

### Letter Reference No. 69031-190

February 05, 2007

Attn: DTIC-OCC

John J. Kingman Road Suite 0944 Fort Belvoir, VA 22060-6218

Subject:

Technical Area Task (TAT) Quarterly Report

Reference:

Contract Number HC1047-05-D-4005

**Enclosures:** 

(1) RIAC 1<sup>st</sup> Quarterly 2007 Technical Area Task (TAT) Report

Dear Ms. Austin,

Wyle Laboratories, Inc. (Wyle) is forwarding in accordance with the referenced contract the enclosed report.

Should you have any questions, please feel free to contact the undersigned at (256) 716-4120, by facsimile at (256) 830-2109, or email to troy.vesper@wylelabs.com.

Respectfully,

### WYLE LABORATORIES, INC.

Test, Engineering, and Research

Troy Vesper Senior Contracts Administrator

Attachment:

as stated



PROJECT:

RIAC 1st Quarterly 2007 Technical

Area Task (TAT) Report

PREPARED BY:

Wyle Laboratories, Inc., Operating the

**Reliability Information Analysis Center** 

CONTRACT:

HC1047-05-D-4005

COVERING THE PERIOD:

1 October 2006 through 31 December 2006

**APPROVALS** 

**RIAC Directo** 

DATE

2/1/07

## **Reliability Information Analysis Center (RIAC)**

6000 Flanagan Road Suite 3 Utica, NY 13502-1348



RIAC is a DoD Information Analysis Center administered by the Defense Technical Information Center (DTIC)

**Approved for Public Release; Distribution Unlimited** 

## RELIABILITY INFORMATION ANALYSIS CENTER

1st Quarter 2007 Technical Area Task (TAT) Report

for

Contract HC1047-05-D-4005

Covering the period

1 October 2006 through 31 December 2006

Prepared for:

Defense Technical Information Center 8725 John J. Kingman Road, Suite 0944 Ft. Belvoir, VA 22060-6218

Prepared by:

Wyle Laboratories, Inc.
Operating the
Reliability Information Analysis Center
6000 Flanagan Road
Suite 3
Utica, NY 13502-1348

# **Contents**

Delivery Order	Title
0001	Naval Air Depot North Island Component Reliability Program Support
0002	AFRL Program Support
0003	Army Aviation Engineering Directorate Reliability Centered Maintenance Support
0004	E-2/C-2 Trainers
0005	AFRL Integrated Information Management System Support
0006	Systems Interoperability, Reliability Engineering and Maintenance, and Systems Engineering and Management Support for the Naval Air Systems
0006 Subtask 1	Air-to-Air Requirements Support
0006 Subtask 2	Conformal Controlled Radiation Pattern Antenna Support
0006 Subtask 3	Taiwan WST and Pilot Training
0006 Subtask 4	Conformal Controlled Taiwan PDM
0006 Subtask 5	NAWCAD, Test Resources Management Center (TRMC) and Central Test Evaluation and Investment Program (CTEIP)
0006 Subtask 6	AFECC
0006 Subtask 7	Commercial Air Services Support
0006 Subtask 8	Low Profile VHF Antenna Support
0006 Subtask 9	Aircraft Survivability and Fleet Readiness
0006 Subtask 11	Systems Interoperability, Reliability Engineering and Maintenance, and Systems Engineering and Management Support for NAVAIRSYSCOM, NAWCAD, OPNAV, CINCPACFLT and CINCLANTFLT
0006 Subtask 12	Navy Aircraft Survivability and Fleet Readiness
0007	Cherry Point Naval Air Depot NP 2000 Propeller Reliability and Maintenance Support
0008	NASA Marshall Space Flight Center Failure Mode & Effects Analysis

<b>Delivery Order</b>	Title
0009	TEMS
0010	RAPIDS
0011	ALQ-184
0012	Maritime Security
0013	AIR 6.8 Aviation Readiness and Resource Analysis Program Life Cycle Support
0014	Product Support Logistics, Sustainment, and Acquisition Strategies for Department of Defense (USN, USMC, USA, USAF, DLA, etc.)
0016	Armed Reconnaissance Helicopter Project Support
0017	PMA-205 Analysis of Alternatives for Land Attack
0018	PMA-231 Network Centric Warfare (NCW) Analysis
0019	Landing Craft, Air Cushion (LCAC) Command, Control, Communication, Computer, and Navigation (C4N) Project Engineering
0020	Commander Second Fleet Maritime Security Interoperability and Program Management Support
0021	Deputy Under Secretary of Defense for Advanced Systems and Concepts (OSD AS&C) Special Capabilities Office (SCO) Projects
0022	Single Integrated Air Picture (SIAP) Analysis
0023	Information Technology, Software Reliability, and Resource Analysis Program Life Cycle Support
0024	Littoral Combat Ship (LCS) Mission Module (MM) Engineering Support
0025	Joint Council on Aging Aircraft Organization and Aeronautical Systems Program Life Cycle Support
0026	Test and Training Enabling Architecture (TENA) Software Development Activity (SDA)
0033	Egyptian Air Force (EAF) Planned Maintenance Interval (PMI) Analysis



Naval Air Station North Island Attn: James Schrope North Island Integrated In-Service Reliability Program (IISRP) Team Leader San Diego, CA 92135 B317-2

SUBJECT:

Naval Air Depot North Island Component Reliability Program Support Quarterly Report for the period 01 October 2006 to 31 December 2006, under Contract No. HC1047-05-D-4005, Delivery Order 0001, Wyle Project No. A20047.0001.0001.

Period of Performance: October 1 through December 31, 2006

### 1.0 WORK PERFORMED THIS PERIOD

- Submitted Component Reliability Program Support Quarterly Report for the period 01 October 2006 to 31 December 2006 on 9 January 2007.
- Maintain, updated and performed monthly Project Plan reporting to IISRP Headquarters.
- Continued research, development and revision of support equipment requirements and maintenance procedures for F/A-18 Servovalves as tasked by Aircraft Equipment Reliability and Maintainability Improvement Program (AERMIP) at NAVAIR Headquarters. Task expanded significantly due to identifying similar components on other aircraft, investigating associated maintenance processes, and comparing findings with current efforts.
- Refined methodology for identifying multi-purpose recommendations and procedures
  to improve component reliability and Naval Air maintenance efforts for AERMIP.
  Continued specific efforts with in-depth research of all Indicators in each respective
  platform.
- Continued research, development and revision of support equipment requirements and maintenance procedures for Aircraft Generators as tasked by AERMIP at NAVAIR Headquarters. Task expanded significantly due to identifying similar components on other aircraft, investigating associated maintenance processes, and comparing findings with current efforts.
- Performed statistical analysis and developed Business Case Analyses for selected consumables as directed by DLA.
- Visited MCAS Miramar San Diego, CA to observe and discuss maintenance on the F/A-18A/B/C/D Generator Converter Unit (GCU) with Organizational and Intermediate maintenance activities.

 Observed various maintenance processes, gathered historical data, performed technical analysis in development for Reliability Studies for the following components:

NI179 AV-8B 30KVA Generator

NI184 F/A-18C Movable Canopy

NI185 F/A-18A/B/C/D Hydraulic Drive Unit (HDU)

NI186 F/A-18A/B/C/D Generator Converter Unit (GCU)

• Performed status check and requisite follow-up activities on implementation actions on previously studied components:

NI002 E-2C 60/90 KVA Generator

NI047 F/A-18 Generator Converter Unit

NI067 H-46 AC/DC Generator

NI070 E-2C/C-2A Variable Delivery Aircraft Hydraulic Pump

NI094 F/A-18 Aileron Servocylinder

NI095 F/A-18 Rudder Servocylinder

NI097 F/A-18 Leading Edge Flap Servovalve Assembly

NI122 F/A-18 Main Landing Gear Wheel Assembly

NI127 F/A-18 Nose Landing Gear Wheel Assembly

NI140 H-53 AC Generator

NI141 H-53 Rate Gyroscope

NI159 E-2C/C-2A Hydraulic Motor Assembly

NI169 General Servovalve Overview

NI170 General Servovalve Overview

NI177 CH-46E Attitude Indicator Display Module

NI178 CH-46E Amplifier-Power Supply Module

#### 2.0 WORK PLANNED FOR NEXT PERIOD

- Continue research, development and revision of support equipment requirements and maintenance procedures for all Servovalves as tasked by Aircraft Equipment Reliability and Maintainability Improvement Program (AERMIP) at NAVAIR Headquarters.
- Continue in-depth research of all Indicators in each respective platform to identify multipurpose recommendations and procedures to improve component reliability and Naval Air maintenance efforts for AERMIP.
- Continued research, development and revision of support equipment requirements and maintenance procedures for Aircraft Generators as tasked by AERMIP at NAVAIR Headquarters.
- Continue statistical analysis and developed Business Case Analyses for selected consumables as directed by DLA.
- Continue previously stated methods for Reliability Study development for the following components:

NI179 AV-8B 20/30KVA Generator

NI184 F/A-18C Movable Canopy

NI185 F/A-18 Hydraulic Drive Unit

NI186 F/A-18 Generator Converter Unit

Perform status check and requisite follow-up activities on implementation actions on previously studied components:

NI002 E-2C 60/90 KVA Generator

NI047 F/A-18 Generator Converter Unit

NI067 H-46 AC/DC Generator

NI070 E-2C/C-2A Variable Delivery Aircraft Hydraulic Pump

NI094 F/A-18 Aileron Servocylinder

NI095 F/A-18 Rudder Servocylinder

NI097 F/A-18 Leading Edge Flap Servovalve Assembly

NI122 F/A-18 Main Landing Gear Wheel Assembly

NI127 F/A-18 Nose Landing Gear Wheel Assembly

NI140 H-53 AC Generator

NI159 E-2C/C-2A Hydraulic Motor Assembly

NI169 General Servovalve Overview

NI170 General Servovalve Overview

NI177 CH-46E Attitude Indicator Display Module

NI178 CH-46E Amplifier-Power Supply Module

Provide assistance upon NASNI request.

#### 3.0 PROJECT FUNDING STATUS

The program financial status as of December 31, 2006.

Funds Allocated to Date

\$1,000,079

Funds Expended to Date

\$895,291

Funds Remaining to Date

\$104,788

Respectfully Submitted:

Melissa Packwood

Program Manager

Approved by:



Respectfully submitted, Preston R. MacDiarmid Quanterion Solutions Incorporated

**Period of Performance:** 

October 1 through December 31, 2006

THIS TAT IS ON HOLD

Approved by:

Loseph T. Hazeltine RIAC Director



US Army Aviation Engineering Directorate Sustainment Engineering Division Huntsville, AL

SUBJECT:

US Army Aviation Engineering Directorate Reliability-Center Maintenance (RCM) Support Program Quarterly Report under Contract No. HC1047-05-D-4005, Delivery Order, Wyle Project No. A10160.0003, RIAC TAT No. RI-06-0002/0003

Period of Performance: October 1 through December 31, 2006

### 4.0 WORK PERFORMED THIS PERIOD

- Final draft RCM Plan has been presented to the government for review, input and approval. All changes incorporated into Final Draft.
- Final Draft approved by Government.
- Final Report completed for Jan 07 submittal to Government.
- Final TAT Report distributed

### 5.0 WORK PLANNED FOR NEXT PERIOD

• Complete closeout paperwork in February

### 6.0 PROJECT FUNDING STATUS

The program financial status as of 31 Dec 2006.

Funds Allocated to Date \$48,000 Funds Expended to Date \$43,321 Funds Remaining to Date \$4,679

Respectfully Submitted:

Jeff Chapman Program Manager Wyle Laboratories Inc.

Approved by:

Loseph T. Hazeltine RIAC Director



From:

Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

and

D3 Technologies 19501 East Mainstreet Parker, CO 80138

**SUBJECT:** Monthly Status Report Under Contract HC1047-05-D-4005, E-2C/C-2 Trainers

**TAT 004** 

Period of Performance: October 1 through December 31, 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- D3 San Diego team determining what parts will be required for the upcoming GARMIN modification. Complete listing sent to Mr. Jeff Lord, Wyle Laboratories, Inc., for distribution. Mr. Lord is working to obtain the GARMIN Aircraft Kit.
- D3 Norfolk team member is documenting all GFE located in Norfolk warehouse.
   Developing inventory list showing quantities of all GFE items plus their physical location in warehouse. Troubleshooting Trainers as directed by school house instructors.
- Verifying AC/DC Trainer MOMI as requested by PMA-205 and Mr. Dana Moen, Wyle Laboratories, Inc.
- The D3 San Diego, California team finalizing development of kit which will be required for the upcoming GARMIN modification.
- Verifying Trainer MOMI's as requested by PMA-205 and Mr. Dana Moen, Wyle Laboratories, Inc.
- D3 San Diego team finalizing development of kit which will be required for the upcoming GARMIN mod.
- Coordinating with Mr. Jeff Lord, Wyle Laboratories, Inc., contact for GARMIN modification. Jeff Lord to assist in obtaining complete GARMIN Aircraft Kit.
- D3 Norfolk team member is documenting all GFE located in Norfolk warehouse.
   Developing inventory list showing quantities of all GFE items plus their physical location in warehouse. Troubleshooting trainers as directed by schoolhouse instructors.
- Verifying Trainer MOMI's as requested by PMA-205 and Mr. Dana Moen, Wyle Laboratories, Inc.

#### WORK PLANNED FOR NEXT PERIOD: 2.0

- Team shall continue planning and obtaining missing parts for upcoming GARMIN modification.
- Continue to classify and list all GFE Trainer located at Norfolk warehouse.
- Continue verification process for the various Trainer MOMI's.

#### 3.0 **PROJECT FUNDING STATUS:**

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$504,585

Funds Expended to Date

\$329,456

Funds Remaining to Date

\$175,129

Respectfully Submitted:

Manning Calhoun

Director - Rocky Mountain Region

D3 Technologies

Approved by:



AFRL/IFSA (J. Reilly) AFRL/IFSB (R. Hyle) 525 Brooks Rd Rome NY 13441-4505

Subject: Quarterly Status Report for RIAC Technical Area Task "IIMS Support" (TAT 5) Reference: Contract HC1047-05-D-4005/Wyle Subcontract Number RC00035478/Delivery Order 2

Period of Performance: October 1 through December 31, 2006

TAT ON HOLD

Preston R. MacDiarmid Quanterion Solutions Incorporated

Approved by:

Weseph T. Hazeltine RIAC Director



NAVAIR/NAWCAD PMA-231, NAWCAD 6.6.2 John F. Martin Building 2044; Buse Road Patuxent River, MD 20670

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, NAVAIR/NAWCAD TAT 006, Subtask 1: Air-to-Air Requirements Support

Period of Performance: October 1 through December 31, 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Coordinated and facilitated the AIM-9X Capabilities Production Document (CPD) working group held at NAS Oceana, Virginia, 3 through 5 October 2006.
- Attended the Air Launched Weapons Team (ALWT) meeting at NAS Oceana, Virginia 6 October 2006.
- Continued liaison and preparation of budget/program issue sheets in support of Navy POM-08 endgame strategy.
- Continued support for N88 Requirements Officer (RO) in development of detailed, inventory, budgetary, and capability information for senior leadership funding decisions.
- Continued detailed planning and facilitation for Navy Program Readiness Review (PRR) briefing submissions to N88 as part of Program Review Fiscal Year 2009 (PR09) cycle.
- Continued preparations for the AIM-9X Capabilities Production Document (CPD) development. Attended several meetings at Navy program office, PMA-259, in support of AIM-9X requirements development, discussions, decisions and PRR development.
- Coordinated Australian Embassy's request for information with PMA-259 and the Navy International Program Office.
- Participated in the Air Launched Weapons Team (ALWT) and Future Readiness Team (FRT) telephone conference.
- Continued to support the N88 Requirements Officer (RO) in development of detailed inventory, budgetary, and capability information for senior leadership funding decisions.
- Continued detailed planning and facilitation the Navy Program Readiness Review (PRR) briefing submissions to N88 as part of the Program Review Fiscal Year 2009 (PR09) cycle.
- Began development of Fiscal Years 2008/2009 Non-Combat Expenditure Allocation (NCEA) for Navy and Marine Corps claimants.
- Supported Navy Air-to-Air Weapons Requirements Officer in coordinating, facilitating, and preparing rapid turnaround action items.

- Conducted AIM-9X Capabilities Production Document (CPD) follow-on meeting at Raytheon Missile Systems Lexington Park, MD facility.
- Completed development of Fiscal Years 08/09 Non-Combat Expenditure Allocation (NCEA) for Navy & Marine Corps claimants.

#### 4.0 **WORK PLANNED FOR NEXT PERIOD:**

- Change of status to hourly employee, effective 12 January 2007.
- Support Navy Air-to-Air Weapons Requirements Officer as required through 12 January 2007.
- Attend requirements development meetings at PMA-259 as necessary.

#### 5.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$330,084

Funds Expended to Date

\$148,802

Funds Remaining to Date

\$181,282

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:



NAVAIR/NAWCAD PMA-231, NAWCAD 6.6.2 John F. Martin Building 2044; Buse Road Patuxent River, MD 20670

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006 NAVAIR/NAWCAD; Subtask 2: Conformal Controlled Radiation Pattern Antenna Support

Period of Performance: October 1 through December 31, 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Participated in telephone conference with sponsor and test site personnel.
- Updated antenna outline drawing for integration into radar cross section (RCS)
- Worked on integration issues of bid sample antennas into RCS test fixture.
- Responded to questions from potential bid sample antenna vendors. Briefed sponsor on progress.
- Worked on integration issues of bid sample antennas into the RCS test fixture.
- Worked on test schedule with Northrop Grumman Corporation.
- Reviewed test plan with Pt. Mugu, California range personnel.
- Briefed sponsor on project.
- Finalize test plan.

### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Visit test site to coordinate delivery of bid sample antennas and test fixture.
- Examine test fixture for fit of bid sample antennas.

### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date \$242,880 Funds Expended to Date \$45,686 Funds Remaining to Date \$197,194

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine



NAVAIR/NAWCAD PMA-231, NAWCAD 6.6.2 John F. Martin Building 2044; Buse Road Patuxent River, MD 20670

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006, Subtask 3: Taiwan WST and Pilot Training

## Period of Performance: October 1 through December 31, 2006

- Testing of Taiwan Tactics Trainer and MC switch from 8 through 13 October 2006.
- Cycle 14 Pilot Training commenced 23 October to continue through 9 November 2006.
- Completed Cycle 14 Pilot Training on 9 November 2006.
- Evaluated training site for Cycle 15 WSO training.
- Drafted letter to TAF recommending venue change to Ping Tung Air Base, Taiwan or Norfolk, Virginia.
- Reviewed final letter to TAF recommending venue change to Ping Tung Air Base, Taiwan or Norfolk, Virginia.
- Attended Cycle 15 WSO training meeting with Taiwan Program Manager and PMA-205 representative to evaluate training site and USN recommendations.

### 2.0 WORK PLANNED FOR NEXT PERIOD:

• Prepare for WSO training at designated site. Schedule instructors, update tactical software and prepare training materials.

### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$234,423

Funds Expended to Date

\$124,400

Funds Remaining to Date

\$110,024

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:

Joseph T. Hazeltine



From: Bob Reed Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006 NAVAIR/NAWCAD; Subtask 4: Taiwan Depot Phased Maintenance (PDM)

Period of Performance: October 1 through December 31, 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- At the request of the Support Equipment (SE) Logistics Element Manager (LEM), continued research to identify a source of supply for depot level tools required for the Taiwan Air Force (TAF) to perform Phased Depot Maintenance (PDM) on their aircraft. After identifying the source, a quote will be requested to start the procurement process for the tools.
- Continued to locate and obtain quotes for tools to be procured for the PDM effort in Pingtung. One Request for Quote (RFQ) is still outstanding.
- Continued receiving tools from the vendors that had provided quotes for the PDM tool procurement effort. Continued the inventory, tracking, and shipment process for the tools that have been received. To date the tool orders from sixteen vendors are complete and six partial shipments have been received.
- At the request of the Support Equipment (SE) Logistics Element Manager (LEM), continued research to identify a source of supply for depot level tools required for the Taiwan Air Force (TAF) to perform Phased Depot Maintenance (PDM) on their aircraft. After identifying the source, a quote will be requested to start the procurement process for the tools.

### 2.0 WORK PLANNED FOR NEXT PERIOD:

• Continue receiving tools from the vendors that have provided quotes for the PDM tool procurement effort. Continue the inventory, tracking, and preparation for shipment process for the tools that have been received.

### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date \$48,077 Funds Expended to Date \$24,453 Funds Remaining to Date \$23,624

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:



Valerie Hayes Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report under Contract HC1047-05-D-4005, TAT RI-06-

0005/0006 Subtask 5: NAWCAD, Test Resources Management Center (TRMC) and Central Test Evaluation and Investment Program (CTEIP)

Period of Performance: October 1 through December 31, 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

#### Scientific Solutions, Inc.

- Conducted telephone conference to discuss feasibility of including TENAenabled assets at Nellis AFB into the second phase of the TTR demo. It was concluded at this meeting that the DIADS may not be in a state to output data for consumption. Attendees included Nellis engineers and military personnel. Other assets were believed to be in a state that would require updating from older versions of the TENA middleware and JNTC LROM.
- Developed and documented a proposed event sequence for the second phase of the TTR demo. This involved cross-range activity across Nellis AFB and Fallon Naval Air Center. It was determined that this is the plan that will be pursued to be discussed at the meetings at Nellis AFB 14 December 2006. It involves flying live F/16 (or F/22 if feasible) aircraft from Nellis to Fallon and engaging new threat systems residing at Fallon.
- Reviewed NCTE Interoperability Guide to discover potential overlap or competing goals of this program with that of PMA-205 TENA efforts. Additional fact finding is required.
- Development of the TENA monitoring tool (TMT) is ongoing. Began creating TMT subscribers for threat objects for use in phase II of the TTR TENA demo. Modified design of subscriber application for TTR:IADSThreatInterface SDO. The subscriber will only write state change updates where the SDO has actually been modified from the last state change update. If the data is identical, the TMT will not write to either the XML file or database. It is possible that a deterministic data stream could be generated with very few changes between transmissions. Also, the configuration file reading capability was added. Other SDO's that will need to be included in the threat executable are RadarSystem, ThreatRadar, TSOM:ReactivityController, JNTC:LandPlatform, TENA:PlatformDetails, and TTRThreatDescriptor. These SDO's will mimic the behavior of the TTR:IADSThreatInterface subscriber.

## Wyle Laboratories, Inc.

- Provided analysis and research to Mr. George Rumford, Training Enabling Architecture (TENA) Software Development Activity (SDA) Program Manager, regarding TENA SDA initiatives.
- Worked with government personnel, BAE Systems, Scientific Solutions, Inc., and Trideum Corporation employees to plan out TENA SDA initiatives, potential trade show efforts, and software requirements over the next 36 months.
- Attended meetings at the Test Resource Management Center (TRMC) on Test Enabling Architecture (TENA) Software Development Activity (SDA) s/w and networking projects.
- Attended Joint Mission Environment Testing Capability (JMETC) meetings at TRMC on supporting networking stand-up.
- Discussed with JMETC Program Office (PO) networking transition on Single integrated Air Picture (SIAP) program.
- Discuss with JMETC PO networking transition on Interoperability Test Evaluation Capability (InterTEC) program.
- Discuss with JMETC PO networking transition on CVN-21 program.
- Started building network transition plan.
- Discussed hosting JMETc Network Operations and Security Center (NOSC) at Patuxent River Air Interoperability Center (AIC) NOSC.
- Attended meeting at China Lake on 12 through 13 December 2006. The purpose of this meeting was to discuss the way forward for the TTR's TENA efforts and second phase of the TENA demo. Extensive tasking was established and assigned. A TENA interface to EW Server was reaffirmed after some uncertainty about this solution. The decision to upgrade all TTR TENA applications to the latest TTR and JNTC (distribution) LROM versions was made. Also, it was determined that the TTR should explore what the role of TTR assets in an integrated LVC capacity such as the Naval Continuous Training Environment would be.
- Attended meeting at Nellis AFB on 14 December 2006. Nellis asset availability was discussed further to arrive at resolution as to the feasibility of their inclusion in the phase II demo. Capt. Okeson USAF confirmed that the DIADS will not be enabled or in a state in which it could effectively interact with a TENA exercise. Capt. Okeson suggested that a worthwhile scenario to include would be to point a Global Hawk at Fallon. This is an action item that warrants further investigation (in process). The most significant proposal was the linking of the Fallon range with Nellis via a TENA gateway. This scenario appears to be feasible and is currently being evaluated.
- Reviewed Statement of Work from Eglin AFB pertaining to the Weapons Simulation Interface Upgrade. The issue on the table is whether to integrate the resulting object representations into the TTR LROM. The Navy is not supportive of this idea at this time and further investigation was advised.
- Began evaluating proposed next version of the JNTC LROM for the purpose of integrating the TTR LROM into the JNTC LROM. This new version of the JNTC LROM is the baseline to which the TTR LROM may be merged into. The TTR LROM baseline is the USNTTR-TSOM LROM-COMBINED-v1.2 version.

- Scheduling and coordination for this effort will begin during side-bar meetings at AMT-34 9 through 11 January 2007.
- Development of the TENA monitoring tool (TMT) is ongoing. Began porting the TMT to the new distributions as determined in the China Lake meetings (USNTTR-TSOM LROM-COMBINED-v1.2 and JNTC-LROM2005S1-v2). The JNTC::FixedWingAirPlatform subscriber has been ported to the new spiral 2 JNTC distribution. Additional features have been added. A configurable echo capability has been added that will echo to the screen diagnostics per the update interval entered in the config file. This will save the user from having to query the database to get this information.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Complete TMT code port to new TTR and JNTC LROM versions.
- Investigate the inclusion of the Global Hawk in phase II of the TENA demo.
- Attend AMT-34 in Virginia Beach, Virginia.
- Prepare initial draft of updated TTR COMTTRI ICD and wiki page as per above.
- Continue TTR/JNTC LROM merge planning and preparations.
- Participate in next phase of JATTL testing (this is pending availability of that facility).
- Add more SDO's to TMT subscriber list.

#### 3.0 **PROJECT FUNDING STATUS:**

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$673,077

Funds Expended to Date

\$ 25,092

Funds Remaining to Date

\$647,985

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:



From: Ellen Holcomb Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-0005/0006 NAVAIR/NAWCAD; Subtask 6: AFECC Support

Period of Performance: October 1 through December 31, 2006

### 1.0 WORK PERFORMED THIS PERIOD:

Atlantic Fleet Exercise Coordination Center (AFECC) provided support by
interfacing with the Fleet, Department of Defense (DoD), and the North Atlantic
Treaty Organization (NATO) to enhance reliability and maintainability of fleet
readiness and deployment. This includes advanced planning and coordination of fleet
exercises to facilitate training of seven East Coast Carrier Battle Groups and four
Expeditionary Strike Groups, Atlantic Fleet missile exercises, and other such training,
target, and/or weapon system exercises.

## • October 2006 Meetings:

Joint Forces Command brief
CVW-8 SINKEX planning meeting
Trident Warrior 07 planning conference
VC-6 Key West planning meeting
Gun Line planning meeting for Dam Neck
Fort Bragg Air Conference
CSFTL Opposition Force planning meeting
WYLE awards presentation
Fleet Scheduling Syndicate meeting
WYLE Interviews
CSFTL Strategic Conference
Truman Group Sail meeting
Tactical Squadron 21 planning meeting
VC-6 Decommissioning planning meetings

### • October 2006 Exercises:

01-19 Oct 06	HMCS ST Johns independent training
03 Oct 06	USS Mason FIAC
06 Oct 06	CDS-26 FIAC
12 Oct 06	X Drone Training flight
18-20 Oct 06	Layered Defense exercise
19 Oct 06	X Drone Training flight
22-28 Oct 06	Atlantic Strike exercise
23 Oct 06	USS Bataan C2X scheduled through 09 Nov 06
23 Oct 06	AQM-37 launch

### 24-26 Oct 06 Manned Raids

- Coordinated and scheduled all surface and air exercises for Fleet Composite Squadron Six (VC-6) in October 2006. These exercises include, but are not limited to: Small Boat Attacks (SBA), Fast Assault Crafts, Fast Inshore Attack Crafts, surface and air launched drone exercises and training evolutions. VC-6 supported two Commander Second Fleet (COMSECONDFLT) mandated Force Protection Exercises (FPEX) for Commander Destroyer Squadron 26 (COMDESRON TWO SIX) and USS Mason. Additionally, VC-6 conducted BQM-74 manned raids in preparation of the first ever three ship Combat System Ships Qualification Trial (CSSQT) missile events. VC-6 currently has three surface detachments deployed on three Mobile Sea Range Vessels.
- Liaison with Sam Griffith, Rocky Hammet, Blaine Rineer, and the Masters of the Mobile Sea Range (MSR) vessels throughout the month of October 2006 for proper coordination and scheduling of Commander Fleet Forces Command Surface Crafts, Hugo, Hunter and Prevail respectively. AFECC is working closely with Commander Strike Force Training Atlantic (CSFTL) to provide the vessels with their tasking for the COMPTUEX (C2X) exercise in progress.
- Mobile Sea Range vessels executed their tasking for the month of October, always balancing maintenance schedules, future requirements and event preparations. There was a maintenance issue with Hunter who failed to sail on time due to a faulty generator during C2X. Hugo was also delayed from starting the C2X on time due to the inability to receive fuel on Sunday 22 October at Little Creek Naval Station. This fuel issue is being investigated by CSFTL. Training Support Vessel (TSV-1) PREVAIL completed all mast structural repairs and crane and recovery certifications. TSV-1 PREVAIL completed transfer of ownership and support from Norfolk Naval Shipyard to Commander Strike Force Training Atlantic (CSFTL). Hunter completed their yard period in Key West for repairs and installation of the new Center Line Recovery System. A proof of concept for the Center Line Recovery System was successful and the vessel is ready for fleet tasking.
- AFECC managed the day-to-day exercises and maintained an up-to-date Schedule of Events for:
  - PEO IWS Layered Defense
  - COMDESRON TWO SIX FIAC
  - Three ship CSSQT manned raids and missile exercises
  - Special Operations training with VFA-115 in Avon Park FL
  - USS Bataan C2X planning and coordination
  - HMCS ST Johns Canadian training exercise
- AFECC is planning and coordinating the Sink Exercise (SINKEX) with CVW-8 and a P-3 squadron for the EX-USS Spruance on 7 December 2006.
- Coordinating the Certification Training Exercise for USS Bataan Battle Group in December 2006.

- Coordinating GREY FOX IV, a Carrier Air Wing bombing exercise using remote controlled targets. Event has been planned for 13 through 17 November 2006.
- Administrative paperwork ongoing. Extensive data collection by AFECC to capture past and future exercise support for VC-6 is taking place. The AFECC Director (LT Houze) has taken the lead for all efforts in regard to the FY08 VC-6 decommissioning.
- Ms. Maggie Arndt attended the Joint Special Operations Air Asset Allocation Coordination Conference in Fort Bragg, North Carolina in October 2006.
- Strike Force Training Atlantic (SFTA) support included the following:
  - Provided support for USS Bataan Expeditionary Strike Group (ESG) Composite Training Unit Exercise (COMPTUEX).
  - Liaison with Deploying Group Systems Inter-operability Team for USS Bataan ESG.
  - Liaison with French Navy liaison officer at Second Fleet for French ship participation in USS Bataan ESG COMPTUEX.
  - Liaison with French Navy liaison officer at Second Fleet and French naval officer from the Ministry of Defense for French ship participation in USS Harry S. Truman Carrier Strike Group (CSG) COMPTUEX.
  - Scheduled Expeditionary Action Group 4 certification events.
  - Maintained updated schedule of events for USS Bataan ESG COMPTUEX.
  - Maintained updated schedule of events for USS Kearsarge ESG COMPTUEX.
  - Maintained updated schedule of events for USS Harry S. Truman CSG COMPTUEX Maintained updated schedule of events for USS Enterprise CSG self-observed sustainment training.
  - Maintained updated schedule of events for the USS Enterprise CSG staffobserved sustainment training.
  - Maintained updated long-range schedules for 2006, 2007, and 2008.
  - Maintained the Maritime Operations exercise reference library.
  - Deployed with COMMANDER, Strike Force Training Atlantic (SFTL) in support of USS Bataan (LHD 5) ESG COMPTUEX 23 October through 1 November 2006
  - Meetings attended:

23 Oct 06	USS Bataan (LHD 5) ESG main planning group
23 Oct 06	USS Bataan (LHD 5) ESG air planning cell
24 Oct 06	USS Bataan (LHD 5) ESG main planning group
24 Oct 06	USS Bataan (LHD 5) ESG logistics planning cell
25 Oct 06	USS Bataan (LHD 5) ESG main planning group
26 Oct 06	USS Bataan (LHD 5) ESG main planning group
26 Oct 06	USS Bataan (LHD 5) ESG air planning cell
26 Oct 06	USS Bataan (LHD 5) ESG logistics planning cell
26 Oct 06	USS Bataan (LHD 5) ESG passenger/mail/cargo planning cell
26 Oct 06	USS Bataan (LHD 5) ESG main planning group

27 Oct 06	USS Bataan (LHD 5) ESG air planning cell
27 Oct 06	USS Bataan (LHD 5) ESG logistics planning cell
28 Oct 06	USS Bataan (LHD 5) ESG main planning group
28 Oct 06	USS Bataan (LHD 5) ESG air planning cell
28 Oct 06	USS Bataan (LHD 5) ESG logistics planning cell
29 Oct 06	USS Bataan (LHD 5) ESG main planning group
29 Oct 06	USS Bataan (LHD 5) ESG air planning cell
29 Oct 06	USS Bataan (LHD 5) ESG logistics planning cell
29 Oct 06	USS Bataan (LHD 5) ESG passenger/mail/cargo planning

- Atlantic Fleet Exercise Coordination Center (AFECC) provided support by
  interfacing with the Fleet, Department of Defense (DoD), and the North Atlantic
  Treaty Organization (NATO) to enhance reliability and maintainability of fleet
  readiness and deployment. This includes advanced planning and coordination of fleet
  exercises to facilitate training of seven East Coast Carrier Battle Groups and four
  Expeditionary Strike Groups, Atlantic Fleet missile exercises, and other such training,
  target, and/or weapon system exercises.
- November 2006 Meetings:
  - Trident Warrior 07 conference (1 November 2006)
  - Standing Naval Maritime Group Mid Planning Conference (1 November 2006)
  - USS Harry S Truman Presail conference (3 November 2006)
  - SINKEX Final planning meeting (7 November 2006)
  - Fleet Scheduling Syndicate meeting (14 November 2006)
  - COMSECONDFLT Quarterly Schedules Conference (14 through 15 November 2006)
  - Integrated Training Conference (15 through 16 November 2006)
  - COMCARAIRWING THREE Missile planning meeting (20 November 2006)
- November 2006 Exercises:
  - Three DDG Missile Exercise (1 through 05 November 2006)
  - Completed Bataan Composite Training Unit Exercise (COMPTUEX) (1 through 9 November 2006)
  - Submarine Commanders Course at Atlantic Underwater Test and Evaluation Center (1 through 15 November 2006)
  - X Drone Training flight (2 November 2006)
  - Canadian Amphibious Exercise (8 through 20 November 2006)
  - Grey Fox IV (13 through 17 November 2006)
  - USS Kearsarge Group Sail (14 through 21 November 2006)
  - DDG-79 Williams Sled towed target exercise (15 November 2006)
  - X Drone Training flight (25 November 2006)
- Coordinated and scheduled all surface and air exercises for Fleet Composite Squadron Six (VC-6) in November 2006. These exercises included, but were not limited to: Small Boat Attacks (SBA), Fast Assault Crafts, Fast Inshore Attack Crafts,

surface and air launched Drone Exercises and training evolutions. VC-6 supported two X-DRONE Test runs in preparation for COMPTUEX. Additionally, VC-6 conducted BQM-74 presentations for the first ever three ship Combat System Ships Qualification Trial (CSSQT) missile events and participated in the Canadian Task Force operations in New River.

- Liaison with Sam Griffith, Rocky Hammet, Blaine Rineer, and the Masters of the Mobile Sea Range (MSR) vessels throughout the month of November 2006 for proper coordination and scheduling of Commander Fleet Forces Command Surface Crafts, Hugo, Hunter and Prevail respectively.
- MSR vessels executed their tasking for the month of November, always balancing maintenance schedules, future requirements and event preparations. All maintenance issues with Hunter have been corrected. Hunter conducted Grey Fox IV for Helicopters, S-3's and F-16's from the 77<sup>th</sup> Fighter Squadron out of Shaw Air Force Base. A portion of this exercise was cancelled in progress due to weather. The Hugo conducted a Photo Triangulation exercise with a towed target for DDG-79, which suffered a gun casualty and could not complete the event. Hugo also conducted a Towing exercise with USS Vella Gulf. Training Support Vessel (TSV-1) Prevail participated in the Canadian Task Force operations in New River.
- AFECC managed the day-to-day exercises and maintained an up-to-date Schedule of Events for:
  - USS Bataan Expeditionary Strike Group (ESG) Exercise
  - Canadian Task Force operations
  - 3 ship CSSQT missile exercises
  - USS Bataan Certification Exercise
  - USS Kearsarge ESG Exercise
- Administrative paperwork ongoing. Extensive data collection by AFECC to capture
  past and future exercise support for VC-6 is taking place. The AFECC Director (LT
  Houze) has taken the lead for all efforts in regards to the FY08 VC-6
  decommissioning.
- Strike Force Training Atlantic (SFTA) support included the following:
  - Liaison with French Navy liaison officer at SECOND FLEET for French ships' participation in USS Harry S Truman CSG COMPTUEX.
  - Liaison with French Navy liaison officer at SECOND FLEET for French ships' participation in USS Enterprise CSG Sustainment I.
  - Liaison with Deploying Group Systems Integration Team for USS Enterprise CSG Sustainment II.
  - Liaison with Deploying Group Systems Integration Team for USS Harry S Truman CSG COMPTUEX.
  - Liaison with Deploying Group Systems Integration Team for USS Kearsarge ESG COMPUTEX.

- Maintained updated schedule of events for USS Kearsarge ESG COMPUTEX.
- Maintained updated schedule of events for USS Harry S Truman ESG COMPUTEX.
- Maintained updated schedule of events for USS Enterprise CSG Sustainment I.
- Maintained updated schedule of events for USS Enterprise CSG Sustainment II.
- Maintained updated long-range schedules for 2006, 2007, and 2008.
- Attended Second Fleet Long Range Schedule development meeting.
- Attended Second Fleet Quarterly Scheduling Conference.
- Atlantic Fleet Exercise Coordination Center (AFECC) provided support by interfacing with the Fleet, Department of Defense (DOD), and the North Atlantic Treaty Organization (NATO) to enhance reliability and maintainability of fleet readiness and deployment. This includes advanced planning and coordination of fleet exercises to facilitate training of seven East Coast Carrier Battle Groups and four Expeditionary Strike Groups, Atlantic Fleet missile exercises, and other such training, target, and/or weapon system exercises.

## Meetings attended:

04 Dec 06	COMDESRON TWO TWO SINKEX Video Tele-
	Conference
04 Dec 06	N/S Hugo SINKEX Safety Brief
05 Dec 06	USS Kearsarge Presail conference
11 Dec 06	Canadian Readiness Operations Task Group Exercise planning conference
12 Dec 06	Fleet Scheduling Syndicate meeting
12 Dec 06	USS Harry S Truman SINKEX meeting
13 Dec 06	Trident Warrior 07 planning conference
14 Dec 06	II Marine Expeditionary Force (MEF) meeting with Major
	Smith
14 Dec 06	Gulf of Mexico Tyndall Air Force Base Missile exercise
	Tele-Conference
19 Dec 06	NSWDG Meeting
19 Dec 06	Chesapeake Cooperative Meeting with Mark Rindler
19 Dec 06	EX-USS Saipan SINKEX planning meeting

## Exercises supported:

01-12 Dec 06	USS Bataan Certification Exercise in Cherry Point
05 Dec 06	20 <sup>th</sup> Fighter Wing Large Fleet Exercise (LFE) at SHAW AFB
07-08 Dec 06	EX-USS Spruance SINKEX in Virginia Capes
12 Dec 06	X Drone Training flight in W-50
12-13 Dec 06	Naval Expeditionary Combat Command at Camp LeJeune, NC

• Coordinated and scheduled all surface and air exercises for Fleet Composite Squadron Six (VC-6) in December 2006. These exercises included, but were not limited to: Small Boat Attacks (SBA), Fast Assault Crafts, Fast Inshore Attack

Crafts, surface and air launched Drone Exercises and training evolutions. VC-6 supported an X-DRONE Test run in preparation for upcoming exercises. Also conducted the USS Bataan Expeditionary Strike Group (ESG) Certification Exercise (CERTEX).

- Liaisoned with Sam Griffith, Rocky Hammet, Blaine Rineer, and the Masters of the Mobile Sea Range (MSR) vessels this reporting period for proper coordination and scheduling of Commander Fleet Forces Command Surface Crafts, Hugo, Hunter and Prevail respectively.
- Mobile Sea Range vessels executed their tasking with no outstanding issues, always balancing maintenance schedules, future requirements and event preparations. Hunter conducted USS Bataan CERTEX events. The Hugo conducted the EX-USS Spruance SINKEX support for the Explosive Teams. Training Support Vessel (TSV-1) Prevail participated in the USS Bataan CERTEX events.
- Coordination is in process for USS Kearsarge Battle Group Sail training exercise and Grey Fox 07-1 Carrier Air Wing bombing exercise scheduled for early 2007.
- Administrative paperwork ongoing. Extensive data collection to capture past and future exercise support for VC-6 is taking place. LT Houze (AFECC Director) is coordinating the tasking for data collection efforts in regard to the FY08 VC-6 decommissioning.
- Provided airspace scheduling and coordination for Operation Sea Lion, an 80 aircraft event encompassing opposed air strikes into North Carolina, South Carolina, and Georgia.
- Coordinated with French Navy liaison officer at SECOND FLEET in support of French ships' participation in USS Harry S. Truman Carrier Strike Group (CSG) Composite Training Unit Exercise (COMPTUEX) and the USS Enterprise CSG Sustainment I.
- Attended Fleet Forces Command Medium Frequency Acoustic Sonar Utilization/Marine Mammal Mitigation sessions.
- Developed several alternatives for the USS Enterprise CSG Sustainment and Major Combat Operations certification.
- Strike Force Training Atlantic (SFTA) support included the following:
  - There were several major changes to ship and strike group schedules this month
    that required a significant amount of work with no tangible results. The research
    and assembly of data and the production of briefs to illustrate the relative merits
    of proposed courses of action consumed much time. We kept pace with these
    requests and provided concise summaries that were, in most cases, the foundation
    for the staff's analysis and decision development processes.

