Marine Corps Losing Focus on Medium Lift Mission
EWS Contemporary Issues Paper
Submitted by Captain J.K. Springfield
To
Major Robert Revoir, CG 9
19 February 2008

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
19 FEB 2008		**00-00-2008 to 00-00-2008**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Marine Corps Losing Focus on Medium Lift Mission	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
United States Marine Corps,Command and Staff College, Marine Corps Combat Development,Marine Corps University, 2076 South Street,Quantico,VA,22134-5068	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**Same as Report (SAR)**	**12**	

The Marine Corps has always prided itself on its ability to accomplish any mission the United States can throw its way in an expeditious and exemplary manner. Marines can operate, with limited support, in every austere environment that can be reached from the sea. A Marine air ground task force (MAGTF) is a flexible force that can be task organized to meet any threat or situation with a sledgehammer blow of focused combat power. It is this flexibility that has made the Marine Corps one of the premier fighting forces in the world's history. Due to its inherent flexibility and expeditionary nature, the Marine Corps finds itself at the forefront of a modern day shift toward distributed operations. This projection of combat power is due, in large part, to its ability to conduct attacks into hostile territory using medium lift assault helicopters as a platform of maneuver. The Marine Corps is slowly losing this capability due to its narrow operational focus, lack of training in an expeditionary environment, and backing an inadequate replacement to its aging fleet of medium lift helicopters.

Operational Focus

The Marine Corps' operational focus in Iraq has limited the scope of medium lift assault support training and operations. A

high operational tempo has meant less time for assault support units to train before being deployed.

> "In the old days, Marines deployed at a 1:3 ratio — for each deployment, they would get three times as much time at home. But the war in Iraq has smothered that model. Now, after a seven-month deployment, a Marine returns home for about seven months before deploying again."[1]

This shorter time to train has upset the Marine Corps' model of the "crawl-walk-run" training cycle. Due to the shortened time to train, training officers are pressed to focus their training on the individual skills of pilots and crew chiefs in order to make them basically qualified as combat capable and combat proficient. This focus on individual training comes at the cost of losing large scale integrated operations between both air and ground communities. Increased operational tempo has also led to increased competition for training area usage. Squadrons are forced to take what training they can in order to maximize their preparedness for deployment.

It is normal for a squadron to lose experienced personnel following a deployment. Experienced corporals and sergeants are

[1] Lubold, Gordon, "Pentagon to pay troops for lost time at home."

replaced with lance corporals fresh from school. This creates friction within the squadron until new personnel can be trained to fill the gap left by Marines leaving the squadron. The demands placed on the more experienced members to train these new recruits while maintaining a high operational tempo for training and fleet-support missions are staggering. Under the older 1:3 operational tempo the squadron would have the necessary time needed to train these new maintainers and still maintain a high readiness rate and robust training schedule.

A standard practice for a squadron coming home from a deployment is to give their lower-hour, better maintained aircraft to the next squadron scheduled to deploy. The newly returned squadron receives an aircraft in return that normally requires more intensive maintenance. The training of new maintainers, increased maintenance required on aircraft received from deploying squadrons and limit the squadrons to a third of the time that they would normally have to prepare and you create situation in which the squadron may not have the time to recover.

Medium lift missions in Iraq have been largely focused on conducting smaller formation flights (two to three aircraft flights), moving personnel and supplies between the operating bases. While air crews have accrued many more flight hours than

they normally would in CONUS, the quality of these hours has been poor. It is in the integrated, multiple, dissimilar airframe planning and training missions that aircrew learn the most. This focus on Iraq narrows the medium lift focus to those operations conducted after a country has been made compliant. The medium lift community must broaden its focus from the current operating environment and look to training for the next war.

The Challenge of Expeditionary Operations

Amphibious shipping is the instrument of how the Marine Corps deploys and fights. The Marine Corps often finds itself operating off hostile shores when the threat to ground based operations is too high. Medium lift squadrons have faced a deficit in expeditionary and amphibious training, leading to a loss of proficiency in that capability. Conducting maintenance and flight operations from a flight deck requires skill, experience, and coordination with navy counterparts.

