The Role of the Osprey in the Pivot to the Pacific

Robbin F. Laird

Contents

Introduction

According to a 2012 Congressional Research Service Report: "In the fall of 2011, the Obama Administration issued a series of announcements indicating that the United States would be expanding and intensifying its already significant role in the Asia- Pacific, particularly in the southern part of the region. The fundamental goal underpinning the shift is to devote more effort to influencing the development of the Asia-Pacific's norms and rules, particularly as China emerges as an ever-more influential regional power."

But given the continued deep involvement in the Middle Eastern land wars, and the stringent defense budgets, how was this going to occur? Part of the answer was provided by new military systems coming to the Pacific, the most notable in the past decade were the coming of a coalition of F-35s and the arrival of the Osprey.

What the Osprey brought to the effort was a unique capability in terms of speed and range and landing flexibility to cover areas of interest for the U.S. military in terms of the insertion of force and of supplies. In a 2013 interview I did with the MARFORPAC at the time, LtGen Robling underscored why the Osprey was so critical to

what the Marines were tasked to do. "Speed, range and presence are crucial to the kind of operations we participate in throughout the Pacific. The Osprey clearly fits perfectly into the types of missions we are tasked to perform.

"To illustrate hypothetically, if we were tasked to counter challenges in the South China sea, such as to bolster defense of Ayungin Shoal, also known internationally as Second Thomas Reef with one of treaty allies, the Philippines, the US has several options, but not all are efficient or even timely. We could use USAF assets, such as a B-2 bombers or B-52 aircraft from Guam, or Navy surface or subsurface assets that are patrolling in the South China Sea, but the location of those assets may not provide timely arrival on station.

"But using the Osprey, we can fly down quickly from Okinawa with a platoon of well-trained Marines or SOF forces, land on difficult terrain or shipping, and perform whatever tasked that may be required in not only a timely but efficient manner."

LtGen Robling noted the unique qualities provided by tiltrotor and the need in his view for broader acquisition of this capability. "Our allies and others look at what we can do with the Osprey and are impressed. We do not have the strategic lift required to move all my forces around the AOR. Until I can get them, I am required to use C-17s that are very expensive and committed elsewhere or amphibious shipping that there is not enough of, or I contract black bottom shipping, the cost of which as nearly triple in the last five years.

"To compensate, I can use KC-130 aircraft or V-22's and move small numbers of lethal Marines thousands of miles. Is this efficient? No! Is this effective? Yes! Nobody else has the capability afforded by the V-22 except our USAF SOF forces."

Eventually allies got the point or at least the Japanese did. And now the U.S. Army has gotten the point and is procuring the V-280 variant of tiltrotor aircraft.

The Marines at the time were pursuing a distributed laydown strategy. And this strategy requires "an ability to operate from multiple locations allows the Marines to broaden their opportunities and shape more meaningful partnership opportunities."

And clearly for the Marines, the Osprey is an indispensable capability in so doing. But now the entire joint force and several coalition partners are working to shape a distributed force approach. As John Conway, the noted Australian strategist put it: "we've now got an adversary, who is making us spend more and more money on survivability. We'd rather spend money on lethality, but they're making us spend money on survivability because they're becoming increasingly sophisticated, because it's coming harder and harder to survive. And this is driving up the cost of survivability."

For the U.S. Navy, the force distribution effort is labelled distributed maritime operations. For the USAF, it is labelled agile combat employment. Such shifts drive up the demand signal for tiltrotor aircraft.

For the Navy, this is evidenced by the acquisition of the CMV-22B. In an interview I did earlier this year with Vice Admiral Whitesell, the U.S. Navy air boss, he underscored that the shift to distributed maritime operations was a work in progress. As he noted: "We are in an experimentation phase. We are working force distribution and integration. We are experimenting like Nimitz did in the inter-war years. We are working from seabed to space with regard to force integration. It is a work in progress but being successful operating in an environment where logistics are contested, where getting weapons

to the fleet in conflict, is not just a nice to have capability — it's a necessary one."

What Vice Admiral Whitesell was referring to in terms of contested logistics was the expanded role for the CMV-22B from being a one-for-one legacy replacement for the carrier-onboard-delivery (COD) mission for large deck aircraft carriers to becoming a distributed maritime fleet operations asset.

