3.526 | | 0.000 | | 3.526 | | | |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>2510: *MAGTF CSSE & SE* |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| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | **R-1 ITEM NOMENCLATURE**<br>PE 0206313M: *Marine Corps Comms Systems* | **PROJECT**<br>2510: *MAGTF CSSE & SE* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 2510*** | | | | |
| Milestone B | 4 | 2014 | 4 | 2014 |
| Milstone C | 1 | 2016 | 1 | 2016 |
| Full Rate Production Decision | 2 | 2016 | 2 | 2016 |
| Initial Operational Capability (IOC) | 4 | 2016 | 4 | 2016 |
| Full Operational Capability (FOC) | 3 | 2017 | 3 | 2017 |
| Developmental Testing | 1 | 2015 | 4 | 2015 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3099: *Radar System* | 116.834 | 31.545 | 25.677 | 10.310 | - | 10.310 | 19.507 | 12.271 | 15.978 | 17.754 | Continuing | Continuing |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

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

Long Range Radar (AN/TPS-59) - The AN/TPS-59 is a three dimensional ground-based sensor that can detect and track long range Air Breathing Targets (ABT) at ranges of 300 nautical miles and Tactical Ballistic Missiles (TBM) at ranges of 400 nautical miles. The system is experiencing increasing obsolescence and Diminishing Manufacturing Sources and Material Shortages (DMSMS) issues. The program will use a Post Production Support (PPS) contract to develop engineering changes to resolve DMSMS and incorporate Mode 5 Identification Friend or Foe (IFF) per DOD mandate.

Family of Target Acquisition Systems (FTAS) - The FTAS provides the MAGTF the capability to locate, identify, and attack enemy indirect fire weapons systems and observe and direct friendly artillery fire. The FTAS consists of the AN/TPQ-46 Firefinder Radar, the AN/TPQ-49 Lightweight Counter Mortar Radar, and the AN/TSQ-267 Target Processing Set. The FTAS is critical in the execution of counterfire and the integration of target acquisition information enabling attack by MAGTF assets. The FTAS also provides artillery firing units the ability to conduct artillery registration and other friendly fire missions. The FTAS encompasses the equipment required to support target acquisition within the target acquisition platoon and is resident in the headquarters battery of each artillery regiment. The program will continue to address engineering issues that arise due to DMSMS items within the FTAS.

Short/Medium Range Air Defense Radar (SHORAD or AN/TPS-63) - The AN/TPS-63 is a two-dimensional, medium-range, medium altitude, transportable radar system which is doctrinally employed as a tactical gap-filler or as an early warning system for early deployment into the operational area. It has a 360-degree air surveillance capability at a range of 160 miles and complements the co-employed AN/TPS-59 three-dimensional, long-range, air surveillance radar system. The program will develop engineering change proposals related to improved system reliability with the specific purpose of meeting increased fleet operational requirements.

Three Dimensional Expeditionary Long Range Radar (3DELRR) - The Three-Dimensional Expeditionary Long-Range Radar (3DELRR) is a USAF progam established to develop a lightweight, expeditionary, transportable, long-range surveillance radar system capable of detecting Airborne Ballistic Targets (ABTs) and Theatre Ballistic Missiles (TBMs). Marine Corps personnel are providing technical, engineering, and programmatic support, as well as, source selection support to the U.S. Air Force 3DELRR program. The program support consists of program management, engineering, logistics, test, and requirements activities.

Virtual Warfare Center (VWC) Support - The project team conducts fully interactive simulated wargames at the Virtual Warfare Center (VWC) in St. Louis, MO, in order to quantify family of systems performance and how it impacts effectiveness in the Integrated Air and Missile Defense (IAMD) mission area. The VWC provides a venue for the exploration of advanced engagement concepts focused on persistent forward naval engagements in support of the MAGTF and the development of associated