- Proposed, and received approval for, the integration of two individual scheduling processes into a single cooperative effort. Each day, the Maritime Operations Assistant Scheduler will survey a series of sources and provide the Operations Department with update and revision data to ensure the principal consolidated schedule includes the most recent and salient information available. As a check point, an e-mail will be sent at the end of each week in the event there are no changes. This team approach will produce a more comprehensive schedule, making it available to a wider audience, and do so with fewer man-hours.
- Researched Fleet Forces Command's Foreign Military Sales policy and procedures, and provided the French Ministry of Defense (via Commander Strike Force Training Atlantic Maritime Operations) cost estimates for events requested during USS Harry S. Truman CSG COMPTUEX.
- Conducted briefing session for USNS Big Horn Officer in Charge, defining the scheme of maneuver and fuel strategy for USS Enterprise CSG Sustainment I.
- Liaisoned with Deploying Group Systems Integration Team for USS Enterprise CSG Sustainment II, USS Kearsarge ESG COMPTUEX, and USS Harry S. Truman CSG COMPTUEX and maintained updated schedules for each.

## SFTA Meetings attended:

- USS Kearsarge ESG readiness and training strategy session.
- Fleet Forces Command Medium Frequency Acoustic Sonar Utilization/Marine Mammal Mitigation sessions.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Naval Special Warfare and Joint Special Operations Command specialized briefings.
- Green Fox 07-1 scheduled for January 2007.
- Grey Fox 07-1 scheduled for February 2007.
- EX-USS Yorktown Sink Exercise (SINKEX) for February 2007.
- USS Kearsarge ESG COMPTUEX scheduled for early 2007.
- EX-USS Saipan SINKEX Scheduled for June through August 2007.
- Canadian Task Force SINKEX operations scheduled for November 2007.
- Release the strawman version of the USS Kearsarge ESG COMPTUEX schedule of events.
- USS Nassau ESG COMPTUEX development.
- Initial Planning Conference for USS Enterprise CSG Sustainment I.
- Assist Commander Strike Force Training Atlantic Maritime Operations and Training and Readiness codes with ship checks on USNS Mohawk.
- Reconfigure the Maritime Operations Department bulk storage drive for 2007.

- Maintain updated schedule of events for USS Enterprise CSG Sustainment I and II, USS Kearsarge ESG COMPTUEX, and USS Harry S. Truman CSG COMPTUEX.
- USS Nassau Expeditionary Strike Group Composite Training Unit Exercise development.
- Assist Commander Strike Force Training Atlantic Maritime Operations and Training and Readiness codes with ship checks on USNS Mohawk.
- Reconfigure the Maritime Operations Department bulk storage drive for 2007.
- Travel to Philadelphia 9 through 10 January 2007 for conference at Inactive Ships Maintenance Office.
- Travel to Shaw Air Force Base (AFB), South Carolina to attend Iron Thunder Planning conference.
- Travel to St. Louis, Missouri 13 through 15 February 2007 to attend Integrated Training Conference.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$253,870

Funds Expended to Date

\$253,870

Funds Remaining to Date

\$0

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:



From: Ellen Holcomb Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006 NAVAIR/NAWCAD; Subtask 7: Commercial Air Services (CAS) Support

**East Coast** 

Period of Performance: October 1 through December 31, 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Provided support to Commander, Atlantic Fleet (COMLANTFLT) Fleet Area Control
  and Surveillance Facility, Virginia Capes (FACSFAC VACAPES) Commercial Air
  Service (CAS) program. This included advanced and real-time planning,
  coordination, and scheduling of airspace and air assets to facilitate and enhance
  integration of weapon systems to maintain Fleet readiness.
- The following exercises were supported in October:
  - Expeditionary Strike Group Exercise (ESG) (23 October through 10 November 2006).
  - Canadian Operations (29 October through 16 November 2006).
  - Fixed Wing Composite Squadron 6 Drone Transit (12 October 2006).
  - Radar Cross Section testing (23 through 27 October 2006).
  - Commander Destroyer Squadron 26 Operations (23 through 25 October 2006).
  - National Air and Space Agency Rocket Exercise (11 through 22 October 2006).
  - Coast Guard Gunnery Exercise (19 October 2006).
  - United States Army Hellfire Missile Exercise (18 and 19 October 2006).
  - Commander Naval Air Warfare Center Hellfire Missile Exercise (27 October 2006).
  - Naval Drone Exercise (DRONEX) (12 October 2006).
  - Research Data Test and Evaluation Missile Exercise (23 through 26 October 2006)
  - Multiple Integrated Mobile Portable Acoustical Scoring System (IMPASS) Exercises (12 through 18 October 2006).

- Worked extensively with Commander Mark Bowman building experimental web site
  for Commercial Air Services. This resource will allow all customers and contractors
  to view upcoming events, state requirements, serve as a portal to other functional
  areas and greatly aid asset planning for service providers. Development of long range
  schedule view is complete and expanded view to include the assets scheduled and the
  total sorties expected to be flown is in progress.
- Provided assistance to Commander Mark Bowman as a subject matter expert on Commercial Air Services in developing Commercial Air Services requirements for the various exercises conducted throughout the fleet.
- Created the Concept of Operations template to be distributed to the contractors prior to any exercise. Information promulgated includes deployments, control stations, and a summary of mission profiles.
- Coordinated Canadian exercise events with LT (N) Guy Wheeler, Canadian Navy.
   Ensured funding path was established and worked with Ms. Connie Brown (CAS Director) to ensure all costs were included.
- Coordinated flight line access for Naval Research Laboratories personnel at Naval Air Station Oceana and Fleet Area Control and Surveillance Facility.
- Notified CAS service providers of impending short notice deployment and worked to resolve logistical concerns.
- Coordinated assets with Atlantic Fleet Exercise Coordination Center (AFECC) for upcoming Canadian and United States Navy exercises.
- Promulgated Omega schedule involving close coordination with the customer and service provider to ensure the most efficient use of assets. Provided background scheduling procedures to Commander Mark Bowman.
- Tested and recommended acceptance of NAVSKED software version 1.63. Changes allow users to bypass deconfliction tables when scheduling events that do not require deconfliction. Also included in version 1.63 were filtered reports for various levels of training.
- Conducted scheduling training for Operation Specialists at the facility.
- Tracked and verified flight invoices and travel vouchers as submitted.
- Maintained financial tracking sheets and submitted required reports.
- Participated in facility reorganization workgroup and submitted reports as required.
   Workgroup is tasked to provide recommendations to increase efficiency and design a single point of contact concept for fleet customers.

- Collected and submitted Commercial Air Services and airspace scheduling data for annual airspace usage reports.
- Operational Schedules (OPSKEDS) released eight various Notice to Mariners (NOTMARS), six various Notice to Airman (NOTAMS), four weekly Naval Target Messages, scheduled and coordinated all exercise events as well as deconflicting and scheduled approximately 900 United States Navy and CAS events.
- Provided support to Commander, Atlantic Fleet (COMLANTFLT) Fleet Area Control
  and Surveillance Facility, Virginia Capes (FACSFAC VACAPES) Commercial Air
  Service (CAS) program. This included advanced and real-time planning,
  coordination, and scheduling of airspace and air assets to facilitate and enhance
  integration of weapon systems to maintain Fleet readiness.
- The following exercises were supported November:
  - Naval Special Warfare Group Parachute Operations (1 through 4 November 2006)
  - USS Bataan Expeditionary Strike Group (ESG) (1 through 8 November 2006)
  - Chief Naval Air Warfare Center Hellfire Missile Exercises (1 through 26 November 2006)
  - National Aeronautics Space Administration Remote Piloted Vehicle launch (6 through 9 November 2006)
  - VFA 106 Bomb Exercise (7 through 8 November 2006)
  - Standing Canadian Task Force Exercise (11 through 16 November 2006)
  - USS Kearsarge ESG (20 through 26 November 2006)
- The following meetings were attended in November:
  - USCG Operations Planning meeting (01 November 2006)
  - Canadian Operations Planning meeting (01 November 2006)
  - United States Air Force Inspection Team briefing (02 November 2006)
  - Weekly Schedules working group meetings (09 and 17 November 2006)
  - Daily Canadian Opposition Force Brief (11 through 16 November 2006)
- Generated and provided management information reports including project reports, spreadsheets, and long range schedules, to the West Coast CAS Program Manager.
- Provided long-range guidance to external agencies for planning objectives to identify specific requirements, prioritize assets, and ensure that resources were coordinated and optimized. Coordinated and tracked Customer funding transfers, delivery orders, and expenditures to support customer projects.
- Web Site consolidation and testing was completed during this reporting period. This
  included evaluation of current web structure to meet minimum capabilities for
  displaying calendar events and obtaining inputs. The latest OPSKED was
  successfully uploaded and user permissions were created and/or modified.
- Wyle provided assistance to Commercial Air Services Officer in developing a long range schedule template for the web. The template provides a quick glance calendar of upcoming exercises for all Fleets utilizing color coding for similar type exercises and depicts number/type of assets required.

- Wyle completed Fiscal Year data call for LOT III tanker services for all users and hours expended from 01 October 2006 to present.
- Coordinated Lot III tanker services including deployment strategy, crew travel, event deconfliction, add-ons, maintenance, and unscheduled delays/cancellations.
- Wyle drafted and forwarded the USS Bataan ESG Lessons Learned documentation.
   Details included key issues encountered during the exercise and recommendations for future exercises.
- Wyle updated the sortie count worksheet. The worksheet measures sorties completed against the allowance.
- Closely interfaced with Mr. Dick Plutt (CAS West Coast Manager) to Coordinate and deconflict support requirements for upcoming west/east coast exercises.
- Attended in a meeting with Federal Aviation Administration (FAA) Southern Region management and received approval to use tactical call signs for CAS aircraft during fleet exercises.
- Wyle completed four Operational Schedules (OPSKEDS), released eight various Notice to Mariners (NOTMARS), six various Notice to Airman (NOTAMS), four weekly Naval Target Messages, scheduled and coordinated all LFE events as well as deconflicting airspace for 4<sup>th</sup> Fighter Wing (4FW), Commander Patrol Reserve Wing 5 (CPRW5) and in Operational Area (OPAREA) W-122, and scheduled approximately 800 United States Navy and CAS events.
- Provided support to Commander, Atlantic Fleet (COMLANTFLT) Fleet Area Control
  and Surveillance Facility, Virginia Capes (FACSFAC VACAPES) Commercial Air
  Service (CAS) program. This included advanced and real-time planning,
  coordination, and scheduling of airspace and air assets to facilitate and enhance
  integration of weapon systems to maintain Fleet readiness.
- The following exercises were supported in December:
  - USS Bataan Expeditionary Strike Group (ESG) Certification Exercise (1 through 12 December 2006).
  - Chief Naval Aviation Warfare Center (CNAWC) Hellfire Missile Exercise (1 through 4 December 2006).
  - USS Arleigh Burke Gunnery Exercise (5 December 2006).
  - USS Klakring Gunnery Exercise (5 December 2006).
  - USS Wasp Gunnery Exercise (6 December 2006).
  - USS Philippine Sea Gunnery Exercise (7 December 2006)
  - USS Oakhill Gunnery Exercise (10 December 2006)
  - National Air and Space Administration (NASA) Rocket Exercise (11 through 18 December 2006).
  - USS Carr Gunnery Exercise (11 December 2006).
  - USS Stout Gunnery Exercise (12 December 2006).
  - Commander Patrol Reserve Wing 5 (CPRW-5) Bombing Exercise (13 December 2006).
  - USS Theodore Roosevelt Gunnery Exercise (16 December 2006).

- The following meetings were attended in December:
  - Adversary Scheduling Conference (7 December 2006)
- Completed Commanding Officer's data call on pros and cons of deploying to Naval Air Station (NAS) Jacksonville and Cecil Field during exercise periods. The Commanding Officer will use data to determine future deployment sites. Provided inputs from the CAS team and vendors.
- Coordinated the Omega schedule. The coordination involved establishing service customers, deployment strategy, crew travel, support services and event deconfliction. Provided real-time support when short-fused events occurred i.e. popup customers, maintenance, and unscheduled delays/cancellations.
- Updated the sortie count worksheet. The worksheet measures sorties completed against the allowance.
- Coordinated asset basing closely with Mr. Dick Plutt COMPACFLT CAS Manager and with contract service providers to deconflict upcoming exercises.
- Updated the Long Range Calendar (LRC) and distributed as required. Developed an Asset Allocation spreadsheet to depict asset scheduling conflicts between the various scheduling offices and vendors.
- Attended a semi-annual Adversary Scheduling Conference hosted by Commander Naval Air Forces (CDR Zach Henry) at Fleet Area Control and Surveillance Facility (FACSFAC) San Diego. The conference deconflicted adversary scheduling/CAS asset requirements for Fiscal Year 07 through Fiscal Year 08 events.
- Completed four Operational Schedules (OPSKEDS), released eight various Notice to Mariners (NOTMARS), six various Notice to Airman (NOTAMS), four weekly Naval Target Messages, scheduled and coordinated all LFE events as well as deconflicted airspace for 4<sup>th</sup> Fighter Wing (4FW), Commander Patrol Reserve Wing 5 (CPRW5) and Operational Area (OPAREA) W-122, scheduled approximately 800 United States Navy and CAS events.
- Conducted in-house training to CAS team members on the CAS Baseline report and reassigned upkeep duties to Bob Owens (Wyle Laboratories). The CAS Baseline report summarizes weekly the contract year flight hour usage of each asset and measures the usage against the baseline.
- Provided update briefing to LT Houze (FACSFAC VACAPES Schedules Officer) on the CAS program, including each vendor's status as well as future CAS supported exercises.

### 2.0 WORK PLANNED FOR NEXT PERIOD:

- CAS Web website development
- Update the CAS Catalog
- Develop web forms for CAS
- Attend CAS Program Managers Review (PMR) 23 through 24 Jan in Las Vegas, Nevada.

#### West Coast

Period of Performance: October 1 through December 31, 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Provided support to the Commander Pacific Fleet (COMPACFLT) Fleet Area Control
  and Surveillance Facility (FACSFAC) San Diego Commercial Air Service (CAS)
  Program. Tasks included employing advanced and real-time planning, coordinating,
  and scheduling of airspace and air assets to facilitate real-time weapon systems
  training as well as Research Development Testing and Evaluation (RDT&E) support
  for the reliable and maintainable integration of fleet readiness and deployment.
- Provided long-range guidance to external agencies for planning objectives to identify specific requirements, prioritize assets, and ensure that resources were coordinated and optimized. Coordinated and tracked Customer funding transfers, delivery orders, and expenditures to support customer projects.
- Generated and provided management information reports including project reports, spreadsheets, and long range schedules, to the West Coast CAS Program Manager.
- Major exercises supported:
  - Carrier Strike Group (CSG) Composite Unit Exercise (COMTUEX) 21
     September through 12 October 2006, CSG Groupsail 2 through 6 October 2006.
  - Carrier Strike Group (CSG) Sustainment Exercise 3 through 16 November 2006.
  - CSG Joint Task Force Exercise 7 through 16 November 2006.
  - CSG Composite Unit Training Exercise (COMPTUEX) 29 November through 20 December 2006.
  - Carrier Strike Group (CSG) Composite Unit Exercise (CTX) 29 November through 20 December 2006.
- Scheduled 307 CAS events for 21 units.
- Coordinated with Naval Air Warfare Center (NAWC) Pt. Mugu, California personnel to fill Electronic Warfare (EW) pod requirements.

- Reviewed L-3 Communications (L-3) Flight International and Advanced Tactical Air Company (ATAC) invoices/vouchers and forwarded to the appropriate agencies.
- Provided support to the Commander Pacific Fleet (COMPACFLT) Fleet Area Control
  and Surveillance Facility (FACSFAC) San Diego Commercial Air Service (CAS)
  Program. Tasks included employing advanced and real-time planning, coordinating,
  and scheduling of airspace and air assets to facilitate real-time weapon systems
  training as well as Research Development Testing and Evaluation (RDT&E) support
  for the reliable and maintainable integration of fleet readiness and deployment.
- Provided long-range guidance to external agencies for planning objectives to identify specific requirements, prioritize assets, and ensure that resources were coordinated and optimized. Coordinated and tracked Customer funding transfers, delivery orders, and expenditures to support customer projects.
- Generated and provided management information reports including project reports, spreadsheets, and long range schedules, to the West Coast CAS Program Manager.
- Scheduled 363 CAS events for 32 units and 3 non-CAS events for 1 unit.
- Coordinated with Naval Air Warfare Center (NAWC) Pt. Mugu, California personnel to fill Electronic Warfare (EW) pod requirements.
- Reviewed L-3 Communications (L-3) Flight International and Advanced Tactical Air Company (ATAC) invoices/vouchers and forwarded to the appropriate agencies.
- Provided support to the Commander Pacific Fleet (COMPACFLT) Fleet Area Control
  and Surveillance Facility (FACSFAC) San Diego Commercial Air Service (CAS)
  Program. Tasks included employing advanced and real-time planning, coordinating,
  and scheduling of airspace and air assets to facilitate real-time weapon systems
  training as well as Research Development Testing and Evaluation (RDT&E) support
  for the reliable and maintainable integration of fleet readiness and deployment.
- Provided long-range guidance to external agencies for planning objectives to identify specific requirements, prioritize assets, and ensure that resources were coordinated and optimized. Coordinated and tracked Customer funding transfers, delivery orders, and expenditures to support customer projects.
- Generated and provided management information reports including project reports, spreadsheets, and long range schedules, to the West Coast CAS Program Manager.
- Scheduled 244 CAS events for 13 units and 0 non-CAS event.
- Coordinated with Naval Air Warfare Center (NAWC) Pt. Mugu, California personnel to fill Electronic Warfare (EW) pod requirements.

• Reviewed L-3 Communications (L-3) Flight International and Airborne Tactical Advantage Company (ATAC) invoices/vouchers and forwarded to the appropriate agencies.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

Scheduled to attend the CAS PMR 23 through 25 January 2007.

Expeditionary Strike Group (ESG) Group Sail Exercise (GS) scheduled 22 through 31 January 2007.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$773,353

Funds Expended to Date

\$260,020

Funds Remaining to Date

\$513,333

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:



NAVAIR/NAWCAD PMA-231, NAWCAD 6.6.2 John F. Martin Building 2044; Buse Road Patuxent River, MD 20670

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006 NAVAIR/NAWCAD; Subtask 8: Low Profile VHF Antenna Support

Period of Performance: October 1 through December 31, 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Held telephone conference with Ball Aerospace technical personnel to discuss descoping it's purchase order.
- Acquired switch box for controlling tuning element in preparation for Patuxent River antenna range test.
- Worked on antenna range test plan and worked with NAWCAD personnel to set up antenna test.
- Assembled prototype antenna in breadboard cavity.
- Held technical discussions with Ball Aerospace technical personnel on antenna cavity and FSS materials.
- Received cavity and FSS materials from Ball.
- Started initial integration of cavity material in prototype unit.
- Interfacing switch box controlling tuning elements in preparation for Patuxent River antenna range test.
- Worked with NAWCAD personnel to set up antenna test on 32 foot ground plane and antenna range test plan. Continued on-going work on tunable antenna and tuning components.
- Held technical meeting at Patuxent River, Maryland, Naval Air Station with NAVAIR
   4.5.5 technical personnel on antenna tuning and gain tests.
- Received NAVAIR antenna test quote for labor, materials, and range time.

- Started switch box controlling tuning software in preparation for Patuxent River antenna range test.
- Completed preliminary antenna test preparations on 32 foot ground plane and preliminary antenna range test plans with NAWCAD personnel.
- Held technical discussions with Raytheon on AN/PSC-5D tuning interface.
- Started laboratory antenna tuning tests.
- Continued on-going work on tunable antenna and tuning components.
- Traveled to Patuxent River, Maryland to attend a technical meeting.

#### 2.0 **WORK PLANNED FOR NEXT PERIOD:**

- Conduct initial tuning tests on prototype antenna in laboratory.
- Conduct (on-going effort) Patuxent River antenna range tests with antenna on 32 foot ground plane and tuning component interface.
- Initial testing at Patuxent River, Maryland scheduled for week of 22 January 2007.
- Prepare brief (as-needed) for sponsor and OSD.