The Osprey provides an important stimulant for the shift in con-ops whereby the Navy's experimentation with distributed operations intersects with the U.S. Air Force's approach to agile combat employment and the Marine Corps' renewed interest in Expeditionary Advanced Base Operations (EABO). In other words, the reshaping of joint and coalition maritime combat operations is underway which focuses upon distributed task forces capable of delivering enhanced lethality and survivability.

The shift to a more distributed force is a strategic one. It will drive not only con-ops but also force development in the near to mid-term. What generally has not been realized is that concept of operations changes are strategic in character and will require significant changes in platform and payload acquisition in the future, new logistical support capabilities, new approaches to sustainment, supply locations and "basing," as well as fully embracing the autonomous systems revolution to add the expendable, the numerous and the much less costly platform/payload combination.

How do you take the con-ops revolution underway and shape the resulting force into a more enduring one?

How do you supply such a force?

With what do you supply it?

How do you build cross-national production and distribution for the disparate national capabilities and forces?

The thinking from the operational forces needs to drive force design and force development, rather than think tanks and acquisition officials remote from the operating forces.

As payloads change – new weapons, new sensors, new approaches to cloaking forces, new ways to disrupt the adversary's society and dominate their decision cycles – rapid acquisition is required.

How rapidly can the acquisition system and its slow-paced process of development be put aside to do so.

The changes occurring in Pacific operations are dramatic; the recognition of the impacts of these changes has not been. The Osprey came as the pivot to the Pacific began. Now tiltrotor is key enabling capability for the strategic shift to force distribution and payload dynamic innovations. Force distribution is enabled by the speed and range of the tiltrotor aircraft able to land on a wide variety of locations.

And the flexibility of the aircraft to carry a wide variety of payloads makes it a center piece of the con-ops revolution under way. The flexibility which the Osprey provides – with the USMC, the U.S. Navy and the USAF operating the aircraft – opens the aperture significantly on how one configures the aircraft to deliver what payload in which situation for which combat and deterrent effect.

Colonel Marvel, the CO of MAG-39, located at Camp Pendleton underscored in an interview I did with him in February 2023 "The Osprey provides unique speed and range combinations with an aircraft which can land vertically. It is a very flexible aircraft which could be described as a mission-kitable aircraft. The Osprey has big hollow space in the rear of the aircraft that can hold a variety of mission kits dependent on the mission which you want the aircraft to support."

He emphasized that with a variety of roll-on roll-off capabilities with different payloads. "We can add the specialists in the use of a particular payload along with the payload itself to operate that payload,

whether kinetic or non-kinetic, whether it is a passive or active sensor payload. We need to stop thinking about having to put the command of such payloads under the glass in the cockpit, and control those payloads with a tablet."

Col Marvel underscored that the Marines when deployed are engaged in presence missions. How then best to use their presence to deliver the desired effect? And given the Marines are operating across the spectrum of warfare, and that spectrum itself is changing, which payloads are most relevant to the mission? This means that "we need to maximize the payload utility of our platforms."

He provided a number of examples of different payloads which they are working with from USVs to a variety of passive and active sensors. Kill webs need to be sustained and Ospreys can provide both fuel and ordinance to platforms throughout the extended battlespace. For example, Ospreys can bring fuel and ordinance to a FARP (forward arming and refueling point) and support P-8 operations, for example. Ospreys can palatize torpedoes and engage them in the battlespace. They can provide key parts of the network of sensors that make a distributed forces' domain C2 and fires control picture. With the proper payload, Ospreys can maintain contact with surface and subsurface forces to help build a common tactical operating picture.

But this is just the beginning. With the innovations already underway with USVs, one can credibly envisage in the near to midterm and Osprey landing on an austere location with payloads for the USVs. The USVs then arriving at the austere location and the Ospreys and USVs operating together in that location for the desired time, and in which the Marines who landed with the Osprey operating the range of payloads which they brought with them with the USVs.

With the U.S. Army now acquiring the V-280, there are clearly expanding opportunities for enhancing force distribution. And with the

Army's many working relationships with core allies in the region, the tiltrotor force could expand exponentially and with it the capabilities to operate a distributed force. And when one crosses tiltrotor with the autonomous revolution, there is a capabilities dynamic which can redefine what the multi-domain force can achieve.

