

MATCALs – A 30-Year Life

Submitted by Ron Irwin

Introduction:

I don't know if you are interested in any updates to the MATCALs system for your web site¹, but I recently saw the attached articles. The first article² (which I think is dated sometime in 2014) says that MATCALs has been decommissioned and the last system is being shipped to SPAWAR, San Diego. The second article is an advertisement for a solicitation for ISEA of MATCALs and ATCALs in SPAWAR, San Diego. It was also sent out in 2014. The solicitation that included MATCALs must be to handle the teardown of the MATCALs systems. Thus, it looks like MATCALs has finally reached the end of its life cycle. It had a 30-year life cycle that seems remarkable since it still had 1980 hardware technology. It just goes to show that LM/UNISYS/SPERRY built a great system (hardware and software) and made it to last. The last update to the chronological support of MATCALs was to say the software support ended in 2010. The hardware support must have continued by SPAWAR until last year.

This paper copies the first article in total and just the second article synopsis.

Marines Upgrade Obsolete Mobile Radar System with Lighter Gear

By Emily Strotman, NAWCAD Public Affairs Communication Support

NAVAIR's Marine Corps Expeditionary Air Traffic Control (ATC) Systems Integrated Product Team completed the demilitarization of its Marine Air Traffic Control and Landing Systems (MATCALs) this fall.

Since its initial fielding to the fleet in the 1980s, MATCALs helping Marine ATC detachments guide aircraft in remote locations that had no such capability. The system began the decommissioning process in 2007, with the rollout of the Air Traffic Navigation Integration and Coordination System (ATNAVICS).



“The MATCALs legacy equipment is beyond its effective life cycle performance period,” said Chip Hibner, expeditionary air traffic control integrated product team lead for Naval Air Traffic Management Systems Program (PMA-213). PMA-213, under the Program Executive Office for Tactical Aircraft Programs (PEO(T)), is responsible for equipping these systems.

¹ <http://vipclubmn.org/sysmarines.html#MATCALs>

² <http://www.dcmilitary.com/article/20141218/NEWS14/141219872/marines-upgrade-obsol...> 4/19/2015

A smaller footprint

“Obsolescence issues and the Marine Corps mandate for a light and mobile force allowed PMA-213 to pursue the ATNAVICS system, which provides the same services but uses today’s technology and has a much smaller footprint,” said Hibner. “It would take three C-5 Galaxy aircraft — each with a 270,000-pound payload capability — to move one suite of MATCALs legacy equipment, but we can transport the ATNAVICS system using only one KC-130 Hercules aircraft — requiring only a 42,000-pound payload capability.”

ATNAVICS consists of a radar vehicle, an operations control vehicle and two tactical power generator trailers and can be set up in less than an hour. Currently, it has an airport surveillance range of 25 nautical miles, but it is getting an upgrade.

\$13 million in savings

In 2009, ATC along with industry partner Raytheon Integrated Defense Systems, began developing an engineering change proposal (ECP) — the management tool used to propose a configuration change — that will extend its airport surveillance range from 25 nautical miles to 60 nautical miles. The ECP will be implemented as part of the ATNAVICS depot restoration process that modifies or refurbishes the radar every five years, resulting in \$13 million in cost savings and enhancing the detachments’ mission effectiveness.

Increased surveillance capability

The increased surveillance capability will allow the needed range and altitude for Marine Air Traffic Control Detachments (MATCD) to provide continuous services in support of main air bases, expeditionary airfields, forward operating bases, forward arming and refueling points, and disaster and humanitarian response locations around the world. The improved system reached initial operational capability in September {sic. 2014} at a U.S. Marine air control squadron in Yuma, Arizona. The last suite of MATCALs is scheduled to be shipped back to the In-Service Engineering Activity, Space and Naval Warfare Systems Command Systems Center Pacific in San Diego, for demilitarization.

Emily Strotman provides contract communication support as an employee of Bowhead Professional Solutions, LLC.

U.S. Marine Corps photos here and on page 1 by Jon McNeil

Members of U.S. Marine Air Control Squadron One set up an AN/TPN-31A Air Traffic Navigation Integration and Coordination System (ATNAVICS) at Marine Corps Air Station Yuma, Ariz. The mobile all-weather radar system that provides air traffic control capabilities to Marine air traffic controllers is replacing Marine Air Traffic Control and Landing Systems (MATCALs), which has been used since the 1980s.



Engineering Services for ISEA MATCALs /ATCALs and Mobile Fixed /Tactical Fixed Systems³

Solicitation Number: N66001-14-R-0024 Agency: Department of the Navy

Office: Space and Naval Warfare Systems Command

Location: SPAWAR Systems Center Pacific

Synopsis:

Added: Oct 24, 2014 4:30 pm

Engineering Services Requirement for support of In-Service Engineering Agent for Marine Air Traffic Control and Landing System (MATCALs) / Air Traffic Controls and Landing Systems (ATCALs), and Mobile Fixed /Tactical Fixed Systems.

{Editor's Note: details of this item are not copied herein.}

The estimated release date of the solicitation is 06 January 2015.

Epilogue:

P.S. We have had periodic luncheons over the years with the people still living and in the area who worked on the software at Mare Island. Our last luncheon was on 4/18/2015 with seven of us meeting to enjoy a get-together. Gordy Erickson, Vern Sandusky, Dennis Larson, Scott Hovey, David Kreiss, Foster Poole, and I were in attendance.

Sincerely, Ron Irwin 707-226-8586 irwinron@att.net

Edited and formatted for the web by:

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For researchers, note that this is article #207 of <http://vipclubmn.org/documents.html>. Other MATCALs article links therein are #152, #153, & #154 posted in April and May of 2011.

³ Engineering Services for ISEA MATCALs /ATCALs and Mobile Fixed /Tactical Fix... Page 1 of 2