Time spent acclimating new squadron members to living and working aboard ship is time that could be spent narrowing the training deficit. Learning how to move aircraft around the deck of a ship, learning to conduct maintenance in the tight confines

of the hangar spaces, and learning even the most rudimentary facets of shipboard life all take a concerted effort. Traditionally, at least half the squadron would be experienced enough with ship operations to facilitate all that operating aboard ship entails. The difficulties of operating in a shipboard environment are exacerbated when the majority of the squadron has never previously stepped foot on a ship. Flight operations, deck cycles, and effective projection of combat power from a sea-based platform are all operations that require a great deal of skill and experience. The only way to learn how to operate in this fashion is through experience.

> ". . . we used to do about 10 combined arms, live-fire maneuver exercises a year . . . Our squadrons were overhead giving the support. . . We don't do it anymore at all. We're not doing that to the degree that we need to be able to do it to be that effective, hard-hitting force on the battlefield . . . It's by exception now. We don't step aboard ship like we used to unless you're assigned to a MEU [Marine Expeditionary Unit]. . . we now have a generation of officers that have not stepped aboard ship except in rare instances."[2]

[2] REMARKS BY GENERAL JAMES T. CONWAY, COMMANDANT OF THE MARINE CORPS made at a luncheon held by the Center for a New American Security (CNAS). 15 October 2007

Inadequate Replacement of the CH-46E

The Marine Corps is in the process of replacing its aging CH-46E Sea Knight fleet with the MV-22 Osprey. In various articles the MV-22 has been advertised as a more capable platform than the CH-46E. It has almost twice the combat radius of the CH-46E, three times the lift capability, and can fly over 100 knots faster.[3] Despite these obvious advantages it has fallen short of the requirements that would have made it an adequate replacement for the CH-46E. The MV-22 has no credible self-defense capability, no autorotation capability when in helicopter mode[4], has a much larger maintenance requirement, and has yet to prove itself reliable when operating in austere environments or capable of taking over the CH-46E workload.

In order to accomplish many of the missions of a medium lift squadron, helicopters will be put in harms way to project combat power. To mitigate the risk involved in these missions, the MV-22 must have the means to defend itself. Currently, the MV-22 has only a 7.62mm tail gun, a small caliber weapon which provides limited coverage to the rear of the aircraft.[5] Concepts such as hell-hole mounted or chin mounted weapon systems are years from production. No military aircraft is suited to

[3] See http://www.navair.navy.mil/v22, accessed 10 November 2007
[4] Bolkcom, Christopher. p.9 CRS Report for Congress
[5] Hogan, Jeffery P. "The Right Perspective," Marine Corps Gazette, January 2007, p.32

provide attached escort for the MV-22. A price tag of 110 million dollars per airframe, the lack of a self-defense capability and the inability of fixed wing escorts to support the MV-22 in an objective area suggest that it will be used only in low threat missions.

The maintenance footprint is also a concern, especially when the complexities of operating a MV-22 squadron from an LHA/LHD are taken into consideration. These ships were not designed for the unusual dimensions or maintenance requirements inherent in a MV-22. The MV-22 has a larger flight deck footprint than the CH-46E which has led to concerns over lack of available deck space. The solution to this is to deploy only nine Ospreys on a ship, but its poor maintenance record suggests that fewer Ospreys will be available to fly. When the CH-46E was conceived it was designed to fit the ship. It seems the Navy must now design a ship to fit the aircraft.

The aircraft parts supply system has historically suffered massive problems with the conversion off HMMs to VMMs being slowed and sometimes halted due to unanticipated parts supply shortfalls and systems redesigns. This lack of supply has contributed to the 68.1 percent mission readiness rating of the

MV-22s deployed to Iraq.[6] These aircraft have priority for parts, which leads to a shortage for those non-deployed squadrons attempting to train in CONUS.