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

Joint and Service specific tactics, techniques, and procedures (TTPs). VWC support encompasses a set of integrated fire control (IFC) activities that also includes concept/CONOPS development, family of systems architecture development, and systems engineering/integration efforts.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** AN/TPS-59 : Develop Engineering Change Proposals | 9.721 | 9.786 | 1.687 |
| ***Articles:*** | 0 | 0 | 0 |
| ***Description:*** The program will address Diminishing Manufacturing Sources and Material Shortages (DMSMS) issues by continuing use of a Post Production Support (PPS) contract as well as use of Other Government Agencies/Navy Labs. The AN/TPS-59 modification will address DMSMS and the DOD mandated Mode 5 Implementation of the AN/TPS-59 Radar System.<br>***FY 2012 Accomplishments:***<br>Continued development of IFF Mode 5, 1A5 Antenna Power Cabinet Engineering Change Proposals, Software Integration, and initiated Ops Console Study.<br>***FY 2013 Plans:***<br>Will continue software integration, studies, and efforts to address obsolescence and DMSMS issues.<br>***FY 2014 Plans:***<br>Will continue software integration, studies, and efforts to address obsolescence and DMSMS issues. The reduction from FY13 to FY14 is a result of fewer DMSMS initiatives scheduled in FY14. | | | |
| ***Title:*** AN/TPS-59 : Management Service Support | 4.131 | 2.700 | 0.000 |
| ***Articles:*** | 0 | 0 | |
| ***FY 2012 Accomplishments:***<br>Provided program management and technical support for Long Range Radar efforts.<br>***FY 2013 Plans:***<br>Continuing program management and technical support for Long Range Radar efforts. Reduction from FY 2012 to FY 2013 due to decrease in requirements. | | | |
| ***Title:*** AN/TPS-59: Test and Evaluation | 0.485 | 0.160 | 0.000 |
| ***Articles:*** | 0 | 0 | |
| ***FY 2012 Accomplishments:***<br>MCOTEA- Mode 5 and Software Maintenance Testing Events, NAWCAD - Mode 5 Testing Support including CAS Flight Support, Civil Air Patrol (CAP) - Testing Support.<br>***FY 2013 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| NAWCAD - Mode 5 Testing Support including CAS Flight Support, Civil Air Patrol (CAP) - Testing Support. | | | |
| ***Title:*** AN/TPS-59 : Engineering and Technical Support | 8.714 | 7.109 | 5.594 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>MITRE/NSWC Dahlgren - Engineering Support, NSWC Crane - Sustainment Support, NSWC Crane/Dahlgren/Port Hueneme - Independent Assessment Study, SPAWAR - IA Support, MCCDC CD&I - Requirements Support, MCSC - Program Office Travel, Lockheed Martin - Post Production Services and Support. | | | |
| ***FY 2013 Plans:***<br>MITRE/NSWC Dahlgren/NSWC Crane - Engineering Support, SPAWAR - IA Support, MCCDC CD&I - Requirements Support, MCSC - Program Office Travel, Lockheed Martin - Post Production Services and Support. | | | |
| ***FY 2014 Plans:***<br>MITRE/NSWC Dahlgren/NSWC Crane - Engineering Support, SPAWAR - Engineering Support, MCCDC CD&I - Requirements Support, MCSC - Program Office Travel, Lockheed Martin - Post Production Services and Support. | | | |
| ***Title:*** SHORAD: Engineering and Technical Support | 0.201 | 0.489 | 0.187 |
| ***Articles:*** | 0 | 0 | 0 |
| ***Description:*** Provide configuration management to the current systems by on-site visits and field configuration surveys. Continuing development effort to resolve ongoing DMSMS and obsolescence issues. | | | |
| ***FY 2012 Accomplishments:***<br>NSWC Dahlgren/Crane - Engineering Support. Continued development of solutions for DMSMS and obsolescence issues based on results of Baseline/Life Extension Study. | | | |
| ***FY 2013 Plans:***<br>NSWC Dahlgren/Crane - Engineering Support. Continue to develop solutions for DMSMS and obsolescence issues based on results of Baseline/Life Extension Study. | | | |