#### 3.0 **PROJECT FUNDING STATUS:**

The program financial status as of 31 December 2006:

Funds Allocated to Date \$392,308 Funds Expended to Date \$ 53,711 Funds Remaining to Date \$338,597

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine **RIAC Director** 



From: Frank Husted Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006 NAVAIR/NAWCAD; Subtask 9: Navy Aircraft Survivability and Fleet Readiness

Period of Performance: October 1 through December 31, 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Reviewed MMA Platform Signature Model and Countermeasure Studies with Mr. Dave Legg.
- Provided C-40 Cycle Deck Information, Operating Conditions and Output Parameters to Mr. Jim Young.
- Attended C-40 SPIRITS Model Status Review Meeting at Spectral Sciences Inc.
- Submit C-40 Task Schedule and Delivery Milestone to Mr. Jim Young.
- Submitted the C-40 SPIRITS Model Status Review Attendance List to Mr. Jim Young.
- Attended the H-1 Block 1Measurements Review and Block 2 Test Plan Review at NAWCAD.
- Submitted Assessment of the ATR H-1Block 1 Steep-Look-Up Measurements to Mr. Mike Falco.
- Provided additional comments to ATR concerning H-1 Test Results.
- Requested and obtained C-40 Paint Scheme File from Navy Technical POC.
- Discussed the Curve Fit Characteristics of the C-40 Paint Scheme File with the Contractor.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

Continue to support AIR-4.9.6 task assignments and initiatives with platform PMA(s), Navy and Marine operational codes, 4.0T Technology Office and tri-service counterparts to provide products and services that reflect the Naval Air Combat Survivability charter to develop signature reduction technology for tactical and rotary wing A/C. Continue efforts that will result in improved component reliability and reduce weapon system life cycle costs.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$62,500

Funds Expended to Date

\$25,848

Funds Remaining to Date

\$36,652

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:



From: Valerie Hayes Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report under Contract HC1047-05-D-4005, TAT RI-06-0005/0006 Subtask 11: Systems Interoperability, Reliability Engineering and Maintenance, and Systems Engineering and Management Support for NAVAIRSYSCOM, NAWCAD, OPNAV, CINCPACFLT and CINCLANTFLT

**Performance Period:** 

27 November through 31 December 2006

## 4.0 WORK PERFORMED THIS PERIOD:

- Editing was completed on the (FR) 01-E2AAF-1C Cockpit Checklist and the file was sent for final Quality Assurance (QA) checks.
- Editing was completed on the (FR) 01-E2AAF-1F Functional Checkflight Checklist and the file was sent for final Quality Assurance (QA) checks.
- Editing was started on the (FR) 01-E2AAF-1B Pocket Checklist and the (FR) 01-E2AAF-1 NATOPS Flight Manual.
- Requested a graphic of the unique French SATCOM antenna, and its physical dimensions. This will be used in the (FR) 01-E2AAF-1.
- Was notified by the PMA-231F French APML, Mr. Bob Malson that both survival seat packs that exist in the US NATOPS should stay in the new French NATOPS.
- Sent (FR) 01-E2AAE-1B Pocket Checklist to the printer. Received Print Proof copy and reviewed it with no recommended changes. Printer shipped final print copies of the (FR) 01-E2AAE-1B, which were received and are undergoing a QA check.

### 6.0 WORK PLANNED FOR NEXT PERIOD:

- Editing will continue on the (FR) 01-E2AAF-1B Pocket Checklist and the (FR) 01-E2AAF-1 NATOPS Flight Manual.
- After a successful QA, the (FR) 01-E2AAF-1C Cockpit Checklist and the (FR) 01-E2AAF-1F Functional Checkflight Checklist will be sent to the printer.

#### 7.0 **PROJECT FUNDING STATUS:**

The program financial status as of 31 December 2006:

Funds Allocated to Date \$344,597 Funds Expended to Date \$ 1,244 Funds Remaining to Date \$343,353

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:



From: Frank Husted Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 006 NAVAIR/NAWCAD; Subtask 12: Navy Aircraft Survivability and Fleet Readiness

**Performance Period:** 

30 October through 31 December 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Attended a kick off meeting with NAVSEA to review requirements and submit questions.
- Picked up operational buoy canister.
- Conducted impedance measurements on prototype long wire and loop antennas.
- Conducted measurements with antennas submerged in salt water tank to verify computer predicted impedance values. Picked up canister test set and conducted laboratory measurements on canister. Ordered components and started work on breadboard compensation network.

### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Conduct measurements with antennas submerged in salt water tank to verify computer predicted impedance values.
- Pick up canister test set and conduct laboratory measurements on canister.
- Start work on breadboard compensation network.
- Assemble breadboard compensation network and bench test. Compare results to computer predicted performance.

## 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$86,956

Funds Expended to Date

\$18,420

Funds Remaining to Date

\$68,536

Respectfully Submitted:

Valerie Hayes, Program Manager

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine RIAC Director



Angela Bell NAVAIR PSC Box 8021 Cherry Point, North Carolina 28533-0021

SUBJECT:

NP2000 Program Quarterly Report under Contract No. HC1047-05-D-4005,

RIAC TAT Number 0007

**Performance Period:** 

1 October through 31 December 2006

#### 1.0 WORK PERFORMED THIS PERIOD

- 1.1 Completed the initial population of Integrated Reliability Centered Maintenance Software version 6.3 database. The FMECA initial layout based on WUC's, existing PM, preliminary NALDA data, PMIC and MIMs. The current layout is a work in progress and all drill downs will happen from the control level down to component as data becomes available.
- 1.2 Completed first WEBCAST with NP2000 IPT Cherry Point, December 15, 2006. Minutes of WEBCAST sent to team members.
- **1.3** Requested the following Data/Documents:
  - NP2000 Maintenance Plan.
  - NP2000 data maintained by IPT.
  - As there are no Depot level publications available, make available the maintenance procedures/inspections and intervals performed at the OEM.
  - EI/HMR documentation and pertinent NP 2000 ECP's.

#### 2.0 WORK PLANNED FOR NEXT PERIOD

- 2.1 Continue to provide services to the NP 2000 IPT in the established manner.
- 2.2 Projected travel January 22 thru February 2, 2007 to NAS Norfolk for NP2000 training and fleet liaison visit. (Wyle Labs Analysts: Jay Moore and Mark Roberts).
- 2.3 Continue organizational level data collection via Optimized Organizational Maintenance Activity reporting system and Naval Aviation Logistics Command Management Information System.
- 2.4 Continue populating Integrated Reliability Centered Maintenance Software version 6.3 database.
- 2.5 Plan and schedule travel to Fleet sites for operational data collection.

#### 3.0 PROJECT FUNDING STATUS

The program financial status as of 31 December 2006:

Funds Allocated to Date \$ 200,000 Funds Expended to Date \$ 38,775 Funds Remaining to Date \$ 161,225

Respectfully Submitted:

Daniel R. Gensch RCM Program Manager

Approved by:



Dr. Karl Nelson Building 4205, Room 117C MSFC, AL 35812

SUBJECT:

NASA Marshall Space Flight Center Failure Mode & Effects Analysis Program

Quarterly Report under Contract No. HC1047-05-D-4005, RIAC TAT No. R1-06-

0007/0008

**Performance Period:** 

1 October through 31 December 2006

## 1.0 WORK PERFORMED THIS PERIOD

Completed Re liability Block Diagram for NERVA. Reviewed with NASA Marshall and NASA Los Alamos. Failure Modes have been developed and agreed to with NASA. The Failure Modes Effect and Analysis (FMEA) is 90% complete. NASA has reviewed the document.

### 2.0 WORKPLANNED FOR NEXT PERIOD

#### 3.0 PROJECT FUNDING STATUS

The program financial status as of 31 December 2006:

Funds Allocated to Date \$ 36,532 Funds Expended to Date \$ 27,793 Funds Remaining to Date \$ 8,739

Respectfully Submitted:

Dr. Bill Wessels, PE CRE CQE Program Manager

Approved by:

Loseph T. Hazeltine RIAC Director



Defense Technical Information Center (DTIC)

IAC Program Office (DTIC/AI)

Attn: Ms. Maria Norales 8725 John J. Kingman Road Ft. Belvoir, VA 22060-6218

Subject:

Quarterly Status Report for RIAC Technical Area Task "TEMS" (TAT 9)

Contract HC1047-05-D-4005/Wyle Subcontract Number RC00035478/Delivery

Order 3

**Performance Period:** 

1 October through 31 December 2006

## **Summary**

Over the period a high rate of scanning continued. Uploading of documents to CTEMS began.

## Work Performed During This Reporting Period (1 Oct 2006 to 31 December 2006).

Over the reporting period the following was accomplished:

1. Work continued scanning high priority documents from the RIAC library with the following status as of 31 December:

TEMS Production Category	<b>TEMS Production</b>
Total Pages Scanned	824,962
Total Documents Scanned	13,645
Documents Uploaded	68*

- 2. RIAC Library Taxonomy: The taxonomy was completed and delivered to Booz Allen during the previous quarter. BAH rejected the taxonomy based on a change in their philosophy on how they should be structured. The taxonomy is currently being reworked per the new direction.
- 3. Document Uploading: The uploading of documents to CTEMS began. The number uploaded (\*) reflects many documents being rejected. The problem has been reported and is being investigated by BAH.
- 4. TEMS Planning/Coordination
  - a. Biweekly Meetings: These calls have been discontinued by BAH.
  - b. Monthly: RIAC's David Nicholls participated in the periodic DTIC calls.
  - c. Ad hoc: Various telephone/email conversations were help with BAH and DTIC personnel regarding the status of TEMS, the required funding, and the progress to date.
- 5. TEMS Problems Encountered:
  - a. Equipment Problems: RIAC experienced failures of the scanner feeder rollers during the period. BAH delivered replacement parts enabling work to continue.

## Work Planned for the Next Reporting Period (1 January to 31 March 2006)

Work will continue on the RIAC high priority documents.

## Financial Status (December 31, 2006)

Funding \$432,000 Cost and Fee \$186,500 \$245,500 Balance

Respectfully submitted, Preston R. MacDiarmid Quanterion Solutions Incorporated

Approved by:



DTIC/IAC Program Office (Ms. Maria Norales)
Defense Technical Information Center
8725 John Kingman Road
Suite 0944
Ft. Belvoir, VA 22060-6218

Subject: Quarterly Status Report #1 for RIAC Technical Area Task "RIAC Accelerated Paradigms for Information and Data Systems - RAPIDS" (TAT 10)

Reference: Contract HC1047-05-D-4005/Wyle Subcontract Number RC00035478/Delivery Order 4

#### **Summary**

#### TRACK:

A meeting was held on 7 December 2006 between Quanterion Solutions Incorporated (QSI) and University of Maryland (UMD) Center for Risk and Reliability personnel (Modarres and Azerkhail) to discuss the details of their role in the development of the life modeling and Bayesian analysis techniques that will be integrated into the TRACK tool. Development of a TRACK specification continued, focusing on areas related to (1) user input data format and interfaces, (2) consideration of how the TRACK methodology will use and transfer data into the 217Plus component libraries and (3) the need to create a 217Plus Assembly library to capture non-component field/test experience data in order to accommodate TRACK capabilities.

#### **CRITICAL:**

To facilitate a more manageable approach to the CRITICAL initiative of RAPIDS, one primary sector was targeted out of the seventeen potential sectors identified by the Department of Homeland Security. This primary sector is the Electric Power Grid. Initial investigation also started in the Transportation Sector.

### MINE:

The SUNY-IT effort on the MINE initiative was funded on 18 September 2006. The major focus of the first quarter of this research project's work (through 31 December 2006) has been on performing an assessment of current trends in data and text mining and web search strategies and conducting an initial examination of the types and sources of reliability data available on the internet.

### Work Performed During This Reporting Period (1 October 2006 to 31 December 2006).

The following work was performed for the three subtasks under the RAPIDS TAT:

#### TRACK:

The initial work on the TRACK initiative has been to develop a high-level process flow that would define the major elements of the TRACK process for collecting/analyzing data and provide information on how that process would feed in to and interact with the existing 217Plus methodology and software tool. The current high-level draft of the process is highlighted in Figure 1.

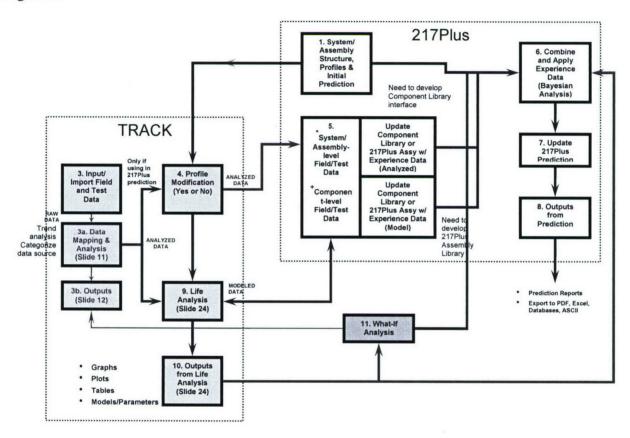


Figure 1: Draft Overview of the TRACK/217Plus Process

This draft flow chart is defined within a MS PowerPoint presentation. Subsequent slides in the presentation provide more detail into the process flow defined for each of the defined Blocks. For example, Figure 2 illustrates a more detailed representation of Blocks 6 and 7, which represent functions within 217Plus that combine and apply test and field experience data that will be merged into a 217Plus prediction using the Bayesian techniques/algorithms being defined by UMD.

The primary issues that are being addressed during the current reporting period are the necessary structure and capabilities of the existing 217Plus Component Library and the need to develop an Assembly Library to handle raw or modeled test/field information from TRACK that may not be sufficient to decompose down to the component level. To that end, we have outlined (Figure 3)

the various data analysis options that will help determine where this experience data will/should be stored within 217Plus.

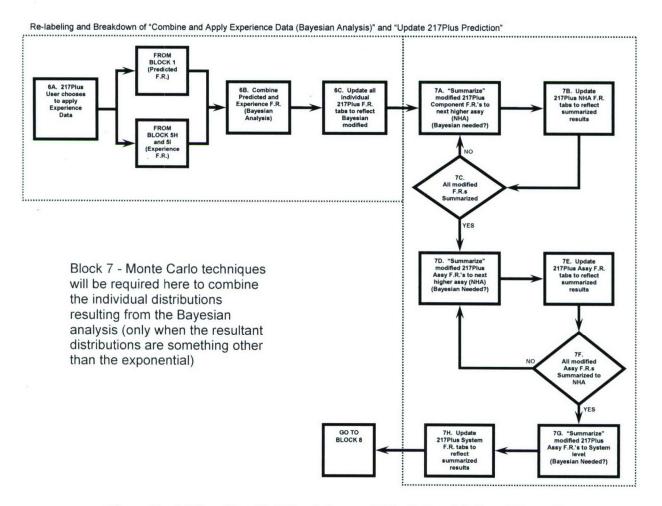


Figure 2: A More Detailed Breakdown of Block 6 and 7 from Figure 1

TTFs known?	Accel. Factor needed?		Α	B,n	β	
	Y		N			
	Data available	Assu med				
Υ	Х			D	D	D
N	Х			D	D	Α
Y		Х		D	Α	D
N		Х		D	Α	Α
Υ			Х	D	N	D
N			Х	D	N	Α

	( )'
	t
_	B .
-	$Ae^{T}S^{n}$

D = Quantified based on data

A = Assumed

N = Not applicable

The example shown is for the Arrhenius and power law, but it could be only one, or any combination of acceleration models. B and n are the constants for the acceleration factors and are independent. Therefore, one could be quantified and the other assumed.

Figure 3: Data Analysis Options for the TRACK Tool

#### **CRITICAL:**

#### Electrical Grid:

To help foster communication and start a more detailed data collection effort with various organizations in the Electric Power Grid, a RIAC CRITICAL presentation has been constructed. The presentation provides background information about the RIAC, including an introduction to its reliability services and capabilities. The presentation provides details about the goals of the CRITICAL project and solicits information exchange and participation from outside organizations.

Several important organizations have been identified on the Department of Homeland Security (DHS) website as being important to this study, with specific initiatives in place to address the topic of Electric Power Grid reliability.

#### Key Organizations include:

- 1. DHS (Department of Homeland Security)
- 2. DOE (Department of Energy): Office of Electricity Delivery and Energy Reliability
- 3. FERC (Federal Energy Regulatory Commission): Office of Energy Markets and Reliability
- 4. NERC (North American Electric Reliability Council)
- 5. EIA (Electronic Information Association)

Each website above, as well as other referenced websites, was investigated for possible leads. The research to date indicates that the NERC is the best place to initiate a more rigorous analysis. The NERC has been designated as the ERO (Electric Reliability Organization) by the FERC and DOE. The NERC is in the process of finalizing national standards for electric grid reliability. Among several of its charters, the NERC collects information, monitors and enforces compliance with the reliability standards, and investigates major bulk disturbances.

NERC's Disturbance Analysis Working Group (DAWG) maintains a database of electric power disturbances of all kinds. These include power outages due to equipment failure, weather events and unusual occurrences. The DAWG database is an industry tracking system that all member power generating organizations must utilize. There are penalties for failing to report a disturbance within a short period of its occurrence. Data records go back as far as 1995. Ron Niebo is the Reliability Assessment & Performance Analysis Coordinator.

The second source of data is NERC's GADS (Generating Availability Data System) database. GADS is a tool that utilities can utilize to study the causes of unavailability. Each member utility provides reports, detailing its unit's operation and performance. The reports include types and causes of outages and deratings. Mike Curley is the Manager of GADS Services.

Initial contacts with both Ron Niebo and Mike Curley were made in December of 2006.

Copies of annual DAWG reports have been collected from 2000 through 20005. In addition, a local executable of GAR (Generating Availability Report) was installed on a RIAC computer.

Requests for additional data details for both of these sources have been made to the NERC.

#### Transportation:

Preliminary research began for this sector in December. This included a general identification of organizations that may be useful for information collection. A partial listing of organizations includes the Department of Transportation (DOT), the Federal Aviation Administration (FAA), the American Trucking Association (ATA) and some railroad corporations. A more detailed summary will be made available for the next quarterly report.

#### MINE:

The project has discovered, to date, that search engines return hundreds of thousands of links to sources matching the queried key word search terms, but those links often provide minimal useful quantitative reliability data that may be associated with terms such as "lifetime" or "use" and not necessarily MTBF; have reliability data may not directly accessible in HTML text but embedded in other types of formatted source materials; and have useful limited active link lifetimes (perhaps limited to months). This initial assessment of the types and sources of reliability data has made us consider that prototype data discovery tools should include the following features:

- Specialized web crawlers rather than general search engines for identifying reliability data sources
- Selection and use of a broad set of key words associated with reliability terms and the ability to understand units, and potentially, special context factors such as temperatures
- Archiving and annotation tools to capture website data for analysis and archival purposes
- Tools with the ability to access and parse multiple source data forms including tables and, potentially, Adobe's Portable Document Format (.pdf) documents

We have also begun to examine the analysis of collected reliability data and have discovered that even with sparse data, analysis of the data shows clustering of reliability data by equipment type and operating environment and a need to critically examine collected data for validity and context. Our current work with data analysis has also shown the importance of providing visualization tools.

As part of the initial assessment of web search strategies and current trends in data and text mining, recent research journal articles in search engine design, hidden web search, and text mining were reviewed and assessed.

As an example, the analysis of "monitor MTBF" data obtained through Google searches is ongoing and will be reported in the coming quarterly report. To date our assessment of the monitor data is showing several trends. These trends show the need to support the following activities.

- 1. Archive webpages found with failure rate / MTBF data. Links with data for electronic equipment may have especially short lifetimes since they are often aimed at purchasers of new equipment. Electronic equipment refresh rates may be as short as 18 to 36 months. Of the top 100 links in the mid-2004 Google search, approximately 50% of the web pages are no longer active.
- 2. Extract data from files, often spec sheets, stored in Adobe Portable Document Format (.pdf file extension).
- 3. Evaluate the context of the failure rate data discovered to determine if the data are associated with the key word search term's context. For example, "monitor" is a highly overloaded term and may often appear in a document as a verb monitor equipment for failure and results established an MTBF of 12,000 hrs. Additionally, monitor could be a remote monitoring system or a baby monitor, and not necessarily the computer display device that was the intended search target.

Conceptually cluster discovered data to allow more detailed analysis by equipment type. For example, it may be useful to cluster discovered monitor data into LED monitors and CRT monitors. Additionally, it appears that LED monitor MTBF data often are cited in two parts – a backlight MTBF and an MTBF for all other portions of the display system.

## Work Planned for the Next Reporting Period (1 January 2007 to 31 March 2007)

#### TRACK:

- UMD will provide draft inputs of their life modeling and Bayesian analysis approach to QSI by 12 March 2007
- Complete a formal TRACK requirements document that will be used to aid the software programmer in the implementation of the TRACK software and its interfaces with the RIAC 217Plus software. These requirements are dependent on the results of the UMD work.
- Begin software coding of the TRACK/217Plus tool based on the formal TRACK requirements

#### **CRITICAL:**

- Pitch the RIAC CRITICAL presentation to Electric Power Grid organizations, starting with members of the NERC.
- Continue the website investigation of the Transportation sector. Identify potential
  contacts for reliability data and tailor the RIAC CRITICAL presentation for the
  Transportation Sector.

#### MINE:

- Continue to review RIAC data sources to identify good internet sources of reliability data and to assess web-based reliability data content for form, validity and longevity
- Continue to actively participate in and, if requested, facilitate RIAC Data Summit activities.
- Continue to review current research in conceptual search and unstructured text mining to identify the most promising techniques and open source tools
- Evaluate open source web crawler tools such as HarvestMan and WebCrawler to work as specialized crawlers to identify reliability data sites on the internet
- Investigate the usefulness and applicability of Quanterion Solution's prototype tool (developed in 2004 by Morris and Fortnam) for parsing HTML data from returned web pages and assigning object relevancy rankings to results
- Investigate open source clustering tools such as Clusty
- Develop a prototype special-purpose crawler and interface it to an HTML parsing tool for harvesting potential data sources

### **Problems to Date:**

QSI is pursuing obtaining additional staff to apply to the RAPIDS TAT.