To date the MV-22 has conducted only limited operations in Iraq, moving from prepared surface to prepared surface, and has yet to prove it can operate effectively within a Marine Expeditionary Unit. It has more easily fallen into the heavy lift missions vice those expected from the medium lift community. The simple conclusion is that the MV-22 is not suited to the medium lift assault support mission. The limitations of the airframe are limiting the missions of the medium lift community.

It is perhaps unfair to criticize the MV-22 too harshly until it is given a more thorough opportunity to prove itself in combat. We should expect any new aircraft to have its own set of unique developmental problems. The fact remains that if you compare the MV-22 to contemporary medium lift helicopters, such as the EH-101 and the S-92, you will find that its capabilities are far less impressive than when compared to the 1970s era CH-46E. The Marine Corps must find an airframe that better suits the role of the medium lift mission and can operate in hostile

[6] II MAW (FWD) PAO, "MV-22 'Osprey' brings new capabilities to the sandbox." *Marine Corps News*. 23 January 2008

and more austere environments. The MV-22 has not demonstrated that it has the capability to take on the medium lift mission.

Conclusion

In an interview featured in the September 2007 issue of Sea Power General Conway states that:

"We are getting heavier instead of lighter with our equipment sets, and we're going to have to make some choices about what our future equipment is going to be because if you're expeditionary, you're light, you're agile, you're hard-hitting and you're fast. The types of things we're doing right now in Iraq don't necessarily lend themselves to that."[7]

This suggests that the Marine Corps will continue to find its way back to a lighter, more flexible force. The focus in training will shift back to expeditionary and amphibious operations. Operationally, the 24th MEU is deploying to Afghanistan after having first conducting standard MEU work–up training. There is still a requirement to have a MEU present in the CENTCOM AOR. All of these factors are encouraging.

Theater commanders have already begun to put Marines back into their more traditional role of a force in readiness by

[7] Gen James Conway, "The Top Marine", *SeaPower* September 2007

tasking Marine Expeditionary Units with the mission of theatre reserve. These Commanders want to maintain and capitalize on the combat power and flexibility that the Marine Corps offers. In order to support effectively Marine Corps Air must turn its focus back towards integrated MAGTF level training: on the effective integration of all air communities and the ground forces which they support. This focus should emphasize and reinforce the expeditionary mindset that defines the Marine Corps. The medium lift community must focus on the aggressive work-ups that precede a Marine Expeditionary Unit deployment. Finally, the Marine Corps must find an airframe that better suits the role of the medium lift mission and can operate in hostile and more austere environments. The MV-22 has not demonstrated that it has the capability to take on the medium lift mission.

1974 words

Bibliography

Bolkcom, Christopher. “V-22 Osprey Tilt-Rotor Aircraft.” *CRS Report for Congress.* 13 Mar 2007.

Crouch, Matthew R., Captain, USMC. “The Future of Medium Lift.” *Marine Corps Gazette.* Nov, 2007

Exner, Philip J. Major, USMC. “Innovative Assault Support Aircrew Training.” *Marine Corps Gazette.* Oct 1992

Wood, Anthony A., Colonel, USMC(Ret). “Generation to Generation.” *Marine Corps Gazette.* Nov, 2006.

Lubold, Gordon, “Pentagon to pay troops for lost time at home.” *Marine Corps Times.* Jan, 2007.

II MAW (FWD) PAO, “MV-22 ‘Osprey’ brings new capabilities to the sandbox.” *Marine Corps News*. 23 January 2008

United States Marine Corps, TECOM. *CH-46E Naval Air Training and Operating Procedures Standardization (NATOPS) Manual.* May 2006.

Bolkcom, Christopher, “V-22 Osprey Tilt-Rotor Aircraft”, *CRS Report for Congress*. 13 March 2007

Conway, James, General, Commandant of the Marine Corps, “Beyond Iraq.” Sponsored by the Center for a New American Security, 15 October 2007