| ***FY 2014 Plans:***<br>NSWC Dahlgren/Crane - Engineering Support. Address outstanding ECP issues. | | | |
| ***Title:*** FTAS: Engineering and Technical Support | 1.571 | 0.646 | 0.582 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| NSWC Dahlgren - Engineering Support for the FTAS supported Sensor Management and Collaboration Tool (SMACT) Development, and Government liason with Fires Software Engineering Directorate (FSED) Ft. Sill. Aberdeen Proving Ground (APG)- M116A3 MOD Trailer Capabilities Validation. Tobyhanna Army Depot (TYAD)- AN/TPQ-46 MILTOPE Computer Refresh Engineering Change Proposal (ECP).<br>***FY 2013 Plans:***<br>Tobyhanna Army Depot (TYAD)- ECP development on the AN/TSQ-267. NSWC Dahlgren - Engineering Support for the Family of Target Acquisition systems, and Government liason with Fires Software Engineering Directorate (FSED) Ft. Sill. Tobyhanna Army Depot (TYAD)- AN/TPQ-46 MILTOPE Computer Refresh Engineering Change Proposal (ECP). MCSC Albany - Program Travel in support of Equipment and Logistics SME.<br>***FY 2014 Plans:***<br>Tobyhanna Army Depot (TYAD)- Continuation of ECP development on the AN/TSQ-267 and ECP development on the AN/TPQ-49. NSWC Dahlgren - Engineering Support for the Family of Target Acquisition systems, and Government liason with Fires Software Engineering Directorate (FSED) Ft. Sill. MCSC Albany - Program Travel in support of Equipment and Logistics SME. | | | |
| ***Title:*** 3DELRR: Management Service Support | 1.985 | 1.851 | 0.000 |
| ***Articles:*** | 0 | 0 | |
| ***Description:*** Provides for programmatic and technical support to U.S. Air Force 3DELRR Program.<br>***FY 2012 Accomplishments:***<br>Provided program management and technical support to U.S. Air Force 3DELRR Program.<br>***FY 2013 Plans:***<br>Continuing program management and technical support to U.S. Air Force 3DELRR Program. | | | |
| ***Title:*** VWC: Testing Support | 4.737 | 2.936 | 2.260 |
| ***Articles:*** | 0 | 0 | 0 |
| ***FY 2012 Accomplishments:***<br>Conducted fully interactive simulated wargames (Nimble Fire) at the Virtual Warfare Center (VWC) in St. Louis, MO, in order to quantify family of systems performance and how it impacts effectiveness in the Integrated Air and Missile Defense (IAMD) mission area. Delivering USMC IFC architecture Phase II products. Conducted systems integration of IFC related systems in analysis venues. Conducted systems engineering of IFC related C2, sensors, networks, and weapons. Transitioning technical workspace to new facility as part of the BRAC. VWC was a new start in FY12.<br>***FY 2013 Plans:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Continuation of simulated wargames at the Virtual Warfare Center (VWC) in St. Louis, MO, in order to quantify family of systems performance and how it impacts effectiveness in the Integrated Air and Missile Defense (IAMD) mission area.<br>***FY 2014 Plans:***<br>Continuation of simulated wargames at the Virtual Warfare Center (VWC) in St. Louis, MO, in order to quantify family of systems performance and how it impacts effectiveness in the Integrated Air and Missile Defense (IAMD) mission area. | | | |
| **Accomplishments/Planned Programs Subtotals** | 31.545 | 25.677 | 10.310 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/465003: *AN/TPS-59* | 49.706 | 38.916 | 10.009 | | 10.009 | 13.426 | 30.996 | 21.796 | 20.668 | Continuing | Continuing |
| • PMC/465005: *FTAS* | 5.388 | 3.145 | 3.004 | | 3.004 | 2.228 | 2.284 | 2.609 | 2.374 | Continuing | Continuing |
| • PMC/465007: *SHORAD (AN/TPS-63)* | 7.425 | 3.685 | 1.713 | | 1.713 | 0.976 | 1.421 | 0.728 | 0.741 | Continuing | Continuing |
| • PMC/463000: *AN/TPS-59 MCHS* | 0.124 | 0.100 | 0.107 | | 0.107 | 0.098 | 0.121 | 0.143 | 0.146 | Continuing | Continuing |