## Financial Status (31 December 2006) (QSI Only)

Funding	\$425,000
QSI Cost and Fee	\$ 81,286
QSI Balance	\$343,714

**David Nicholls** 

Quanterion Solutions Incorporated

Approved by:

Loseph T. Hazeltine RIAC Director



Electronic Warfare Management 542 EWSG/LSELP Attn: James C. Rehberg, Jr. Warner Robins Air Logistics Center 380 Richard Ray Boulevard, Ste. 104 Robins AFB GA 31098-1638

SUBJECT:

AN/ALQ-184(V) Electronic Attack Pod Reprogrammable Low Band (RLB) Standard Processor Printed Wire Assembly (PWA) Failure Analysis Study (TAT 0011) Quarterly Report under Contract No. HC1047-05-D-4005, Delivery Order, Wyle Project No. A10160.0011

Performance Period: 1 October through 31 December 2006

#### 1.0 WORK PERFORMED THIS PERIOD

- UMD and UAH: Continuing causal analysis.
- Preparing data and test results for Causal Analysis draft, due to government on 15 January 2007.
- Causal analysis team meeting held at UMD with Dr. Christou, Dr. Wessels, and John LaBuda on 12 December 2006 to ensure all causal analysis tasks are on target with requirements and scheduled completion dates.
- Wyle-WR: John LaBuda traveled to Shaw AFB, SC and Montgomery, AL (Dannelly Field) to gather data for the Component Review Process (CRP) that is a part of the Causal Analysis Report. He will go to Boise, ID (124 WG) and Hill AFB, UT (388 FW) in January to finish researching information for the CRP and include that data in the Causal Analysis Final Report. He traveled to Huntsville, AL with Connie Bowman 20-22 November 2006 for meetings with RIAC personnel and the UAH analysis team.
- Received vibration test data from 542 CBSSS/GBEAA and will conduct further analysis
  and testing to determine potential failure modes from environmental effects. Vibration,
  thermal and EMI effects be further studied.
- Wyle-HSV: Developed vibration test procedures for RLB Standard Processor card and card cage. Vibration tests complete, report delivered.
- University Maryland: Attempts to electrically test the P-pod was carried out but was
  terminated in order to ensure that the pin layout diagrams were well understood.
  Through a series of teleconference calls, the testing issues have been resolved. The
  Agilent function generator and the Agilent power supply have been prepared for the
  testing. Continuing with ESD simulation at the chip level, analyzing the issue of the
  parasitic NPN transistor being triggered into breakdown. Based on the simulation results
  design measures as well as chip level ESD verification can be carried out.

#### 2.0 WORK PLANNED FOR NEXT PERIOD

- Complete Causal Analysis phase.
- Begin Failure Elimination and Control Analysis phase.
- Monthly Status Telecom 16 January 2007 at 1100 EDT/1000 CDT.
- Draft Safety Assessment Report due at Causal TIM (Data Item # A006).
- John LaBuda will travel to Hill AFB, UT and Boise, ID to complete CRP 22-26 January 2007.
- 30 January 2007 Causal TIM at Wyle-WR office. Dr. Christou, Dr. Wessels, and Joe Hazeltine will travel to attend.
- Draft Safety Assessment Report due at Causal TIM.

#### 3.0 PROJECT FUNDING STATUS

The program financial status as of 31 Dec 2006.

Funds Allocated to Date	\$492,678	
Funds Expended to Date	\$ 89,040	
Funds Remaining to Date	\$403,638	

Respectfully Submitted:

Jeff Chapman Program Manager Wyle Laboratories, Inc.

Approved by:



From: EBR Mark Sinclair 1595 Spring Hill Road Suite 250 Vienna, VA 22182

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, Technical Area

Task 0012, Commander Second Fleet - Conduct and Analysis of Maritime

**Security Wargame Workshops** 

**Performance Period:** 

1 October through 30 November 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Completed analysis of Workshop 2.
- Delivered Workshop 2 Final Report.
- Completed final work relating to Workshop 2.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

• None.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 26 November 2006:

Funds Allocated to date:

\$120,457

Funds Expended to date:

\$120,457

Funds Remaining to date:

\$0

Respectfully Submitted:

Valerie Hayes Program Manager

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine



From: Kim Dooley Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 013 AIR

6.8 Aviation Readiness & Resource Analysis Program Life Cycle Support

Performance Period: 1 October through 31 December 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Participated in a three day FAM/DADMS review of all the applications within the Application Portfolio Management module in eRoom. Wyle SMEs provided insight on how the application signatures were determined, and provided assistance with correcting and improving the current process. Proposed that we AIR 6.8.4 look into other more robust Asset Management tools. Currently looking on bringing in vendors for demonstrations.
- Conducted a three day intensive FAM/DADMS review of all our applications with the customer. This review gives the customer an entire view of her portfolio and this review allowed TRUE Portfolio Management to exist. Upon completion of the review a vision will be displayed on what NAVAIR 6.8 needs to do to be compliant, what products are planned to migrate to, and how NAVIAR 6.8 need to get there.
- Chairing weekly NMCI transition working meeting. The group is attempting to quantify components for NMCI transition options. The benefit for the customer is to have a solid architecture in which future components will have a place in the infrastructure.
- Attended a two day meeting in Huntsville, Alabama to Kick-Off the ELITE Program
  which enabled Wyle SMEs to get a better understanding of the ELITE program.
  Wyle SMEs provided guidance in regards to FAM approvals and high level IA
  issues.
- Participating Member on the FAM Tiger Team to improve our Application Management processes. The Tiger Team will help streamline the current internal FAM processes currently used by 6.8.4.
- Worked with Mr. Frank Williams, Wyle Laboratories, in the construction of the new NMCI drops in building 420A.

- Updated diagrams and eRoom with current PCInfo Scans on a weekly basis. Keeping
  the scan information current enables project managers and systems administrators to
  be able to manage their IT assets more efficiently.
- Worked with program personnel to ensure applications critical to Airborne Weapons Information System (AWIS) are properly registered with the FAM. Prepared FAM questionnaires and conducted research on Toad for Oracle 8.6.1, SourceOffSite 3.5.2, and MSDN Professional 7.0; submitted packages for Lindo API 2.0 and LINGO 10.0 to S&T FAM; and continued work on FedEx Ship Manager API, Graphics Server .NET, Oracle Data Provider for .NET, and SAFileup. This will allow AWIS program to gain approval of their FY07 IT Spend Plan and prepare AWIS for migration into the NMCI environment.
- Validated AIR 6.8.4 applications against Enterprise Services FAM Vol. 19 Roadmap
  of preferred applications and updated eRoom records to reflect FAM preferences.
  Provides visibility of FAM decisions to AIR 6.8.4 team members; aids in
  determining which applications should become target applications; which
  applications must be upgraded to a newer version; and which applications must be
  migrated to another software suite.
- Wrote concept paper recommending creation of a formal, centralized Program Management Center of Excellence (PMCOE) for AIR 6.8.4. The PMCOE would leverage the core of senior experienced personnel who currently provide NALDA/DECKPLATE program management support to expand across all AIR 6.8.4 programs. If adopted, the PMCOE would employ standard, repeatable portfolio management processes and tools to provide visibility of all AIR 6.8.4 programs while assisting individual Program Managers with management of assets under their responsibility. A much greater breadth and depth of expertise, at lower overall cost, would be made available to individual programs by sharing a team of experts than could be achieved by each program hiring support personnel on its own.
- Followed up with Enterprise Services FAM on registration of applications required to upgrade DECKPLATE with the latest versions of NCR Teradata software. Requested Approved-Interim Waiver (AIW) status for NCR Teradata, NCR Teradata Tools and Utilities, NCR Administration Workstation for Windows 2003, and SmartClient for Windows. Achieving AIW status will allow procurement of software and hardware necessary to upgrade Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE), Naval Aviation's data warehouse solution.
- Completed more than two dozen action items, and identified and resolved numerous other issues not previously identified to obtain Navy Functional Area Manager (FAM) approval for applications residing (or planned for procurement) on AIR 6.8.4 servers. Will make it possible to gain AIR 7.2 approval of AIR 6.8.4 IT Spend Plans and prepare AIR 6.8.4 servers to move off the legacy network and migrate inside NMCI.

- Prepared AIR 6.8.4 response to Enterprise Services FAM Vol. 19 Roadmap of preferred applications. Identified applications critical to AIR 6.8.4 operations; requested that activities not be required to register Java components that are automatically loaded during installation of commercial software packages; recommended a standard naming convention be determined for COTS applications; and recommend activities be allowed to register J2SE/JAVA Software at the Version level and not at the Update level. Allows continued use of commercial software crucial to AIR 6.8.4 operations and provides recommendations for portfolio management of enterprise software used to web-enable Navy applications.
- Authored white paper for Commander, Naval Air Forces (CNAF) N422 describing value NAVAIR 6.8 Logistics IT systems bring to the fleet; the need to provide RDT&E investment dollars in order to modernize legacy Logistics IT systems and keep pace with growing information requirements demanded by the Naval Aviation Enterprise; and outlined the impacts if RDT&E funding is not received. Also provided draft email to be sent from CNAF N422 to OPNAV N881 resource sponsor. Efforts led to agreement of CNAF N422 to include NAVAIR Logistics IT systems on the Type Commander's Priority List. This action will greatly increase the likelihood that OPNAV will provide RDT&E funding to modernize AIR 6.8.4 information systems.
- Worked with the JTDI Program to integrate their needs into our processes. Gave a detailed training session on all the areas of our eROOM and how the processes work. JTDI will be able to re-use processes that already exist which will save them time and money. Plus, if they utilize the same processes and procedures then it will allow management better view of all the business areas, not just the NALDA pieces.
- Reviewed every record in eROOM and submitted a FAM Package, UIC stakeholder package, or AIW Request or Extension. Created a tracker system for all actions and sent to ES FAM. We have addressed every piece of software on our servers and have a plan.
  - Held Kick Off Meeting with the government customer.
  - Developed detailed project plan and resource plan.
  - Participated in the AIR 6.8.4 weekly staff meetings representing Enterprise Architecture.
  - Performed Product Data Management and Product Lifecycle Management research including DADMS reports.
  - Participated in Document Management System Demonstrations/Reviews of TEAMCENTER product and provided evaluation documentation.
  - Met with JCMIS Program Manager to define architecture requirements and artifacts needed to support JCMIS program documentation.

- Collected required JCMIS source data for use in architecture documentation.
- Began the JCMIS Architecture development.
- Installed Telelogic System Architect Tool.
- Developed project plan for performing DECKPLATE Data Warehouse Analysis and recommendation effort.
- Completed key team member badging and requested access for NAVAIR DECKPLATE document repository.
- Conducted DECKPLATE and data warehouse research and document reviews.
- Coordinated and finalized DECKPLATE project plan.
- Completed kickoff interviews with government sponsor, his deputy, and project manager.
- Conducted multiple interviews with project leads and development staff.
- Toured DECKPLATE facility.

### Wyle Laboratories, Inc. inputs:

- Participated in Elite Architectural meeting. Constructed ELITE network topology drawing and ELITE Functional diagram. Worked with various team members in determining best design. Constructed PowerPoint presentation describing the architecture and requirements.
- Contacted and worked with NAVAIR server team to determine Active Directory push to AIR 6.0 server Paxweb801. Permissions via Group Policy Objected (GPO) were disabled locally on that server and users were not allowed to login into the system. The server team developed an Organizational Unit (OU) that the server was not part of that, did not receive the offending GPO's.
- Met with NALDA Program Manager, Ms. Ann McClay, regarding server purchase of RAMP System. Initially RAMP Program was to purchase 10 additional servers for a total of 12. I advised that this would probably not be approved by 7.2 and suggest a strategy of combining the Test Legacy and Test Best of breed server into one server. I also suggested that the Developmental environment remain with the Titan contractor alleviating the need for additional Government servers for that environment. The net effect was to reduce servers down to 6 with a long term strategy of reduction to 4 when Production Best of Breed would take over the Production Legacy.

- Installed additional network cables in Building #420 for contractor support NMCI connectivity. Network wires were ran above ceiling, through conduits, and through the Wyle installed network cable tray system. The cables were hidden from view and attached to RJ-45 connector plates and appropriately labeled. Switch end was fed into NMCI connecting room, conduits waiting on EDS personnel to attach to NMCI Switch. This effort was accomplished with the help of Wyle team member Mr. Kenny Alvey.
- Advised the ELITE program that the Sikorsky Contractor that intends to connect to
  the ELITE System is required by CJCSI 6211.02B Policy to currently have an "AIRGapped" Government network. This network is to have a DISA provided circuit to
  the NIPRNET for connectivity into any DOD Systems. Currently the Sikorsky
  architecture has a "Virtually" separated Government network which utilizes their
  corporate Internet connection to the NIPRNET. This information was emailed to the
  Sikorsky POC for action.
- Attended Military Flight Operations Quality Assurance (MFOQA) offsite meeting per Government requests. Working with AIR 6.8 personnel in developing an Architecture of MFOQA Top Tier and Mid Tier. Developing System accreditation strategy for all IA approvals.
- Updated all AIR 6.8 Diagrams that I have created including: System CONOPS, SSAA, Building Floor Plans, JATDI System, Cable Trays, and Server Racks.
- Led Continuity of Operations (COOP) meeting for AIR 6.8.4 for developing an all encompassing plan for all AIR 6.8.4 systems. Developed a matrix for determining overall system requirements with regards to operations continuance in the event of system failures either natural of unnatural.
- Participated in "Server Consolidation" meeting. The goal is to adhere to NAVAIR mandate of server reduction. In conversation with Severn representative various strategies have been explored for meeting this requirement. "Virtualization" is the key component in this strategy. We are developing a strategy where computer hardware boxes will house a multitude of instances of an operating system. This has the advantage of leveraging one hardware platform against many server instances. The net effect is the reduction in hardware boxes (which meets the mandate) while retaining independent servers for each of the systems.
- Validated DADMS Servers against current inventory and Inventory taken in June.
   Created a spreadsheet with pie graphs to show server additions, reductions, and deltas. Submitted this to Ms. McClay.
- Created a work package for Mr. Andy Eckley for all the DECKPLATE software.
  This package was to show what we need to happen to ensure that we can spend our IT
  dollars this year on the new servers/software. This package outlined when we
  submitted packages and to whom.

- Coordinated gathering of technical information required for FAM registration of applications required for in support of AWIS and submitted registration packages to relevant FAMs.
- Reviewed FAM status of applications used in support of AIR 6.8.4 data center, updated eRoom database, and pushed packages back through eRoom workflow for review by Data Center Team, DECKPLATE Team, Technical Review (by System Administrators), and Cost Research and License Review.
- Coordinated AWIS IT Spend Plan review and responses between AWIS Program Manager and AIR 7.2 Chief Information Officer (CIO) staff.
- Wrote point paper for OPNAV N881 to provide background and discussion to N8 on why NALDA RDT&E issue is yellow trending down.
- Developed AIR 6.8.4 Action Tracker database. (Government customer, Ms. Ann McClay, requested an action tracker during an earlier Wyle Team meeting.)
- Presented the NAVAIR 6.8.4 eROOM information and capabilities to the NAVAIR 7.2 FAM and DITPR-DoN team. This was an opportunity for NAVAIR 6.8 to show NAVAIR 7.2 the pro-active approach we are taking to Portfolio Management. It allowed 7.2 to see how our assets are being managed and it showed repeatable processes that could be utilized at other activities.
- Team completed "Phishing Awareness Training" via MyNAVAIR Career Development Community of Interest. This training met the Department of the Navy's mandatory training requirement.
- Mr. Kenny Alvey completed a 4-day Security+ Training class. This training will allow our team to better serve our customers in the IT security arena.
- Wrote a point paper that identifies fourteen specific issues and recommendations to improve the way Navy manages Enterprise Services applications. Since critical Navy business applications are typically built upon or tightly integrated with Enterprise Service (ES) Functional Area Manager (FAM) applications, decisions made by ES FAM affect every other Functional Area Manager. ES FAM appears to make decisions independent of other Functional Area Managers and without a full understanding of the impact those decisions have on critical Navy business applications. ES FAM processes are inconsistent and subject to frequent change, but application owners and co-owners are not notified of changes and must often rework FAM registration packages or re-evaluate planning and budgeting for program information technology requirements. This paper describes the special challenges presented by Enterprise Service FAM applications and recommends specific ways the Navy can improve management of these applications.
- Worked with Airborne Weapons Information System (AWIS) program manager to develop and document AWIS Requirements Review and Approval Process concept.

Process concept was subsequently approved by AWIS Policy Review Board. This process will provide a formal, repeatable process for review and approval of AWIS requirements; instills program discipline; provides a way to document program decisions; ensures visibility of funding and requirements across all programs; and results in better informed decisions with input from all stakeholders.

- Continually maintaining accurate inventory of the NAVAIR 6.8.4 servers in building 420 by updating diagrams and eROOM with the weekly scan data from PCInfo. Keeping the scan information current, project managers and systems administrators are able to manage their IT assets more efficiently.
- Researched Nat addresses on all 6.8.4 servers and documented the findings for the Clin29 requirements. This will ensure a smoother transition when completing the Clin29 Questionnaire.
- Completed all Clin29 Questionnaires for the 6.8.4 servers in building 420. This documentation is required so that we can stay operational while we wait to transition into the NMCI enclave.
- Coordinated gathering of technical information required for FAM registration of applications required for in support of JMADS and submitted registration packages to relevant FAMs.
- Reviewed FAM status of applications used in support of AIR 6.8.4 data center, updated eRoom database, and pushed packages back through eRoom workflow for review by Data Center Team, DECKPLATE Team, Technical Review (by System Administrators), and Cost Research and License Review.
- Developed AIR 6.8.4 Calendar database. This will show when NAVAIR 6.8.4
  personnel (government and contractors) are on vacation or compressed work schedule
  (CWS) and it also displays standing meetings. This product will help management
  plan work.
- Managed the day to day operations of the NAVAIR 6.8.4 eROOM. During the
  month of December, the AIR 6.8.4 eROOM was visited 1317 times by 119 individual
  members. 5228 new items were made available and 4401 items were edited in the
  AIR 6.8.4 eROOM.

#### Blue Heron inputs:

- Attend Telelogic SA DoDAF Training 4 through 7 December 2006.
- Provided Document Management Evaluation Support:
  - o Participation in product evaluation sessions
  - Preparation of product evaluation results
  - o Assisted in development of proposed server architecture
  - Preparation of DMS results report presentation

- o Participation in presentation of results to customer
- Documentation of customer feedback
- o Development of effort re-scoping and follow-up plan
- Participation in stakeholder meetings
- Related DMS evaluation to Migration Planning requirements
- Downloaded and updated Telelogic Architecture tool SA 10.4.23 with SP4.
- Installed SA 10.4 on BHS Laptop.
- Developed initial configuration of JCMIS SA Database.
- Completed 12 of 17 JCMIS SA DoDAF Products.
- Updated Master SAMP Document for Government Team Lead.
- Continued Product Life-Cycle Management evaluation and coordination.
- Discussed SA Tool standards and guidelines with NAVAIR CIO office.
- Continued research and analysis in support of DECKPLATE evaluation.

### L-3 Communications Titan Corporation inputs:

- Reviewing NAVAIR Information systems Requirements Application Version 1.0
- Identified Required Database Additions
- Identified Required Input Additions
- Identified Required Output Additions
- Reviewing Subject Matter Expert BB Notes, Developer Notes and DR's marked for
- Identified Required Database Additions
- Identified Required Input Additions
- Identified Required Output Additions
- Reviewing User Requests not listed as DR's and Determining Optional Database Changes
- Created Best of Breed Template Database
- Removed Antiquated Stored Procedures
- Began Mapping Legacy Databases
- Began Mapping Legacy Outputs
- Began Mapping Legacy Inpits
- Began Software Design Document (SDD)
- Created Data Dictionary (DD) Template
- Provided Draft POA&M

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

#### **Blue Heron inputs:**

- Continue to participate in AIR 6.8.4 weekly staff meetings representing Enterprise Architecture.
- Continue monitoring of Logistics Applications for updates to the SAMP including DADMS status and server migration.
- Continue support of Document Management System Evaluation including:
  - Development of Baseline Cost collection instrument
  - Baseline cost analysis
  - Update to implementation plan
  - Update to budget plan
  - Recommended solution
  - Update and creation of SA artifacts
- Continue the development of the JCMIS encyclopedia and required DoDAF artifacts.
- Continue the DECKPLATE analysis and recommendation effort.
- Meet with the In-Service Support Team to validate architecture development efforts.

### L-3 Communications Titan Corporation inputs:

- Continue Mapping Legacy Databases and Begin Database Changes.
- Continue Mapping Legacy Inputs and Build Input Template.
- Continue Mapping Legacy Outputs and Build Output Templates.
- Continue development of DD and SDD documents.

### Wyle Laboratories, Inc. inputs:

- Continue to update all AIR 6.8 Servers.
- Continue updating all System checklists.
- Continue updating all technical solution sets.
- Continue AIR 6.8 cable end construction.
- Continuing to support Elite Program in IA and NMCI Transition.
- Continue to support NALDA Program in IA and NMCI Transition.

#### 2.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date \$769,888 Funds Expended to Date \$227,943 Funds Remaining to Date \$541,945

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:



From: Travis Hayes, PAL Services Inc. 530 Kings Manor Drive O'Fallon, MO 63368

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-00013/0014 DoD Performance Based Logistic (PBL) Centric Sustainment Strategies

Performance Period: 30 October through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Participated in multiple telephone conferences on Gas Turbine Generator pilot PBL.
- Participated in face to face meeting on Gas Turbine Generator pilot PBL.
- Participated in Over-Arching PBL telephone conference.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Participate in Gas Turbine Generator pilot PBLs meetings.
- Participate in Over-Arching PBL meetings.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date \$ 33,654 Funds Expended to Date \$ 4,202 Funds Remaining to Date \$ 29,452

Respectfully Submitted:

Valerie Hayes Program Manager Wyle Laboratories, Inc.

