



DEPARTMENT OF THE NAVY
PORTSMOUTH NAVAL SHIPYARD
PORTSMOUTH, N. H. 03804-5000

IN REPLY REFER TO:
5239
Ser 1230/021
14 Jul 2011

From: Commander, Portsmouth Naval Shipyard
To: Commander, Naval Sea Systems Command (SEA 04L)

Subj: WEMACS INITIAL OPERATING CAPABILITY

Ref: (a) OPNAVINST 4790.16a; Condition-Based Maintenance Policy
(b) NETWARCOM Ltr 5239 Ser ODAA/1386 of 21 Feb 08; Designation as PIT for WEMACS
(c) DoDI 8510.01 of 28 Nov 2007; DoD Information Assurance Certification and Accreditation Process (DIACAP)

1. This letter documents the Initial Operating Capability (IOC) of the Wireless Equipment Monitoring and Control System (WEMACS) at Portsmouth Naval Shipyard (NAVSHIPYD PTSMH), and addresses actions required to reach full operating capability (FOC).

2. WEMACS began as an Office of Naval Research (ONR) Small Business Innovation Research (SBIR) project at NAVSHIPYD PTSMH in 2006, and later transitioned to Naval Sea Systems Command (NAVSEA) 04 sponsorship. The goal is to provide the ability to monitor Shipyard capital assets, facilities and equipment in support of performing maintenance based on objective evidence of need, in accordance with directives of reference (a). Cranes are the initial focus and their inherent mobility necessitated the installation of a wireless network to deliver data to management, engineering and maintenance personnel. Sufficient assets are now being monitored and the system has matured sufficiently such that it can be considered to have reached IOC. Specifically:

a. SNAP2™ monitoring equipment installed on 17 cranes on an as-available basis, based on their need in production. Operational monitoring on seven cranes is complete, including one portal crane and one bridge crane with lift weight monitoring. Crane data is transmitted through a developer installed Fortress Technologies™ FIPS 140-2 secure wireless network, based on the Defense Information System agency Security Technical Information Guides in force at the time. Custom data acquisition and display software was developed to transfer data via that network to a pilot server, and provide local storage

Subj: WEMACS INITIAL OPERATING CAPABILITY

and display. The pilot server is being replaced by servers under Code 1230 control.

b. WEMACS designated as a Platform Information Technology system by Naval Network Warfare Command (NETWARCOM) in reference (b), approved in Department of the Navy Information Technology Portfolio Registry (ID # 22278) in May 2010, and approved in Department of the Navy Application and Database Management System (ID # 78840) in November 2010.

c. System pre-test Department of Defense Information Assurance Certification and Accreditation Process documentation, developer prepared in accordance with reference (c), signed out by key management in July 2010, submitted to NAVSEA 00I, and uploaded to NETWARCOM's Information Assurance Tracking System.

d. Network functional documentation (design information, equipment data sheets, installation instructions and guide), and software installation guideline, developer provided to NAVSHIPYD PTSMH in December 2010 and May 2011 respectively.

e. Wireless Intrusion Detection System (WIDS) installed and a technical refresh in process based on updated requirements.

f. Navy/Marine Corps Intranet (NMCI) interconnection provisioned, connection pending only completion of security testing and WIDS refresh.

g. Electronic Facility and Equipment Management (eFEM) system interface designed and tested on the pilot server with an in situ version of eFEM's Maximo database. Final eFEM interface design is awaiting Navy Systems Support Group (NSSG) action associated with the Lifting and Handling Module of eFEM.

h. Contracts for support and maintenance of WEMACS are funded and in contracting.

3. Based on the above, NAVSHIPYD PTSMH considers WEMACS to have achieved IOC.

Subj: WEMACS INITIAL OPERATING CAPABILITY

4. NAVSHIPYD PTSMH acknowledges and is pursuing the following actions necessary to achieve FOC:

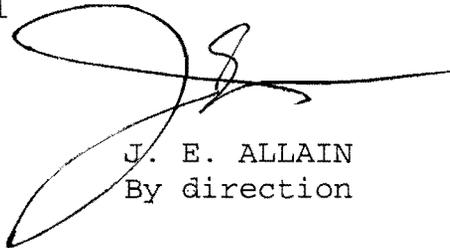
a. Security testing and submission to NAVSEA and NETWARCOM for Certification and Accreditation, submission expected August 2011.

b. WIDS technical refresh, expected to be operational August 2011.

c. Connection to NMCI, expected to be operational September 2011 (joint NAVSHIPYD PTSMH, NMCI action).

d. eFEM-WEMACS interface, expected Fall of 2011 (NSSG action).

5. The point of contact at Portsmouth Naval Shipyard is Mr. Philip Hourihan, Code 1224, Telephone 207-438-2293, philip.hourihan@navy.mil



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