**Remarks**

**D. Acquisition Strategy**

Long Range Radar (AN/TPS-59) - The AN/TPS-59 is a three dimensional ground-based sensor that can detect and track long range Air Breathing Targets (ABT) at ranges of 300 nautical miles and Tactical Ballistic Missiles (TBM) at ranges of 400 nautical miles. The system is experiencing increasing obsolescence and Diminishing Manufacturing Sources and Material Shortages (DMSMS) issues. The program will use a Post Production Support (PPS) contract as well as Other Government Agencies (OGA) to develop engineering changes to resolve DMSMS and incorporate Mode 5 Identification Friend or Foe (IFF) per DOD mandate.

Virtual Warfare Center (VWC) Support - The project team conducts fully interactive simulated wargames at the Virtual Warfare Center (VWC) in St. Louis, MO, in order to quantify family of systems performance and how it impacts effectiveness in the Integrated Air and Missile Defense (IAMD) mission area. VWC support encompasses a set of integrated fire control (IFC) activities that also includes concept/CONOPS development, family of systems architecture development, and systems engineering/ integration efforts. These efforts are led by ONR.

**E. Performance Metrics**

Milestone Reviews

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* | |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AN/TPS-59 | C/CPFF | LOCKHEED MARTIN:SYRACUSE, NY | 61.938 | 9.721 | May 2012 | 1.867 | May 2013 | 0.000 | | - | | 0.000 | 0.000 | 73.526 | |
| AN/TPS-59 | WR | TBD:TBD | 0.000 | 0.000 | | 2.625 | Jul 2013 | 0.000 | | - | | 0.000 | 0.000 | 2.625 | |
| AN/TPS-59 | WR | NSWC:CRANE, IN | 0.000 | 0.000 | | 5.294 | Feb 2013 | 1.687 | Feb 2014 | - | | 1.687 | Continuing | Continuing | Continuing |
| AN/TPS-63 | C/CPFF | NORTHROP GRUMMAN:WARNER ROBINS, GA | 1.444 | 0.201 | May 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.645 | |
| | | **Subtotal** | 63.382 | 9.922 | | 9.786 | | 1.687 | | 0.000 | | 1.687 | | | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AN/TPS-59 | C/CPFF | MCCDC CDI:QUANTICO, VA | 0.788 | 0.355 | May 2012 | 0.450 | May 2013 | 0.400 | May 2014 | - | | 0.400 | 0.000 | 1.993 | |
| AN/TPS-59 | WR | NSWC:DAHLGEN, VA | 4.100 | 2.743 | Mar 2012 | 1.370 | Jan 2013 | 1.378 | Apr 2014 | - | | 1.378 | Continuing | Continuing | Continuing |
| AN/TPS-59 | Various | SPAWAR:CHARLESTON, SC | 3.244 | 0.563 | Dec 2012 | 0.222 | Dec 2012 | 0.500 | Oct 2013 | - | | 0.500 | Continuing | Continuing | Continuing |
| AN/TPS-59 | MIPR | MITRE:BEDFORD, MA | 2.925 | 0.757 | Dec 2011 | 0.932 | Dec 2012 | 0.850 | Dec 2013 | - | | 0.850 | Continuing | Continuing | Continuing |
| AN/TPS-59 | Various | MCSC:QUANTICO, VA | 1.000 | 0.084 | Oct 2011 | 0.125 | Oct 2012 | 0.250 | Oct 2013 | - | | 0.250 | Continuing | Continuing | Continuing |
| AN/TPS-59 | C/CPFF | LOCKHEED MARTIN:SYRACUSE, NY | 6.000 | 2.137 | Apr 2012 | 2.419 | Apr 2013 | 1.425 | Apr 2014 | - | | 1.425 | Continuing | Continuing | Continuing |
| AN/TPS-59 | C/CPFF | MCSC COMP:QUANTICO, VA | 3.142 | 1.362 | Mar 2012 | 1.591 | Mar 2013 | 0.791 | Mar 2014 | - | | 0.791 | Continuing | Continuing | Continuing |
| AN/TPS-59 | WR | NSWC:CRANE, IN | 1.536 | 0.696 | May 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.232 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AN/TPS-59 | WR | NSWC:PHD VA BEACH DETACHMENT, VA | 0.000 | 0.017 | Mar 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.017 | |
| FTAS | WR | NSWC:DAHLGREN, VA | 6.163 | 1.036 | Jan 2012 | 0.250 | Apr 2013 | 0.206 | Jan 2014 | - | | 0.206 | Continuing | Continuing | Continuing |
| FTAS | MIPR | APG:ABERDEEN, MD | 2.418 | 0.262 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.680 | |
| FTAS | MIPR | TYAD:TOBYHANNA, PA | 0.000 | 0.219 | Dec 2012 | 0.346 | Apr 2013 | 0.326 | Jan 2014 | - | | 0.326 | Continuing | Continuing | Continuing |
| FTAS | WR | NSWC:CRANE, IN | 1.850 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.850 | |
| FTAS | Various | MCSC:QUANTICO, VA | 2.024 | 0.054 | Oct 2011 | 0.050 | Oct 2012 | 0.050 | Oct 2013 | - | | 0.050 | 0.000 | 2.178 | |
| AN/TPS-63 | WR | NSWC:CRANE, IN | 0.209 | 0.000 | | 0.150 | Jun 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.359 | |
| VWC | C/CPFF | MCSC:ONR; ST LOUIS, MO | 0.000 | 4.737 | Oct 2011 | 2.936 | Dec 2012 | 2.260 | Dec 2013 | - | | 2.260 | 0.000 | 9.933 | |
| AN/TPS-63 | WR | NSWC:DAHLGREN, VA | 0.775 | 0.000 | | 0.075 | Jan 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.850 | |
| AN/TPS-63 | MIPR | USA:TOBYHHANNA, PA | 0.150 | 0.000 | | 0.164 | Mar 2013 | 0.187 | Mar 2014 | - | | 0.187 | Continuing | Continuing | Continuing |
| AN/TPS-63 | WR | NAVAIR:NAWCAD: PAXTUXENT RIVER, MD | 0.000 | 0.000 | | 0.100 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.100 | |
| | | **Subtotal** | 36.324 | 15.022 | | 11.180 | | 8.623 | | 0.000 | | 8.623 | | | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AN/TPS-59 | C/CPFF | MCSC:MCOTEA QUANTICO VA | 0.690 | 0.346 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | Continuing | Continuing | Continuing |
| AN/TPS-59 | MIPR | USAF:MAXWELL AFB AL | 0.000 | 0.017 | Jun 2012 | 0.020 | Dec 2012 | 0.000 | | - | | 0.000 | 0.000 | 0.037 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AN/TPS-59 | WR | NAWCAD:PAX RIVER MD | 0.000 | 0.061 | Aug 2012 | 0.140 | Mar 2013 | 0.000 | | - | | 0.000 | 0.000 | 0.201 | |
| AN/TPS-59 | WR | NAVAIR:PAX RIVER MD | 0.000 | 0.061 | Apr 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.061 | |
| | | **Subtotal** | 0.690 | 0.485 | | 0.160 | | 0.000 | | 0.000 | | 0.000 | | | |