Approved by:

Leseph T. Hazeltine RIAC Director



From: Daniel Donaldson Wyle Laboratories, Inc

SUBJECT: Monthly Status Report under Contract HC1047-05-D-4005, TAT 016 Armed

Reconnaissance Helicopter Project Support

Performance Period: 1 October through 31 December 2006

#### 1.0 WORK PERFORMED THIS PERIOD:

- Reviewed the following source documents, Test and Evaluation Master Plan (TEMP),
  Transportability Training Plan, training devices production flow, training devices task
  list, current training devices maintenance register, Support Equipment Master List
  (SEML), Capability Production Document (CPD), critical task selection, Composite
  Armament/Avionics/Electrical Trainer (CAAET) fault insertion list.
- Gained access to the following resource sites, USAFMSA, General Dynamics portal (IMI review), and Bell NEXPRISE secure website.
- Conference with AGPU PM on path ahead for his product and how it would affect the ARH-70A to include BOIP issues. Inquired about AGPU mock up for maintainer training environment and cost effectiveness.
- Attended ARH Supportability Working Integrated Product Team (SWIPT) at Bell Helicopter facility in Alliance Texas. Goals and Objectives focused on recent Red Team impact, execution plan included CDRL impacts and schedule realignment. Key program events were looked at to include LUT, Transportability Demonstration, Tech Pub Validation and Verification, Log/Maintenance Demonstration and IKPT Training.
- Attended T&E WIPT focusing on Transportability Demonstration embark and debark training and clarification of task requirements from the TRADOC System Manager. Limited User Test (LUT) schedule was discussed in relation to Transportability Demonstration and ACFT configuration.
- Attended CAAET fault insertion working group to identify maintenance tasks to be incorporated in the training device, power supply requirements, hardware options and software challenges. Update and walk around of training devices build was accomplished.

- Attended Supportability WIPT key program events were looked at to include LUT, Transportability Demo, Tech Pub Validation and Verification, Log/Maintenance Demo and IKPT Training. Reliability and materiel release information on specific components were discussed in detail.
- Attended MEP CDR telephonically, the focus was on supportability and training requirements. Program schedule and requirements were restated.
- Participated in the ARH-70A CAAET MWG to identify maintenance tasks to be incorporated in the training device, power supply requirements, hardware options, and software challenges.
  - 1. Restructured charter
  - 2. Restructured action item spreadsheet
- Reviewed the following storyboards (functional flow, graphics and text):
  - 1. 050101 Main Rotor System components
  - 2. 050207 Maintaining Main Rotor Controls Gimbal
  - 3. 050401 Adjusting Swashplate Friction
  - 4. 050701 Tail Rotor System Components
  - 5. 060101 Main Rotor Drive Components
  - 6. 060801 Tail Rotor Drive Components
  - 7. 070101 Hydraulic System
- Gained access to the following resource site Bell Secure Web.
- Attended ARH Interactive Multimedia Instruction (IMI) Development In Progress Review (IPR). Multimedia program events were looked at to include Interactive Electronic Technical Manual (IETM) integration, color conventioning and 508 conformant requirements.
- Attended Interservice/Industry Training, Simulation & Education Conference (I/ITSEC). Exhibits observed and evaluated were maintainer and operator devices that are the latest technology available. Comparison was then made to the ARH current project. Attended Sharable Content Object Reference Model (SCORM) conformant material presentation.
- Restructured ARH-70A CAAET fault insertion list.
- Completed ACQ201A and requested seat for ACQ201B.
- Completed review and made comments to the following storyboards (functional flow, graphics, and text):
  - o 050101 Main Rotor System components.

- 050207 Maintaining Main Rotor Controls Gimbal.
- 050401 Adjusting Swashplate Friction.
- 050701 Tail Rotor System Components.
- 060101 Main Rotor Drive Components.
- 060801 Tail Rotor Drive Components.
- 070101 Hydraulic System.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Review IMI storyboards.
- Participate in bi-weekly teleconferences for IMI, Training Devices, IETM and Transportability.
- Investigate Composite Repair training procedures.
- Attend DAU ACQ201B.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$126,923

Funds Expended to Date

\$ 54,792

Funds Remaining to Date

\$ 72,131

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:



From: OSEC Bill Makridis 2141 Palomar Airport Rd. Suite 200 Carlsbad, CA 92011

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-0016/0017, PMA-205 Analysis of Alternatives for Land Attack

**Performance Period:** 

1 October 2006 through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Contacted NAS Fallon, Nellis AFB and NAWC China Lake Range Departments.
   Acquired electronic documentation on all range operational procedures, target arrays, and limitations. Combined this information into Appendix format for inclusion in the AoA.
- Established points of contact for range questions, and collected information for inclusion of this information in Appendices of AoA.
- Acquired draft document from NAWC China Lake Range Department explaining their recent successes with Moving Land Targets developed from large tractor-trailer rigs.
   Planning trip to China Lake in late November or early December 2006 to investigate this further.
- Researched and contacted the Army PEO for ground targets. Received and reviewed a
  detailed brief of current targets and followed up with request for additional information
  on ground control systems.
- Established contact with the Joint Range Commanders' Conference in White Sands, New Mexico. Received sanction from that group to contact the heads of each respective military service to facilitate our AoA. In process of contacting POCs from each service at the SES level to plan travel in NOV/DEC timeframe to investigate/ascertain what other services are currently using/planning in MLT arena.
- Researched weapons and sensor systems for participating aircraft as delineated in MLT draft outline provided to PMA-205.
- Finalized individual NDAs with Wyle Labs for all OSEC personnel participating in MLT AoA effort.
- Met with Meggitt Defense in their Tustin, CA offices 7 November 2006. Mr. Ken Kenjale, Mr. Rob Couture and Mr. Ian Matyear were present. We did not have the NDA in place at that time and they presented on a high level their perceived solution to the MLT issue for the Navy. Mr. Couture spent most of the time briefing their plan for a target scoring solution, while Mr. Kenjale quickly reviewed their capabilities to install a remote control package on a HUMVEE while towing linked targets from 20'-200' behind.
- Attended the Armed UAV Conference in Washington, DC 13 and 14 November 2006.
   This was a very informative conference and identified the future need to provide armed UAS operators adequate MLT training opportunities as well.

- Met with Navy Range Office personnel in Crystal City on 16 November 2006. Very informative meeting reviewing SOW and existing Operational Requirements Documents (primarily T&E ORD). Identified that there are no specific environmental requirements (i.e. no harm to the environment) for any vehicle base or subsystems at this time and that convoys are not specifically detailed in the T&E ORD. Both of these issues are deemed to be assumed requirements and we are taking that into account in the detailing of the AoA.
- Met with PMA-205 and PMA-208 on 20 November 2006. Reviewed notes from Navy Range meeting, Armed UAV Conference and revalidated that the concept of a base station and target subsystem is still plausible for MLT training purposes. It was agreed that OSEC would place more emphasis than originally planned on east coast ranges and prioritized the ranges in order of importance as follows:
  - a. NAS Fallon Range Complex
  - b. China Lake
  - c. Pine Castle
  - d. Yuma
  - e. Cherry Point
  - f. El Centro
  - g. Twenty-nine Palms
  - h. Camp Pendleton
  - i. SCORE
  - j. Nellis
  - k. UTTR
  - 1. Hawaii
  - m. Guam
- OSEC requested and has been provided with the following GFI:
  - a. Meggitt Defense previous RFI submission
  - b. SAIC previous RFI submission
- OSEC suggested that at the culmination of the AoA, potential for a demo of top candidate systems be funded for the Spring '07 timeframe at NSAWC and both PMA-205 and 208 agreed. Furthermore, OSEC offered assistance in any MLT CONOPS effort underway/anticipated as well as our desire to participate in any MLT System Design Reviews and Working Groups insofar as our SOW allows and PMA-205/208 desire.
- The current "Dune Buggy" effort underway at NSAWC was also discussed during this
  meeting and OSEC agreed that we would monitor progress closely and report back to
  PMA-205/208 through our monthly status reports.
- Finally, actual method of delivery of the MLT AoA was discussed and OSEC agreed that this would be done in person and furthermore agreed that we would gladly prepare a powerpoint presentation of our findings/recommendations to be presented at an agreed to time and location upon completion.
- Met with PMA-201 on 20 November 2006 to discuss Navy Precision Strike initiatives as they relate to MLT. Excellent information was gleaned as to the direction that the Navy is taking in enhancing existing weapon systems to handle MLTs (i.e. not requiring the "pilot compensation" techniques that we have been training to for so many years). We

- also discussed the recent successful SLAM-ER and JDAM launches against MLTs from ATFLIR and AESA equipped F/A-18s.
- Met with Mr. Josh Messner of Applied Resources Inc. on 22NOV06, in his capacity under contract with DOT&E for the MLT T&E effort underway at China Lake. He provided OSEC with extensive information/briefs and status updates on the Multi-Spectral Mobile Ground Target System. There has been tremendous work accomplished in that regard to date and there could be an opportunity to share government information from the T&E community for application to the training environment.
- Traveled to Pt. Mugu for meeting with Mr. Kevin Phillips and Mr. Lee Mumma to discuss MLT initiatives in their purview.
  - o Discussed at length the Advanced Ground Target Threat Systems (AGTTS) initiative underway.
  - Served to confirm modular, cost-effective approach supporting AoA findings to
  - o Able to get "eyes on" of full scale, visually representative fabricated shapes of vehicles which tied in nicely with information we derived from previous visit to China Lake and observations of remote controlled F350 there.
  - o Coupled with F350, these seem to be realistic, low cost alternative for US Navy use however, does not solve convoy requirement.
- Spoke at length with Mr. Glen Schaeffer in Huntsville regarding current and planned initiatives for Army training. Wealth of information gleaned regarding USA's approach to training and current "towed" (railed) targets used on ranges. They envision continued use of their railed targets to be augmented with T&E efforts currently underway. Following up with phonecon with Ms. Robin Finley.
- Researching USA's Multiple Integrated Laser Engagement System (MILES) and MILES 2000 system(s) currently in use for force-on-force training (as scoring system alternative). Mr. Braddy had stated no laser scoring system is in use currently however; we are aware of MILES and are pulling this thread a little to ascertain if it might be a lower cost option than that already discussed with PMA-208 and NSAWC (Pete Milham).
- Initiated contact with USAF ACC to discuss requirements from USAF side and work done on MLT initiatives to date (primarily SDB Inc 2, etc). As we move to completion, want to ensure we have given other service initiatives a thorough review to assist in development of Navy requirements for MLT.
- Initiated contact with SCORE Director of Operations (Mrs. Heidi Nevitt) with follow-on meetings scheduled.
- Contacted CDR Chris Schnabel at NSAWC to discuss current dune buggy initiative. Understand that there is currently an engineering analysis underway to determine condition and best use plan for that asset. With back to back SFARPs currently planned for January through April 2007 timeframe and limited personnel assets, we are led to believe that we may not be able to use this as a data point for inclusion in our AoA, but are continuing to pursue that option.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Have discussed internally and we would like to get the MLT added as a side-bar to discussions during the next HTAT to be held at NSAWC in February 2007. Goal would be to further/fully define fleet moving land target requirements and get initial buy-in from fleet end users. Intent is to distribute short powerpoint to fleet reps for review and comment prior to side-bar meeting.
- Scheduling meeting with SCORE Director of Operations to collect data on range capabilities and current fleet mobile target training conducted in support of Carrier Strike Groups and Expeditionary Strike Groups.
- Re-engaging Meggitt Defense Systems now that NDAs are approved to fully understand their offering in support of MLT.
- Following up with discussions with Huntsville personnel (primarily Ms. Robin Finley).
- Following up initial contact with USAF Training POC Mr. Raul Bennet to ensure we have complete understanding of USAF MLT training initiatives (may require a trip to Nellis AFB).

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$158,375

Funds Expended to Date

\$ 55,760

Funds Remaining to Date

\$102,615

Respectfully Submitted:

Valerie Haves Program Manager

Wyle Laboratories, Inc.

Approved by:



Mr. James Poduszlo

Code: 4.1.2

Hanger 306, Tate Road Patuxent River, MD 20670

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, PMA-231 Network Centric Warfare (NCW) Analysis, TAT RI-06-0017/0018

**Performance Period:** 

6 November 2006 through 31 December 2006

# 1.0 WORK PERFORMED THIS PERIOD:

- Researched SIPRnet connectivity for Makaha Ridge FORCEnet Lab (MRF).
- Developed MRF Vision.
- Coordinated NGC MRF Phase 2 and 3 contract modifications.
- Presented MRF Vision.
- Coordinated MRF Kickoff and PDR.

# 2.0 WORK PLANNED FOR NEXT PERIOD:

- Coordinate MRF 2007 events.
- Continue to research SIPRnet connectivity and I/O range participation.

# 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$340,000

Funds Expended to Date

\$ 25,873

Funds Remaining to Date

\$314,127

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine RIAC Director



From: Triton Services, Inc. Bob Denton 17001 Science Drive, Suite 100 Bowie, MD 20715

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-0018/0019, Landing Craft, Air Cushion (LCAC) Command, Control, Communication, Computer, and Navigation (C4N) Project Engineering

Period of Performance: 1 October through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Provided the LCAC C4N project engineer research for craft alteration 516K material procurements, labor, and shipping quotes.
- Reviewed and provided comments to the LCAC project engineer for the Landing Craft Air Cushion (LCAC) Communications Grooming Set 441-CGS User's Manual.
- Provided engineering analysis to address fleet issues prior to the LCAC fleet support conference.
- Attended the 26<sup>th</sup> LCAC Fleet Support Conference at Camp Pendleton, California, 16 through 20 October 2006. Provided engineering data for the C4N communication workshop.
- Attended the SPAWAR antenna evaluation meeting at SSC Sand Diego, California, 20 October 2006 to plan FY07 follow on work to evaluate LCAC to LCAC communication capabilities.
- Provided engineering analysis to the Amphibious Assault Direction System (AADS) for development of LCAC craft alteration 531K.
- Provided engineering analysis to the LCAC C4N project engineer researching procurement information for the final procurement of the replacement Man-Onthe-Move (MOM) radio, craft alteration 516K kits.
- Provided engineering analysis to the LCAC C4N project engineer researching procurement information for the Defense Advanced GPS Receiver (DAGR) FY07 procurement.

- Traveled to Assault Craft Unit Five (ACU-5) for System Upgrade Testing on three craft.
- Converted three existing test procedures to a software format to be imported to a tablet PC or laptop.
- Attended weekly C4N project meetings to discuss project schedules, milestones, and issues.
- Attended the Amphibious Assault Direction System (AADS) Logistics Status/Issues/Plan Ahead Meeting and provided engineering support for the project engineer.
- Reviewed the AADS J-6771/KSQ interface unit drawing for the LCAC C4N project engineer.
- Developed a preliminary list of material for LCAC AADS craft alteration 531K for technicians to assemble the craft alteration installation kits.
- Developed preliminary craft alteration 531K lists of material using redlined craft alteration 316K material lists for the AADS project.
- Researched the command and control capabilities of the LCAC top level requirements to determine where updates are recommended. Provided recommended updates to the LCAC project engineer.
- Provided craft alteration 516K Man-On-the-Move (MOM) kit for installation on LCAC 21. Developed Data Validation Sheet (DVS) 516K-21 and 4790 CK form for the LCAC C4N project engineer. Completed craft alteration on LCAC 21.
- Provided craft alteration 423D MOM antenna lit for installation on LCAC 21.
   Developed Data Validation Sheet (DVS) 423D-21 and 4790 CK form for the LCAC C4N project engineer. Completed craft alteration on LCAC 21.
- Attended the final design review at Avavlex Technologies in Pensacola, FL and provided engineering support to the project engineer.
- Completed Communication Security (COMSEC) testing on LCAC 65 and 76 at Assault Craft Unit FIVE (ACU 5).
- Developing Service Life Extension Program (SLEP) communication, Global Positioning System (GPS), and Identification Friend or Foe (IFF) COMSEC test procedures.
- Attended weekly C4N project meetings to discuss project schedules, milestones, and issues.

- Attended the weekly Amphibious Assault Direction System (AADS) Project meeting and provided engineering support for the project engineer.
- Reviewed the LCAC AADS Craft Alteration (CA) 531K drawings for the LCAC C4N project engineer. Began revising the drawings with red lines.
- Developed CA 531K kit material list data sheets for the Alteration Installation Team (AIT).
- Prepared installation kits for LCAC AADS CA 531K for technicians to install craft alteration 531K on LCAC 27, 35, 55, 88, and 89 at Assault Craft Unit Four, Little Creek Virginia during the period 6 through 22 December 2006.
- Provided the C4N project engineer historical data and recommended closing LCAC 9 trial card for CA 316K.
- Obtained one AADS Interface Unit (AADSIU) J-6771/KSQ-1 from the AADS project engineer for LCAC Environmental Qualification Testing (EQT). Requested a second AASDIU from the AADS project engineer for installation in the LCAC C4N Software integration Lab (SIL).
- Provided AADSIU Interface Control Drawings (ICD), mating connectors, and cabling to the C4N project engineer for EQT of the AADSIU.
- Began preparing installation kits for LCAC AADS craft alteration 531K for technicians to install CA 531K on LCAC 66 and 91 at Panama City NSWC-PC.
- Completed second and final review of CA Record (CAR) 531K for the C4N project engineer.
- Continued developing Service Life Extension Program (SLEP) communication, Global Positioning System (GPS), and Identification Friend or Foe (IFF) COMSEC test procedures.
- Completed government required property pass system training.
- Provided radio transmitter power out data for building 319, LCAC 66 and 91 to the NSA base frequency manager.
- Provided recommendations to the Assault Craft Unit FIVE (ACU 5) West Pack Alpha (WPA) NA443 LCAC Maintenance Shop and Control Tower drawings.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Provide engineering support to the LCAC C4N project engineer integrating C4N systems.
- Continue developing SLEP COMSEC test procedures.

#### 3.0 **PROJECT FUNDING STATUS:**

The program financial status as of 31 December 2006:

Funds Allocated to Date:

\$192,308

Funds Expended to Date:

\$ 98,446

Funds Remaining to Date:

\$ 93,862

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:



From: EBR Mark Sinclair Evidence Based Research 1595 Spring Hill Road Suite 250 Vienna, Virginia 22182

SUBJECT: Commander Second Fleet Maritime Security Interoperability and Program Management Support, TAT RI-06-0019/0020

**Performance Period:** 

1 October 2006 through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Participation in a two-day meeting to align the MHQ Operational Architecture (OA) and CONOPS efforts, hosted by Mr. Tim Sorber, Klett Consulting Group.
- Attendance at a SYSCOM Architecture Development and Integration Environment (SADIE) and System Architect training at the SSC Charlestown facility in Norfolk, Virginia with one new hire participant attending.
- Additional familiarization with SADIE and the MHQ OA Model in particular.
- Participated in a three-day MHQ (MOC) Intelligence Table Top Exercise, designed to identify core intelligence processes for incorporation into the MHQ (MOC).
- Started to analyze the MHQ(MOC) task set, derived from the Operational Architecture and identify associated Universal Joint Tasks (UJTs).
- Reports were generated from the JTF HQ Process Model to permit access to the Master Training Guide and JTF SOP references from a spreadsheet. The goal of this effort is to provide additional reference tools, indexed to UJTs for the MHQ (MOC) CONOPS and TTP efforts.
- Participated in the fourth MHQ (MOC) Operational Advisory Group (OAG), held on 28 through 30 November in San Diego, California.
- Significant effort was continued on the analysis and mapping of the MHQ (MOC) Operational Architecture (OA) Activity List to Universal Joint Tasks (UJT). Once complete, this mapping will be useful to evaluate the depth and breadth of the current OA and compare the resulting OA-generated Mission Essential Task List (METL) with that generated by the formal Naval METL (NMETL) effort.

- Analysis was performed to investigate MHQ (MOC) baseline assessments and maturity tracking, along with associated metrics. The results of this analysis may result in either a re-direction of effort and/or a plus-up to the existing BPM efforts.
- A presentation of the next-generation SLATE system management tool, presented by Northrop Grumman Corporation (NGC) was attended. As a result, several tentative taskings were identified, including the nature of Numbered Fleet feedback within the Joint Training Information Management System (JTIMS).
- A request to extend the Period of Performance (PoP) on TAT-20 changing the PoP from 24 August 2006 through 23 January 2007 to 24 August 2006 through 31 May 2007 was submitted to Wyle Laboratories, Inc. The rationale for the PoP extension is a change in the nature of the task from production of Business Process Models to comparison, adjudication, and reconciliation of architectures with various joint and service process models resulting in a reallocation of resources to match up with other synergistic efforts ongoing in support of Second Fleet (C2F). This extension will result in greater flexibility for C2F in the execution of the Business Process tasks.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Completion of the OA/UJT mapping activity.
- Creation of an analysis report describing findings originating out of the OA/UJT analysis, including comparison to the formal NMETL analysis.
- Mapping of Naval Officer Billet Categories (NOBC) to UJT-indexed task list.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$291,301

Funds Expended to Date

\$170,730

Funds Remaining to Date

\$120,571

Respectfully Submitted:

Valerie Hayes

Program Manager

Wyle Laboratories, Inc.

Approved by:



From: Valerie Hayes Wyle Laboratories, Inc. 22309 Exploration Drive Lexington Park, MD 20653

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 021, Deputy Under Secretary of Defense for OSD AS&C Special Capabilities Office Project Support

**Performance Period:** 1 October through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- In-processing and administrative actions.
- Attended the Office of the Secretary of Defense (OSD) Program Review in Irvington, Virginia.
- Conducted initial coordination for travel to Costa Rica and Del Rio, Texas.
- Conducted ground tests and preflights on the Yarara Unmanned Aircraft Systems (UAS).
- Coordinated additional ground and flight test activities for the Yarara system.

### Aerodyne

- Completed ground tests and preflights on the Yarara Unmanned Aircraft System (UAS).
- Completed test plan for electromagnetic tests on the Yarara system.
- Conducted electromagnetic tests on the Yarara system.
- Traveled to Del Rio, Texas, to observe the UAS Training Class I conducted by UAS Group, Inc.
- Traveled to Bolivia to discuss the UAS initiatives with U.S. Embassy personnel.
- Conducted initial coordination for flight test activities for the Yarara system.

# Maureen Callahan/Valerie Hayes - Wyle Laboratories, Inc.

- Began review and organization of existing prime contracts for SCO.
- Initiated non-disclosure agreements with prime contractors.
- Met with key individuals to establish understanding of requirements:
  - Thomas Moore
  - Dennis Baker
  - David Lathrop
  - Bill Hartman and staff
- Ms. Valerie Hayes traveled to the Pentagon on 21 November 2006 to visit Mr. Tom Moore and Mr. Brian Hibbeln to discuss OSD AS&C contractual, tasking, and financial issues.
- Continued organization of existing prime contracts for SCO

- Continued to identify missing documents.
- Continued execution of non-disclosure agreements with prime contractors.
- Provided support to Mr. David Lathrop of Saber Focus contracting requirements:
  - Researched utilization of DMEA contracting support
  - Researched utilization of FFRDS Rand Corporation
- Met with Contracting Officer from Warner Robbins to gain understanding of scope of contract workload and support in Annapolis, Maryland.
- Met with SCITOR and PRA Contracting personnel.
- Initiated change order to Purchase Order to L-3 Communications Corporation.
- Check and process subcontractor invoices.
- Traveled to Bolivia to discuss Unmanned Aerial Systems (UAS) initiatives with U.S. Embassy personnel.
- Developed UAS recommendations and cost estimates to support Bolivia mission.
- Conducted coordination for flight test activities for the Yarara system.
- Ensured the Yarara system was shipped and delivered to the flight test facility.
- Conducted initial coordination for the property transfer of the Raven A UAS.
- Completed an interim test report on Electromagnetic Interference environment for the Yarara system.

# **L-3 Communications Titan Corporation:**

Customer delivered specific enclosure required for mission fulfillment. Technicians are
now disassembling enclosure to determine what modifications will be needed to allow for
placement of customer desired device. Met with customer to discuss more details of
requirement.

# 2.0 WORK PLANNED FOR NEXT PERIOD:

# Maureen Callahan/Valerie Hayes – Wyle Laboratories, Inc.:

- Scheduled meetings for upcoming period with the following activities:
  - DMEA
  - Raytheon support of CET development
  - Rand Corporation
- Gain competence using the financial database.
- Continue to organize contracts.
- Establish contracting library at Crystal City office.

# **Aerodyne Inc.:**

- Coordinate possible overseas travel to Afghanistan to support Small UAS activities.
- Final coordination to conduct flight test activities on the Yarara system.
- Complete the final test report on the Yarara system.
- Continue discussions with the Bolivia point of contact on implementing UAS initiatives.

# **L-3 Communications Titan Corporation:**

 Placement of device in customer provided enclosure for full concealment. Casual observation by non witting persons to determine detect-ability of concealed device in customer's enclosure.

# 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$2,565,385

Funds Expended to Date

\$ 56,285

Funds Remaining to Date

\$2,509,100

Respectfully Submitted:

Valerie Hayes

Wyle Laboratories, Inc.

Approved by:

eseph T. Hazeltine



Ms. Diane Wathen 4.5.3.3 Building 3290, Tate Road Patuxent River, MD 20670

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-021/0022, Single Integrated Air Picture (SIAP) Analysis

Performance Period:

18 December through 31 December 2006

## 1.0 WORK PERFORMED THIS PERIOD:

- Continued participation in the review and adjudication of the Derived System
  Requirements List (DSRL) to complete Integrated Architecture Behavior Model (IABM)
  System Functional Review (SFR) exit criteria.
- As members of the Navy Single Integrated Air Picture Metrics/Scenario Working Group, conducted case study to access the process and feasibility Navy Single Integrated Air of mapping SIAP Derived System Requirements (DSR) Traceability to Unified Navy Metrics.
- Continued participation in the SIAP Thread Pulling Team (TPT) multi-week effort to develop strategic plan and process for the development of Functional Capabilities (FCs)/Threads by using existing artifacts. Result will be updated sequence diagrams and architectural products in various threads including Composite Tracking, Global track management/remote data, Electronic Surveillance (ES)/Identification Friend or Foe (IFF)/Passive Angle Track (PAT)/Jammer, Program Location Register (PLR)/Planned Position Location Indicator (PPLI)/Cooperating Unit (CU) registration, Basic Tactical Data Link (TDL), Peer-to-Peer (P2P) communications and composite track bridging, Cooperative Engagement Capability (CEC) compatibility, Combat ID, Link 16, and IFC, TDL/P2P forwarding Threads.
- Participated in review for Navy Engineering Change Proposals for Distributed Weapon Control (DWC) and Tactical Data Link (TDL) prior to Joint SIAP System Engineering Organization (JSSEO) submission.
- Participated in SIAP Tactical Data Link (TDL) Rapid Capability Insertion Process
  (RCIP)/Enterprise Solution\_meetings to discuss RCIP for input as an enterprise solution
  for developing TDL adaptation layer functionality for IABM. Evaluation of costing and
  timeline ongoing.
- Continued to review input to JSSEO IABM IDD relative to the sensor interface domain; continued discussion of possible common Navy design for adaptation layers.
- Coordinated system configurations, prepared system architecture drawings and updated Information Assurance documentation in preparation for the integration of the APS-

- 145/IFF/NAV Sensor Adaptation Layer (SAL) to the E2 SIAP test bed to be conducted in January 2007.
- Led weekly PMA-231 SIAP Integrated Product Team (IPT) Software Team meeting. with main emphasis on developing schedules, assigning tasking and directing design of software products
- Participated in weekly JSSEO / Beta tester technical interchange meetings to discuss problems and defects discovered in the building and testing of the IABM.
- Participated in SIAP TDL Rapid Capability Insertion Process (RCIP)/Enterprise Solution meetings to discuss RCIP for input as an enterprise solution for developing TDL adaptation layer functionality for IABM. Evaluation of the cost and timeline is ongoing.
- Conducted weekly PMA-231 SIAP Integrated Product Team (IPT) Systems Integration and Test Leads meeting to ensure progress in tasking and to provide inputs to Open Architecture (OA) Weekly Status report.
- Updated draft release of Scenario Description Document Version 1 to incorporate comments received from Navy SIAP Metrics/Scenario working group.
- Built both the Windows and Linux version of IABM Timebox (TB) 35 to analyze impact of the introduction of the Plug-In architecture to E-2 developed sensor domains, test driver tools and automated analysis tool suite.
- Participated in the AODS Demonstration on 19 December 2006 where AODS was demonstrated for the NSWC - Dahlgren for consideration to coordinate use of Air Intercept Control (AIC) software being developed by NSWC Dahlgren under an SBIR contract. AODS automatically correlates Air Tasking Orders (ATOs) to tracks and provides cueing on Airspace Control Order (ACO) related events.
- Participated in the Technology Exchange Meeting telecon with Lockheed-Martin to discuss AODS-related technologies and associated efforts in work at Lockheed-Martin.
- Participated in the Navy T&E WIPT Charter Review on 22 December 2006 where the E-2 SIAP IPT provided comments to Navy on the Navy SIAP T&E WIPT Charter including discussion of voting membership, WIPT and Working Group organizational structure, and team roles and responsibilities.
- Conducted testing from 11 to 22 December 2006 to analyze the interim 2D solution provided in IABM Timebox (TB) 32.3.1 in conjunction with the SIAP Joint Program Office (JPO) 2D Tiger Team. Efforts in support of this testing included development of test scenarios including modifications to reflect more real world targets, generation of sensor accuracy matrices, development of several sets of input files, root cause analysis of Kinematic Data Fusion (KDF) functionality and development of automated metrics and graphics generation tools. Conducted preliminary analysis on two sets of test scenarios.
- Briefed the SIAP Joint Program Office (JPO) 2D Tiger Team Status Meeting on 21 December 2006 on findings from preliminary assessment of the interim 2D solution in Time box 32.3.1.

- Continuing integration with other MSET members and the Dahlgren test site.
   Modifications of the E-2 High Level Architecture (HLA) TB32.3.1 IABM are being completed at Patuxent River and integration tests of the modifications are being done at Dahlgren. Capturing data of runs to analyze for integration purposes.
- Conducted an Air Force, Army, and Navy collaborative assessment of the maturity and capability of a modified Timebox 32. Simulations of IABM-running were hosted at colocations at the Dahlgren test facility communicate via P2P and Link-16 simulations. This architecture will be adapted for the Spring 07 Defense Acquisition Board (DAB) IABM/SIAP demo.
- Participated in JSSEO 2D/3D presentation of E-2C 2D test results / analysis and discussion of test results and implications of results relative to acceptability of the 2D augmentation algorithms.
- Provided interface between SIAP Integrated Product Team (IPT), SIAP Integrated
  Architecture Behavior Model (IABM) System Architect and Lockheed Martin AODS
  contract engineer to facilitate technical communication and arranged Technical
  Interchange Meeting (TIM).
- Participated in Air Operations Decision Support (AODS) TIM discussion with IABM Lead System Architecture and Lockheed Martin SME for the purpose of establishing common understanding of IABM architecture and philosophy.
- Conferred with Mr. Doug Crowe on Dr. Van Cleaf's request for Assistant Secretary of the Navy, Technical (ASNT) Technology Insertion information/clarification.
- Monitoring JSSEO for desired time for discussion pertaining to E-2 Electronic Surveillance interface layer sensor requirements. This effort is delayed, as JSSEO requires additional time to complete supporting documentation.
- Participated in SIAP Test Team discussion addressing JSSEO test and response coordination mechanism for E-2 System Test and Evaluation Laboratory (ESTEL) Technical Observation Reports (TORs) for the purpose of installing an effective and efficient two-way TOR report / retest protocol.
- Submitted the SIAP Test Bed System Security Authorization Agreement (SSAA) on 19
  December 2006 to the Information Assurance Program Office (IAPO)/7.2.6 to receive an
  authority to operate.
- Continue to work on the SIPRNet accreditation for the Network NCW Laboratory.
- Continue IA effort on Trident Warrior 07 (TW07).
- In the process of completing Memorandum of Record (MOR) between NCW Laboratory and ESTEL regarding SIAP Test Bed assets.
- Continue to set up the NCW Lab.
- Managed the inventory for the safes at the NCW trailer.
- Continue to track IA projects through the MyNAVAIR website.
- Attended the monthly NAWCAD Information Assurance Officer (IAO) Training and Awareness Meeting at NAS Patuxent River, MD.

- Attended and reported on SIAP progress for the ESTEL weekly status meetings.
- Participated in SIAP IPT weekly meetings.
- Participated in daily JSSEO Tech Director stand-up status update.
- Provided JSSEO Four Week Look Ahead calendar for weekly SIAP project distribution to the Hawkeye SIAP Team.
- Reviewed SIAP draft TEMP.
- Participated in PMA-231 SIAP RRB meeting to provide updates to program development and planned risk mitigation for vetting of E-2 pathfinder program risks to the Navy SIAP RRB and JSSEO Risk IPT.
- Identified E-2/SIAP personnel attendance at JSSEO WIPTs.
- Provided interface between JSSEO Partner Program Interface Team (PPIT) and NAVAIR/E-2 points of contact (POCs)
- Provided E-2/SIAP POCs reminders to provide comments on documents and minutes of JSSEO PPIT Meetings
- Provided NAVAIR and Contractor representatives assistance accessing and visiting JSSEO for meetings, TIMs, and other discussion.
- Participated in SIAP Test Team teleconference to address strategies for managing test documents and documentation.
- Reviewed Navy SIAP Test and Evaluation WIPT Draft Charter.
- Participated in Navy SIAP Docs WIPT meeting.
- Provided E-2/SIAP updates and changes for and participated in Services Review of the IABM technical sessions
- Participated in the SIAP NAVSEA/JPEO(T) Funding Review on 18 December to discuss the E-2 SIAP funding status review with NAVSEA/JPEO. This will be elevated for review with PEO IWS/JPEO to reconcile FY07 shortfall in funding received for PMA-231 SIAP support.
- Participated in the SIAP JPEO PEO(T) Stakeholders Meeting on 19 December with PEO(T) and the Joint Program Executive Office. Discussion focused on Navy governance structure. Brief to PMA-231 and PEO(T) leadership pending.

# 2.0 WORK PLANNED FOR NEXT PERIOD:

- Continued participation in the review and adjudication of the Derived System Requirements List (DSRL) to complete Integrated Architecture Behavior Model (IABM) System Functional Review (SFR) exit criteria.
- Continued participation as members of the Navy SIAP Metrics/Scenario Working Group.
- Participation in the Navy T&E WIPT.
- Continue to track IA projects effecting NCW and SIAP through the MyNAVAIR website.
- Attend and report on SIAP progress for the ESTEL weekly status meetings.
- Participate in SIAP IPT weekly meetings.

### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$359,432

Funds Expended to Date

\$ 40,907

Funds Remaining to Date

\$318,525

Respectfully Submitted:

Valerie Hayes

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine



Ms. Arnetta L. White Naval Air Depot PSC Box 8021 Cherry Point, NC 28533-0021

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-0022/0023, Information Technology, Software Reliability, and Resource Analysis Program Life Cycle Support

Performance Period: 2 through 29 October 2006

## 1.0 WORK PERFORMED THIS PERIOD:

# • Web Development and WebSphere analysis and support:

- WebSphere 5.1.x support for MPT-STP and QAWB systems.
- WebSphere 6.x support for Network Supply system.
- Provided Http server and security support for MPT-STP and QAWB systems.
- Several PMR's (trouble tickets) opened, troubleshot, and resolved for WebSphere and security issues.
- Planning and research for WebSphere 6.x on Solaris 10 x86 units for MAXIMO system.
- Planning and research for WebSphere 6.x Windows Server 2003 for Network Supply Application
- Several PMR's (trouble tickets) opened, troubleshot, and resolved for WebSphere application and security issues.
- Support for MPT-STP and QAWB testers.
- WebSphere 5.1.x analysis for MPT-STP and QAWB systems.
- WebSphere 6.x analysis for Network Supply and MAXIMO applications.
- Http server and security for MPT-STP, QAWB, Network Supply and MAXIMO applications.
- Planning and research for WebSphere 6.x on Solaris 10 x86 on four x86 units for MAXIMO system.
- Ongoing PMR opened with IBM for WebSphere memory leak issue.
- Support for MPT-STP and QAWB testers.
- Developed 5sPlus One Chart and search page for Airspeed Metrics Project.
- Developed EIP Plan of Actions and Milestones POAM.
- Created Airspeed Metrics website In GES Portal.
- Added report to MCE and Added JavaScript.
- Conducted Phase 1 Testing of MCE. Updated CMMI documentation in Serena.

- Gathered Requirements from Data warehouse personnel through meetings. Developed System Subsystem Design Description SSDD for CP Airspeed Metrics projects wrote System Subsystem Design Description SSDD for Manufacturing Cost Estimate and uploaded document into Serena.
- Began Development of Web user interface utilizing Coldfusion for Manufacturing Cost Estimate utilizing Serena for configuration management.
- Continued development of a NAVAIR metrics web application for the 4.0C competency.
- Continued development of the ISSFF Administration tool for the 4.0C competency.
- Continued design and development of the ISSFF look and feel.
- Finished writing Excel Macros to pull data from large spreadsheets for load into Airspeed Metrics database.
- Ran several previously written SQL scripts to track data and populate tables that support the web input portion of the AIRSpeed Metrics Project.
- Wrote PL/SQL scripts to pull information from several different sources for availability in the Phasing Plan portion of the Airspeed Metrics Project.
- Analyzed data within the Airspeed charts including documenting and tracking the issues to their sources and providing solutions.
- Refined code for input pages on the Airspeed Metrics Phasing Plan Web and enhanced programming based on requirements from the functionals at NAVAIR.
- Continued work on conversion of Oracle Reports to 10g and Oracle forms to ColdFusion.
- Assisted with programming 10g Forms and Reports.
- Assisted with programming Coldfusion front end for 10g Reports.

# Unix System Administration analysis and support:

- Support for HP-UX, Solaris, and RedHat Linux systems.
- Support for Oracle DBAs.
- Installed RedHat Linux Enterprise Edition on one x86server to support test and development of WebSphere Network Deployment to support MTP-STP QAWB applications.
- Installed Solaris 10 x86 on four x86 servers to support test, development, and production of Web Sphere Application server 6.x for MAXIMO application.
- Installed Solaris 10 x86 on four x86 servers to support test, development and production of Web Sphere Application server 6.x for MAXIMO application.
- Support for WebSphere 5.1 and 6.0 on Linux, Solaris 10 x86 and Windows Server 2003 platforms.

# • Windows System Administration:

• Support for Windows Server 2003 (updated and configured server for Network Supply application).

### Database Administration:

- Updated and added Triggers to 36 IBAS reports for MRPII using Oracle Forms and reports and recompiled the reports.
- Created new SQL server database for "PC Configuration" web application.
   Added roles for security closed 4235 and posted application to production.
- Wrote and ran SQL Server scripts to migrate production databases to new server.
- Created backup jobs for new SQL Server databases.
- Continued configuration maintenance of Oracle 10g Application servers.
- Patched Oracle 10g Application servers and Infrastructure.
- Configured Oracle 10g application server as necessary in report and form conversion process for Production Reporting Environment.
- Administered Users for various databases.
- Server Certificate Requests.
- Researched scripts on changing user information on windows.

# Participated in the following meetings. The meetings dates and descriptions are as follows:

- 3 October 2006: Planning and estimating for Network Supply system.
- 16 October 2006: Planning and estimating architecture for MAXIMO system.
- 17 October 2006: Telephone conference with MAXIMO representative to verify proposed architecture.
- 27 October 2006: MTP-STP performance and architecture meeting.
- 11 December 2006: Status meeting for MAXIMO project.
- Participated in several ISS-FF development/support meetings with 4.0C.
   Attendees: John Eubanks, Bill Jolley, Stephen Barrow, David Powell,
   Steve Groninga
- Participated in Metrics Core Team Member meeting discussing the Metrics Web Site. Attendees: John Eubanks, Lori Glass, and Steve Groninga

### Other Accomplishments

- Completed data entry.
- Collected, categorized, maintained, checked-out software media, and licenses.
- Maintained spreadsheet records of all NMCI legacy, NMCI Move, Add, and Change (MAC) records, and Government IT related service requests.

- Maintained spreadsheet records of all Maintained and worked 4235 IT service requests and followed up with customer on service.
- Maintained NMCI transition-related documentation and the NMCI Team service request mailboxes electronic MAC requests that averaged out to approximately 20 legacy MAC requests per day.
- Prepared status reports on the software and documentation under the contractor's control on an as-needed basis.
- Prepared MAC service requests for submission to the NMCI vendor both legacy and NMCI.
- HEAT approved daily to activate MAC service requests.
- Heavy daily email and telephone correspondences approximately 3-4 hours a day.
- Prepared documentation as requested by the customer.
- Assumed duties of creating all IT task orders in the FEMA program.
- Managed and updated NMCI website daily.
- Prepared and delivered the 4 December 2006, 11<sup>th</sup> NMCI Move Meeting agendas.
- Facilitated the 4 December 2006, 11<sup>th</sup> NMCI Move Meetings. Prepared and delivered meeting minutes.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

- Web Development and WebSphere:
  - Continue WebSphere installation, configuration and support for various projects and systems.
  - MAXIMO site visit for installation and implementation scheduled for week of 8 January 2007.
  - Network Supply site visit for installation and implementation scheduled for mid-to-late January 2007.
  - Developing and Programming "Manufacturing Cost Estimate and Update"
    Web Application using Coldfusion, HTML and Oracle. This system allows
    external customers to input and track requests for manufacturing cost
    estimates and require well-defined user security as well as development of
    dynamic reports.
  - Will be developing and programming NADEP Directives Requirements/Process Improvement system.
  - Participate in the development/support of the ISS-FF application within 4.0C.
  - Continue to develop and design the NAVAIR Metrics website.
  - Continue to complete any web development issues directed by the government requesting agency.
  - Continue Oracle Application Server Upgrade to Oracle 10g Release 2.
  - Work on Design of Oracle RAC and GRID.
  - Automate Phasing Plan pull solution through script.
  - Continue work on Oracle Forms and Reports conversion using 10g AS and Coldfusion.