**Management Services ($ in Millions)**

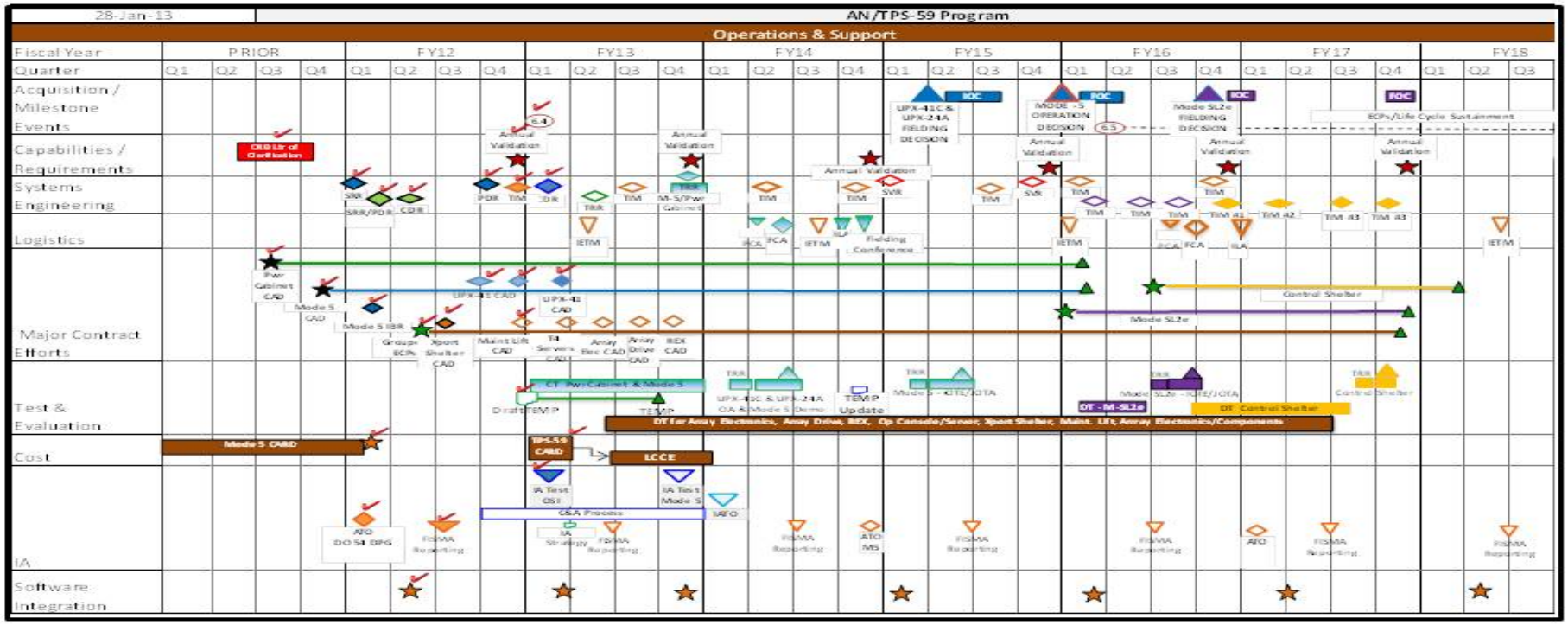
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AN/TPS-59 | C/CPFF | MCSC:GENERAL DYNAMICS QUANTICO VA | 13.654 | 4.131 | Jun 2012 | 2.700 | Jun 2013 | 0.000 | | - | | 0.000 | 0.000 | 20.485 | |
| AN/TPS-59 (3 DELRR) | C/CPFF | MCSC:GENERAL DYNAMICS QUANTICO VA | 2.000 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.000 | |
| FTAS | WR | MCSC:QUANTICO VA | 0.504 | 0.000 | | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.504 | |
| 3DELRR | C/CPFF | MCSC:GENERAL DYNAMICS QUANTICO VA | 0.280 | 1.985 | Jun 2012 | 1.851 | Jun 2013 | 0.000 | | - | | 0.000 | 0.000 | 4.116 | |
| | | **Subtotal** | 16.438 | 6.116 | | 4.551 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 27.105 | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 116.834 | 31.545 | | 25.677 | | 10.310 | | 0.000 | | 10.310 | | | |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

# AN/TPS-59 Program



| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>3099: *Radar System* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 3099*** | | | | |
| AN/TPS-59 PPM II MS-C/Fielding Decision | 3 | 2014 | 3 | 2014 |
| AN/TPS-59 PPM II IOC | 4 | 2014 | 4 | 2014 |
| AN/TPS-59 PPM II FOC | 1 | 2016 | 1 | 2016 |
| AN/TPS-59 PPM II Life Cycle Sustainment | 2 | 2015 | 4 | 2018 |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* | |

| COST ($ in Millions) | All Prior Years | FY 2012 | FY 2013# | FY 2014 Base | FY 2014 OCO ## | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9C89: *Marine Ground-Air Radar* | 248.235 | 102.455 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 350.690 |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |

# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

## The FY 2014 OCO Request will be submitted at a later date

**Note**

Program Element change in FY13 from 0206313M to 0204460M

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

The Ground/Air Task Oriented Radar (G/ATOR) is multi-role, ground-based, expeditionary radar that replaces five legacy radar systems for the Marine Air Ground Task Force. It satisfies the Marine Air Command and Control System and the Ground Counter Fire/Counter Battery capabilities. The G/ATOR replaces the AN/TPS-63 and complements the AN/TPS-59 long range radar and will provide mobile, multi-functional, three-dimensional surveillance of air breathing targets, detection of cruise missiles and UAS, and the cueing of air defense weapons. The G/ATOR contributes to the extension of Sea Shield/Sea Strike by surveillance and detection of enemy air threats not seen by Navy sensors in the littorals by participating in a cooperative engagement network of sensors and shooters. G/ATOR enables Integrated Fire Control (IFC) and provides engage/fire on remote capability. G/ATOR surveillance coverage with IFC will provide unprecedented reach, volume and precision in the execution of Operational Maneuver From The Sea, allowing Naval forces to project and sustain power deep inland. Funding for this effort was moved to PE 0204460M in FY13 and beyond.

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| ***Title:*** *G/ATOR: Contractor Technical, Development Engineering/EDM | 78.305 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:***<br>Finished System I&T, conducted Environmental Qualification Test (EQT), finished PQT, delivered Engineering Development Model (EDM) to the Government (DD250 sign off), started Anti-Tamper (AT) planning, assisted the government in development of the LRIP configuration in support of Transition to LRIP, conducted Production Readiness Review (PRR) and began producibility enhancement efforts to include design, prototype development and integration/regression testing of Gallium Nitride (GaN) based Transmit/Receive (T/R) modules and associated technology insertion efforts. | | | |
| ***Title:*** *G/ATOR: Test and Evaluation | 3.769 | 0.000 | 0.000 |
| ***Articles:*** | 0 | | |
| ***FY 2012 Accomplishments:*** | | | |

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* |

| B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each) | FY 2012 | FY 2013 | FY 2014 |
|---|---|---|---|
| Finished System I&T, conducted Environmental Qualification Test (EQT), finished PQT, provided support for the beginning of Developmental Testing 1B (DT1B). | | | |
| ***Title:*** *G/ATOR: Program Office Management & Travel Costs<br>***Articles:***<br><br>***FY 2012 Accomplishments:***<br>Continued Program Office Support and travel efforts in support of system development and test. | 6.113<br>0 | 0.000 | 0.000 |
| ***Title:*** *G/ATOR: Government Technical Support<br>***Articles:***<br><br>***FY 2012 Accomplishments:***<br>Continued support from these activities to enable program execution: MITRE, NSWC Dahlgren, NSWC Crane, NSWC PHD, MARCORSYSCOM and MCOTEA | 10.741<br>0 | 0.000 | 0.000 |
| ***Title:*** *G/ATOR: Engineering, Management, & Logistics Support<br>***Articles:***<br><br>***FY 2012 Accomplishments:***<br>Finished engineering, management & logistics program office support under existing contract with GDIT. Awarded new contract and continued engineering, management & logistics program office support with new contract vehicle. | 3.527<br>0 | 0.000 | 0.000 |
| **Accomplishments/Planned Programs Subtotals** | 102.455 | 0.000 | 0.000 |

**C. Other Program Funding Summary ($ in Millions)**

| Line Item | FY 2012 | FY 2013 | FY 2014 Base | FY 2014 OCO | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| • PMC/465000: *GRND/AIR TASK ORIENTED RADAR* | 4.246 | 90.348 | 99.325 | | 99.325 | 74.830 | 236.165 | 237.381 | 229.000 | 0.000 | 971.295 |
| • RDTE/0604504N: Air C: *MATCALS* | 0.000 | 0.000 | 3.000 | | 3.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3.000 |
| • RDTE/0204460M: *GRND/AIR TASK ORIENTED RADAR* | 0.000 | 75.088 | 78.208 | | 78.208 | 77.413 | 74.653 | 49.969 | 19.968 | 0.000 | 375.299 |
| • PMC/700000: *SPARES - G/ATOR* | 0.000 | 0.000 | 7.500 | | 7.500 | 6.800 | 18.900 | 21.200 | 26.300 | 0.000 | 80.700 |

**Remarks**

| Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* |

**D. Acquisition Strategy**

The Ground/Air Task Oriented Radar (G/ATOR) is multi-role, ground-based, expeditionary radar replacing five legacy radar systems and provides the USMC Air Defense and Air Surveillance (AD/AS), Counterfire/Targeting, and Air Traffic Control capability. The AD/AS development effort, competitively awarded in 2007, is scheduled for Milestone C in the 4th Qtr of FY13. Development of the Counterfire/Targeting capability was initiated in FY 10 with a RFI to industry followed by a Business Case Analysis (BCA) to select the most cost effective procurement strategy. The results of the BCA indicated that a sole source contract to NGSC was the most cost effective solution. Consequently, the J&A has been submitted reflecting the results of the BCA, and the contract award is scheduled for the first Qtr of FY 14. In FY13, a BCA will be performed to determine the optimum strategy for development of the Air Traffic Control mission with a targeted development contract to be awarded in FY 15.

**E. Performance Metrics**

N/A

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* |

**Product Development ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G/ATOR | C/CPIF | NORTHROP GRUMMAN SYSTEMS CORPORATION:LINTHICUM HEIGHTS, MD | 195.803 | 78.305 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 274.108 | |
| | | **Subtotal** | 195.803 | 78.305 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 274.108 | |

**Support ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G/ATOR | MIPR | MITRE:BOSTON, MA | 3.055 | 1.402 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 4.457 | |
| G/ATOR | WR | NSWC-DAHLGREN:DAHLGREN, VA | 21.319 | 10.741 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 32.060 | |
| G/ATOR | WR | NSWC-CRANE:CRANE, IN | 1.474 | 0.250 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.724 | |
| G/ATOR | C/FP | MCSC:QUANTICO, VA | 0.414 | 0.300 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 0.714 | |
| G/ATOR | WR | NSWC-PHD:DAM NECK, VA | 0.569 | 1.575 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.144 | |
| | | **Subtotal** | 26.831 | 14.268 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 41.099 | |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G/ATOR | C/CPIF | MCOTEA:QUANTICO, VA | 1.372 | 0.536 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.908 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* |

**Test and Evaluation ($ in Millions)**

| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G/ATOR | C/FP | GENERAL DYNAMICS:STAFFORD, VA | 1.550 | 0.600 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.150 | |
| G/ATOR | WR | NSWC-CORONA:CORONA, CA | 0.718 | 0.612 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.330 | |
| G/ATOR | MIPR | US ARMY ABERDEEN:PROVING GROUND, MD | 2.050 | 1.600 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 3.650 | |
| G/ATOR | MIPR | NAVAL SURFACE WEAPONS COMBAT CNTR:WALLOPS ISLAND, VA | 1.600 | 0.421 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 2.021 | |
| | | **Subtotal** | 7.290 | 3.769 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 11.059 | |