- Creation of application to create and consume web services for NAMDRP and MRP II.
- Continued work on development of a pilot in the Oracle Form and Report Conversion from one of the most difficult Forms/Reports for a baseline in development time for all Forms and Reports housed locally.
- Continue to develop Phasing Plan/CHINO Web Application to use Oracle User Permissions instead of a user table for increased security.
- Continue to track and analyze data for Airspeed Metrics Project.
- Continue development Input Pages for the Cycletime Reduction Lean effort for Aircraft, Engines and Components.
- Transition ADR/QDR Web Page to an automated source (NAMDRP).
- Provide information and technical support for PMR brief.
- Continue to run processes for pulling and manipulating data out of source systems for availability in the Airspeed metrics Charts.
- Assist in building of Database and Application servers Linux Redhat and Oracle 10g.
- Unix System Administration:
  - Continue UNIX and Windows Support as required.
  - Continue Linux and Solaris 10 x 86 supports as required.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date:

\$398,240

Funds Expended to Date:

\$38,064

Funds Remaining to Date:

\$360,176

Respectfully Submitted:

Valerie Haves

Wyle Laboratories, Inc.

Approved by:



Ms. Lisa Tindell Naval Surface Warfare Center Panama City NSWC-PC 110 Vernon Avenue

SUBJECT: Monthly Status Report Under Contract TAT RI-06-0023/0024, Littoral Combat Ship (LCS) Mission Module (MM) Engineering Support

Performance Period: 1 October 2006 through 31 December 2007

## 4.0 WORK PERFORMED THIS PERIOD:

- Initial meeting was held to determine plan of action for future growth of the
  program, facilities, and systems of the Littoral Combat Ship (LCS). Senior level
  meetings will continue throughout this contract period to assist the NSWC PC
  Program Manager and his staff.
- Mr. Brad Foret, Wyle Laboratories:
  - Traveled to Panama City Beach, Florida and set up residence. Obtained contractor's badge for base access/vehicle pass.
  - Developing EMI test plan for Littoral Combat Ship (LCS), Multiple Vehicle Communications System (MVCS).
  - Working with Micro Systems out of Ft. Walton Beach, Florida to interface the Iridium Radio with a KIV-7M.
  - Attended weekly meeting and telephone conference.
  - Met with Dam Neck, Virginia personnel.
  - Research/Obtain Iridium radio interface information.
  - Research connectors and back-shells for LCS MVCS serial and network cabinet connections.
  - Attend L22 monthly meeting.
  - Attend weekly status meeting and telephone conferences.
  - Attend weekly procurement meetings.
  - Attend EMI meeting with Dahlgren.

- Develop equipment/parts list for vehicle simulator.
- Assisted integrating equipment and cables into RMV DDG rack for LCS 1 installation.
- Began learning how to terminate fiber optic cable connections.
- Research/Obtain Iridium radio pricing information.
- Research/Obtain KIV-7M Cryptographic Device pricing information.
- Research/Obtain KIV-7M Cryptographic Device interface information.
- Research internal strain relief for LCS MVCS serial and network cabinet connections.
- Moved development cabinet/rack to it's proper location.
- Continue to develop equipment/parts list for vehicle simulator.
- Continued to work with local and network NMCI personnel to fix computer issue.

### Triton Services:

- No meetings held with senior management at NSWC PC due to unavailability and prior program commitments.
- Held telephone conference with Deputy Department Head for the Littoral Combat Ship (LCS) Mission Module (MM) Engineering Support. Result of conversation revealed that the LCS Program sponsors in Washington, DC were making budget decisions due to funding cuts in this program. Results of this review will not be known until the end of January or the February 2007 timeframe.

## 2.0 WORK PLANNED FOR NEXT PERIOD:

- Triton Services:
  - Plan to follow up with the Deputy Department Head LCS MM to determine if program budgets have been allocated for the effort at Naval Surface Warfare Center Panama City (NSWC PC).

## Mr. Foret:

- Continue developing an EMI test plan for Littoral Combat Ship (LCS), Multiple Vehicle Communications System (MVCS).
- Continue working with engineering on interfaces for the systems installed in the Littoral Combat Ship (LCS), Multiple Vehicle Communications System (MVCS).
- Continue developing equipment/parts list for remote vehicle simulator.
- Order parts to build remote vehicle simulator.

#### 3.0 **PROJECT FUNDING STATUS:**

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$55,634

Funds Expended to Date

\$34,305

Funds Remaining to Date \$21,329

Respectfully Submitted:

Valerie Hayes

Wyle Laboratories, Inc.

Approved by:



Lance Hernandez
Naval Air Systems Command AIR 4.1E
Bldg 2185, Unit 6, Suite 2100-E4
22347 Cedar Point Road
Patuxent River, MD 20670-1161

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-0024/0025, Joint Council on Aging Aircraft Organizational and Aeronautical Systems Program Life Cycle Support

**Performance Period:** 

1 October 2006 through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

- Updated and maintained the JCAA web site.
- Developed agenda and facilitated the JCAA weekly Meet-Me conference call each Friday at 1000 Hrs.
- Attended the DoD Maintenance Symposium and Exhibition Conference on 23 through 26 October 2006 in Reno, Nevada. JCAA provided a ten foot booth.
- Developed agenda, coordinated speakers and informed attendees of the JCAA November 2006 meeting.
- Participated off and on over six days total with Wyle laboratories in requirements and design discussions for a new JCAA web site to be operational by the first of next year. Presented an overview briefing of the new/proposed JCAA web site to Patuxent River Aging Aircraft IPT personnel.
- Participated in Aging Aircraft conference 2007 telephone call to coordinate suspense dates, abstract reviewers, actions, and status of speakers.
- Hosted several organizational meetings to include personnel from DLA, Navy and contractors for a total of approximately 100 visitors.
- Coordinated graphics, exhibitor personnel, electrical requirements, tables, chairs, carpet and other acutriments for the Defense Logistics Agency (DLA) exhibit at the Defense Manufacturing Conference.

## Wyle Laboratories, Inc.

- Continued planning for Aging Aircraft Conference in 2007.
- Initiated and completed graphics booth redesign and production.
- Attend Aircraft Structural Integrity Program (ASIP) Conference.
- Hosted meetings at JCAA Central Office for Aging Aircraft IPT personnel, DLA, OSD.
- Troubleshooted network server systems, administered user accounts.
- Edited and forwarded JALC Conference presentation materials.
- Conducted planning and presentation prep and review for JCAA Meetings.

- Researched and distributed Capital Hill activities and congressional committee proceedings of interest/application to JCAA and AAIPT.
- Hosted JCAA Primary Member meeting.
- Hosted Corrosion Steering Group meeting.
- Hosted Technical Paper Review for 2007 Aging Aircraft Conference; screened 294 papers.
- Supporting continued planning for Aging Aircraft Conference in 2007; built and distributed contact database.
- Collected and distributed "new versus legacy" cost of aging assessment as part of Strategic Focus documents.
- Updated JCAA World Wide Web site and public affairs CDs, materials and graphics.

# **AT&T Inputs:**

- Updated and maintained the JCAA web site.
- Developed agenda and facilitated the JCAA weekly Meet-Me conference call each Friday at 1000 Hrs.
- Participated in another Aging Aircraft conference 2007 telephone call to coordinate suspense dates, abstract reviewers, actions, status of speakers, etc.
- Hosted several organizational meetings to include personnel from DLA, Navy, and contractors for a total of approximately 75 visitors
- Developed the JALC VTC briefing to be presented 7 Dec 2006.
- No travel this reporting period.
- Sent copies of several deliverables (briefings and DLA brochure) to Wyle Laboratories, Inc.
- Finished JALC briefing for 7 December 2006 VTC and attended same VTC in the NAVAIR Washington Liaison Office. JCAA did not receive any actions.
   Escorted Brig Gen Steve Gross, USAF to VTC. He is the USAF rep for Lt Gen Houston (AFMC).
- Unpacked and inventoried materials from DMC 2006 conference.
- Hosted the Annual Aging Aircraft Abstract Review meeting on 12 through 13
  December 2006. Approximately 280 abstracts were submitted for the conference
  but they had to be down selected to 160 to fit into a 3-day conference. At the end
  of the session individual tracks with session co-chairs were assigned and a rough
  conference agenda to include speakers was drafted.
- Conducted web meeting for DMSMS group to discuss a new hand held tester to determine lead content in circuitry.
- Drafted the JALC VTC briefing to be presented 4 January 2007.
- Hosted two meetings for DLA on 20 December 2006, both involving joint efforts on alternative fuels. DLA has received funding for implementing military projects that are more energy efficient and is initiating a program to enhance batteries for general purpose equipment, i.e. battery operated fork lifts, etc.
   Defense Supply Center Richmond is military purchasing center for batteries.
- Added up total visitors to the JCAA Central Office during 2006 and total came to almost 1300 guests.

#### 2.0 WORK PLANNED FOR NEXT PERIOD:

## Wyle Laboratories, Inc.

- Support continued planning for Aging Aircraft Conference in 2007.
- Continue graphics booth redesign and production for Aging Aircraft Conference in April 2007.
- Review and publish Strategic Focus Area assessment with Chairman JCAA.
- Host meetings at JCAA Central Office for Aging Aircraft IPT personnel, DLA, OSD.
- Maintain network server systems, administer user accounts, and assess environment for update of computer work stations that are now over 2.5 years old.
- Update JCAA World Wide Web site materials and graphics.
- Redesign, update and produce small JCAA information CD's.
- Support updates of JALC Conference presentation materials.
- Continue planning and presentation preps and reviews for JCAA Meetings.
- Research and distribute Capital Hill activities & congressional committee proceedings of interest/application to JCAA and AAIPT

# **AT&T Inputs**:

- Attend and facilitate the JCAA meeting on 24 and 25 January 2007 at the Central Office. Meeting objective is to set goals and objectives for 2007.
- Attend the JALC VTC on 4 January 2007 and prepare for next JALC conference on 7 and 8 February 2007 at NASA, Huntsville, Alabama.
- Monitor and report on JCAA initiatives as needed.
- Coordinate upgrades to new JCAA web site.

# 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funding Allocated to Date: \$493,886 Funding Expended to Date: \$112,518 Funds Remaining to Date: \$381,368

Respectfully Submitted:

Valerie Hayes

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine RIAC Director



Requesting Activity and Address: George J. Rumford TENA SDA 1225 South Clark Street, 12<sup>th</sup> Floor Arlington, VA 22202-4371

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT RI-06-0025/0026, Test and Training Enabling Architecture (TENA) Software Development Activity (SDA)

**Performance Period:** 

27 November through 31 December 2006

### 1.0 WORK PERFORMED THIS PERIOD:

# **BAE Systems:**

- Exhibit at ITEA Modeling and Simulation 11 through 15 December 2007.
- TENA Tutorial at ITEA M&S.
- TENA Paper presented at ITEA M&S.
- TENA SDA Meeting in Washington, DC 8 through 9 December 2007.
- Logical Range Object Model Tool (LROM) update for Alaska Red Flag and Talisman Sabre Events.
- Graphics update for TENA Exhibit.
- TENA Monthly Report Prepared.
- Researched Hardware in The Loop (HITL) facilities for Infrared Countermeasures (IRCM) Study.
- After Action Review (AAR) Tasking for JFCOM.
- Instrumentation tasking for JFCOM.
- Attended weekly IO range Planning Meeting weekly.

### **SSI Solutions:**

- Attended I/ITSEC 2006 Conference, Orlando, Florida 5 through 6 December 2006.
- Participated in PMA-205 sidebar to discuss TACTS/TENA demo report and JNTC efforts at MAWTS-1. Meeting was hosted by MAJ Velazquez (TECOM) and LTC Schueller (PMA-205 Maritime Aviation Training Systems). A very brief overview of the demonstration was presented but no planning for future expansion. Topics that were discussed:
  - O Marine Aviation Networks architecture being developed by Veraxx. Veraxx was awarded contract to perform an upgrade to the Tactical Environment Network (TEN). This rehost of the MCAS New River UH-1N APT consists of the conversion of a multiplatform / multiprocess Windows based system to a single platform / single process Linux system. This is basically a black box HLA gateway.
  - Navy Continuous Training Environment (NCTE) driven by operational requirements, which must drive technology, and the need to train at homebase.
  - o Multi-Purpose Supporting Arms Trainer (MSAT) MSAT display system will train Forward Air Controllers (FACs), Joint Terminal Attack Controllers (JTACs), Forward Air Controllers Airborne FAC(A) and Forward Observers (FOs) in staff and joint exercise training events. MSAT is designed to include all aspects of artillery, mortar, naval, and Close Air Support. This training includes the use of Joint approved Joint Close Air Support (JCAS) tactics, techniques and procedures and observed fire procedures for Naval Surface Fire Support (NSFS), artillery and mortar fires. MSAT will enable FACs, JTACs, FAC(A)s and FOs to train in stand-alone or interoperable modes without the use of live ammunition or range/training areas.
  - o Availability of networks, e.g. permanent connectivity.
- Met with DRS personnel to discuss their I/ITSEC presentation "Achieving Standardized Live-Virtual-Constructive Test and Training Interactions via TENA". Follow up discussions are planned.
- Attended CVN-21 Program Warfare System (WS) Test and Evaluation Integrated Process Team (WS T&E IPT) working group meeting to present and discuss JMETC capabilities in support of interoperability testing (13 through 14 December 2006, Suffolk, VA). JMETC team included Mr. Skip Mr. Buchanon, Mr. Frank Barone, Mr. Tom DeSelms, Mr. Kevin Alix and Ms. Sally Halstead; also present were Mr. Heilman and Mr. Marcus Makarehchi from the InterTEC project. Discussion topics:
  - Rob presented an overview of InterTEC tools and infrastructure. This
    kicked off a lengthy discussion of sites and networks for upcoming
    CVN-21 and InterTEC events. Additional review of applicable

mission threads also mentioned. CVN-21 need for tools, e.g. scheduler, and repository.

- JITC presentation had been made the previous day, but no mention of any collaboration with JMETC.
- Mr. Kevin Gerald presented the CVN Mission Level Test Strategy based on ORD. Near-term test planned for March 2007.
  - DTA2i P2 objectives to test infrastructure and identify shortfalls (e.g. latency).
  - Dry run scheduled for 12 through 21 March 2007; Test 22 and 23 March 2007.
  - Mission threads include AAW and Strike.
  - Systems include GCCS-M 4.0.2, FBCB2 (generates enemy spot report), C2PC, and JMPS 1.2.5.
  - o Tools include sharepoint, netmeeting, and VIPER (for VTC).
- Mr. Buchanon presented overview of JMETC. Discussed possible parallel effort in site connectivity and tools (e.g. JIMS).
- Follow on monthly telephone conference alternating with face-to-face meetings planned.
- Mr. Randy Guettner presented the Interoperability Certification Committee (ICC). The ICC is a single collaborative approach for Navy interoperability certification.
- Mr. Jim Setzer presented the CVN-78 IWS T&E Schedule. They are still
  discovering test milestones. Weapons and C2 systems will have IP interfaces,
  which will make it easier to do distributed testing. Latency is an issue for
  their network infrastructure.
- Virginia Advanced Shipbuilding and Carrier Integration Center VASCIC –
  Northrop Grumman Newport News along with electronic system suppliers,
  software suppliers, U.S. Navy laboratories and program representatives, and
  Virginia institutions of higher learning, develop new technologies for aircraft
  carriers and advanced shipbuilding.
- Primary systems for mission level interoperability testing:
  - Ship Self Defense System (SSDS) SSDS will be an integration of all the ship's self-defense systems and will include multi-function radar, Advanced Integrated Electronic Warfare System and Infrared Search and Track system (IRST).
  - Common Data Link Management System (CDLMS) the goal of the C2P/CDLMS is to collect, manage, and transmit information that is essential to Navy and Joint Forces tactical operations. C2P/CDLMS is nearing the end of its life cycle. The new Multi-TADIL Processor

- (MTP) will take advantage of COTS h/w and s/w architecture and will replace the C2P/CDLMS. MTP will begin to be fielded in the 2006 time frame. [from NGC website]
- Ocooperative Engagement Capability (CEC) CEC system provides the capability for CEC-equipped ships to engage targets using sensor data from other CEC-equipped units such as ships, aircraft, and land-based sensors, even in a jamming environment. The fusion of sensor data from multiple radars significantly improves the consistency, completeness, and coherency of the tactical picture. This can increase the range at which enemy targets can be engaged. It also provides a common air defense picture that allows operational commanders in the battle group to make more effective decisions on force employment.
- o Global Command and Control System Maritime (GCCS-M).
- o Shipboard Gridlock System with Automatic Correlation (SGS/AC).
- Produced a draft matrix of sites vs. programs; including known relevance and importance and current network connectivity (DREN, SDREN, DISN).
- Participated in User Support Team telephone conferences and meetings.
- Meeting to discuss FY07 activities held in Arlingon, Virginia on 19 January 2007.
- Provided status on JNTC and IOR for telephone conferences held on 7, 14, and 21 December 2006.
- Participated in IO Range Collaboration telecom (20Dec). Discussion topics:
  - o Cross Domain Repository IOR funded study (2Q FY07).
  - o IOR & IOJMEM Leadership meeting to determine how to collaborate w/ DOT&E on services to customer.
- PACAM out of cycle event (April 2007). Use of TENA video distribution system possible. Additional requirement for video timestamp (overlay).
- Provided TENA Tools Requirements and Tools Assessment Process documents for IOR review (as aide in assessing visualization tools).
- Network appliances, e.g. WARP, Cloudshield; differences in accreditation, levels of maturity. Forwarded AF-ICE MCSOA overview.
- Plans for bi-weekly telephone conference.
- JNTC Talisman Saber 2007 Event Support. Coordinating TENA support with Mr. Glenn Conrad and Mr. Greg Schultz.

- Discussed orientation conversion issue with RI developers and Cubic.
   Consensus that documentation was incorrect but application code modifications (Cubic) will be required prior to event.
- Coordinating discussions on the JNTC TENA Middleware Performance Test Bed with Mr. Steve Bachinsky and Mr. Rich Hawley (JATTL).
- Reviewed draft test plan; require more details on appropriate test parameters and procedures. Telephone conference scheduled for January 2007.

### 2.0 WORK PLANNED FOR NEXT PERIOD:

## **BAE Systems:**

- Participate in TENA 34<sup>th</sup> Architecture Management Team (AMT-34) Meeting 10 through 11 January 2007 in Virginia Beach, Virginia.
- Participate in Joint Mission Environment Testing Capability (JMETC) Offsite Meeting on 18 through 19 in Rosslyn, Virginia.
- Logical Range Object Model Tool (LROM) update for InterTEC.
- Graphics update for TENA Exhibit and COMOPTEVFOR exhibit.
- TENA Monthly Report Prepared.
- Research Hardware in The Loop (HITL) facilities for Infrared Countermeasures (IRCM) Study.
- After Action Review (AAR) Tasking for JFCOM.
- Instrumentation tasking for JFCOM.
- Attended JMETC VPN and IO range Planning Meeting weekly.

#### **SSI Solutions:**

- Continued collaboration with IO Range for PACOM event via bi-weekly telephone conference.
- Coordinate and lead TENA Security IPT meeting on 9 January 2007 held in Virginia Beach, Virginia. Sally Halstead, Wyle Laboratories, Inc. providing administrative support. Prepare agenda and arrange for guest speakers.
- Attend TENA AMT-34 held on 10 through 11 January held in Virginia Beach, Virginia. Prepare and present out brief from Security IPT meeting.

- Continue support coordination with Glenn Conrad and Greg Schultz for JNTC TS07 exercise; possible RI testing on West Coast in January; ET2 in Suffolk Virginia in February 2007.
- Setup monthly telecom with JNTC/JATTL personnel to exchange info/news on TENA support activities.
- Participate in User Support Team telephone conference and meetings on 18 through 19 January 2007 in Arlington, VA. Maintain tools wiki.
- Continue coordination effort on JNTC TENA Middleware Performance Test Bed via telephone conference and meetings (TBD).
- Continue participation with JNTC Architecture and Technical Standards group. Quarterly Conference scheduled for 24 and 25 January in Suffolk, Virginia.
- Continue participation with JNTC Joint Rapid Scenario Generation (JRSG) Integration and Development Team. Working Conference scheduled for 6 through 8 February in Suffolk, Virginia.
- Continue support to JMETC/CVN-21 as requested. Telecons/meetings TBD.

#### 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date

\$638,754

Funds Expended to Date

\$ 1,301

Funds Remaining to Date

\$637,453

Respectfully Submitted:

Valerie Hayes

Wyle Laboratories, Inc.

Approved by:



Mr. Doug England E-2 Foreign Military Sales Advocate P.O. Box 357058 San Diego, CA 92135-7058

SUBJECT: Monthly Status Report Under Contract HC1047-05-D-4005, TAT 033, Egyptian Air Force (EAF) Planned Maintenance Interval (PMI) Analysis

Performance Period: 27 November through 31 December 2006

## 1.0 WORK PERFORMED THIS PERIOD:

• Commenced the preparation of Egyptian Air Force Planned Maintenance Interval One (PMI-1) Requirements Listing.

## 2.0 WORK PLANNED FOR NEXT PERIOD:

- Continue the development of documents.
- Host documentation update meetings with Fleet Readiness Center South West (FRCSW), E-2 FMS Advocate's office.
- Deliver requirements listing to FRC, E-2 FMS Advocate's office.

# 3.0 PROJECT FUNDING STATUS:

The program financial status as of 31 December 2006:

Funds Allocated to Date \$84,000 Funds Expended to Date \$9,606 Funds Remaining to Date \$74,394

Respectfully Submitted:

Valerie Hayes

Wyle Laboratories, Inc.

Approved by:

Loseph T. Hazeltine RIAC Director