**Management Services ($ in Millions)**

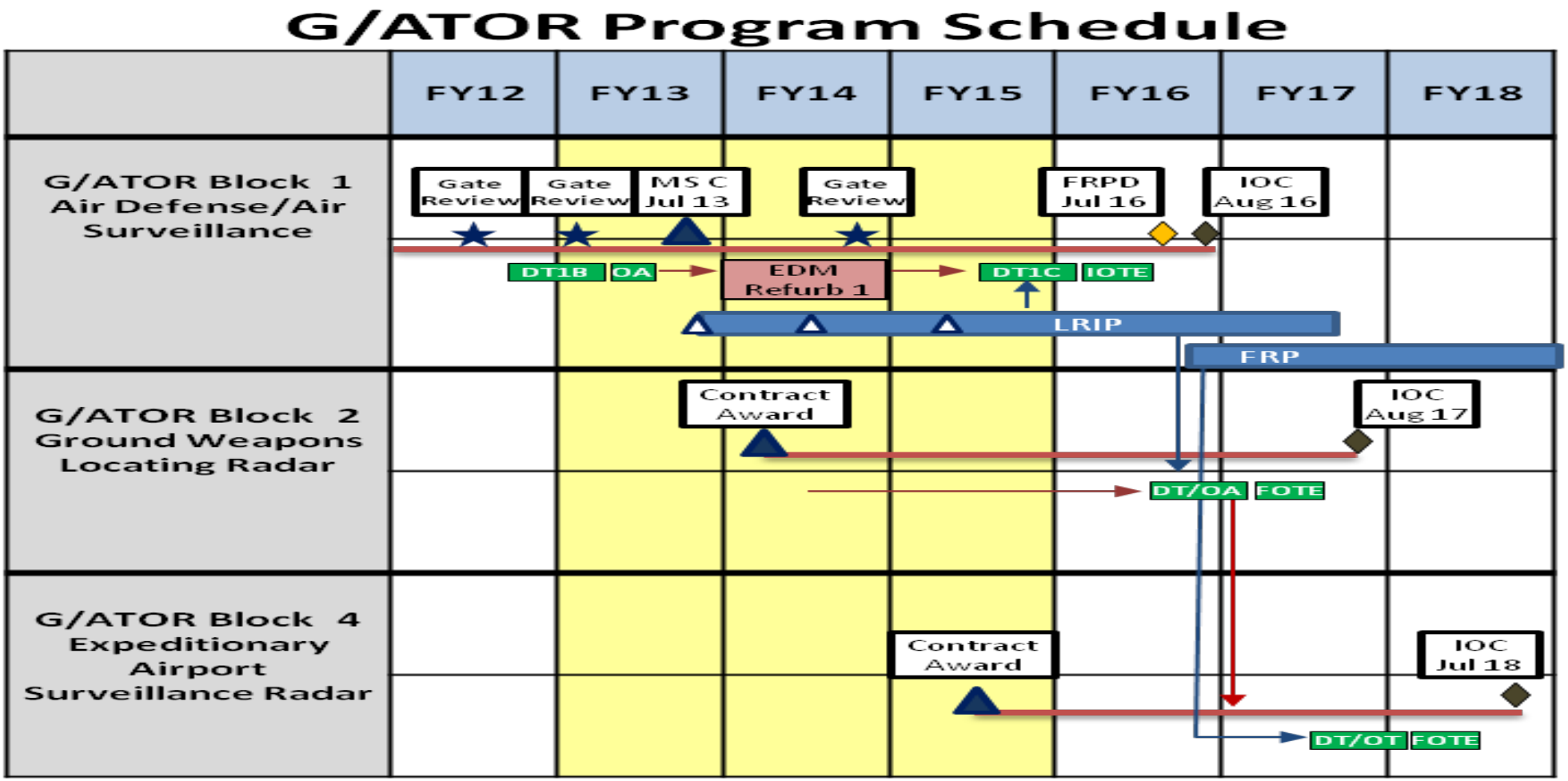
| Cost Category Item | Contract Method & Type | Performing Activity & Location | All Prior Years | FY 2012 Cost | FY 2012 Award Date | FY 2013 Cost | FY 2013 Award Date | FY 2014 Base Cost | FY 2014 Base Award Date | FY 2014 OCO Cost | FY 2014 OCO Award Date | FY 2014 Total Cost | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G/ATOR | C/FP | MCSC:MCSC-QUANTICO, VA | 4.151 | 0.346 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 4.497 | |
| G/ATOR | Various | MCSC:QUANTICO, VA | 0.724 | 0.424 | Sep 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.148 | |
| G/ATOR | C/FP | GENERAL DYNAMICS:STAFFORD, VA | 12.587 | 4.905 | May 2012 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 17.492 | |
| GATOR | C/FP | MCSC:QUANTICO, VA | 0.849 | 0.438 | Dec 2011 | 0.000 | | 0.000 | | - | | 0.000 | 0.000 | 1.287 | |
| | | **Subtotal** | 18.311 | 6.113 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 24.424 | |

| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy | | | DATE: April 2013 |
|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* | |

| | All Prior Years | FY 2012 | | FY 2013 | | FY 2014 Base | | FY 2014 OCO | | FY 2014 Total | Cost To Complete | Total Cost | Target Value of Contract |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Project Cost Totals** | 248.235 | 102.455 | | 0.000 | | 0.000 | | 0.000 | | 0.000 | 0.000 | 350.690 | |

**Remarks**

| Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* |



| Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy | | DATE: April 2013 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>1319: *Research, Development, Test & Evaluation, Navy*<br>BA 7: *Operational Systems Development* | R-1 ITEM NOMENCLATURE<br>PE 0206313M: *Marine Corps Comms Systems* | PROJECT<br>9C89: *Marine Ground-Air Radar* |

## Schedule Details

| | Start | | End | |
|---|---|---|---|---|
| **Events by Sub Project** | **Quarter** | **Year** | **Quarter** | **Year** |
| ***Proj 9C89*** | | | | |
| Defense/Air Surveillance AS/AD Capability System Demonstration (DT)(1B) | 4 | 2012 | 2 | 2013 |
| Defense/Air Surveillance AS/AD Capability System Demonstration (DT/OT)(1C) | 3 | 2015 | 1 | 2016 |
| Defense/Air Surveillance AS/AD Capability Operational Assessment (OA) | 2 | 2013 | 3 | 2013 |
| Defense/Air Surveillance AS/AD Capability Low Rate Initial Production (LRIP) | 4 | 2013 | 3 | 2017 |
| Defense/Air Surveillance AS/AD Capability Milestone C | 4 | 2013 | 4 | 2013 |
| Defense/Air Surveillance AS/AD Capability (IOT&E) | 2 | 2016 | 2 | 2016 |
| Defense/Air Surveillance AS/AD Capability (IOC) | 4 | 2016 | 4 | 2016 |
| Defense/Air Surveillance AS/AD Capability Full Rate Production Decision | 4 | 2016 | 4 | 2016 |