It began as a pivot to the Pacific. Now it is becoming a con-ops revolution.

We published a book in 2013 which anticipated the strategic shift discussed.

What this report includes is the part of that book which provided a perspective from 2013 of what the tiltrotor capability could bring to Pacifc defense.

A "Tsunami of Change"

The Marines not only are physically moving in the context of the pivot to the Pacific but are introducing new equipment and capabilities in the region as well.

The Osprey has been introduced into Okinawa in spite of protests from residents of the island.

The F-35Bs based at Yuma Marine Corps Air Station will deploy to the Pacific mid-decade.

A new flagship for the seabase, the USS America, will deploy to the Pacific in the next couple of years.

The Marines are spearheading a relook at basing the region. With the evolving capabilities of the seabase—and the addition of new ships like the LPD-17s, the Joint High Speed Vessel, and the Mobile Landing Platform—and new concepts of the operation of the seabase, a foundation for shaping distributed capabilities is being laid.

And with it, the ability to mix and match land-based assets with sea-based assets will be important as well.

The Ospreys can operate off of ships but operate with land-based assets to shape a joint intervention force. The F-35Bs can provide a

capability to operate off of large-deck amphibious ships, large-deck carriers, and short runways on land.

And the F-35B carrying the same sensor and communications suites as USAF, USN, or allied F-35s can provide for a fleet engagement or leadership function.

The lead element in demonstrating the innovative possibilities of combining the new technologies with new concepts of operations has clearly been the Osprey.

As of September 2012, the Osprey reached a little noticed five-year mark in its operational deployment deployment history. This aircraft, which can fly like a plane but land like a helicopter, has been a game changer for the USMC and its operations.

Deployment to Iraq

In September 2007, the Osprey was deployed for the first time to Iraq. The USMC Commandant Conway and Deputy Commandant of Aviation Castellaw announced and made the decision to deploy the Osprey into combat, although virtually all public commentators thought this was too early for an "untested" airplane, as one critic put it. It was deployed in part, due to a MANPADs attack on a CH-46 and the determination by USMC leaders that it was necessary to deploy the Osprey to avoid the kind of attack which the CH-46 had suffered.

The plane has not only done well, but in a few short years has demonstrated its capability not only to have a significant impact on combat but to reshape thinking about concepts of operations.

The story of the evolution of the CONOPS surrounding the plane provides a solid foundation for innovation and transformation of concepts of operations for the USN-USMC team, if boldness overcomes timidity.

We have interviewed over the past few years many pilots and maintainers of the Osprey and officers involved in combat operations using the plane.

The Osprey Marines refer to themselves as the "Osprey Nation" and are a growing group of young aviators and maintainers who form the nucleus of the future of the USMC and of American power projection. We can start first with the decision of USMC leaders to deploy the plane to Iraq.

This deployment was itself part of the "testing" process. What is often overlooked is that testing is really done by pilots and maintainers in combat, not by technicians in white coats or statisticians at the Government Accountability Office. There was clear concern expressed to us by Marine Corps aviators that the deployment to Iraq would prove challenging, and it was.

But it was also evidence of the role of leadership in making the hard decisions to roll out needed capabilities and let the users define the direction of a program, not the program managers.

The deployments have been on land—Iraq and Afghanistan—as well as at sea. The plane and its crews have been tested in combat and in real-world operations. What we have seen is that the plane started with "training wheels on" in its deployments, and those wheels not only have been thrown off, but as time in combat has gone up, the Marines as well as the combatant commanders have begun to understand what a transformational platform can do when connected with other capabilities and assets. The plane started in Iraq built around a famous diagram showing the speed and range of the aircraft in covering Iraq.

As one Marine commented, "The MV-22 in the AO was like turning the size of the state of Texas into the size of Rhode Island."

It was the only "helicopter" that could completely cover Iraqi territory. And in this role, the testing of support as well as operational

capabilities was somewhat limited as Marines tested out capabilities and dealt with operational challenges. The plane was largely used for passenger and cargo transport in support operations in difficult terrain and operating conditions. It was used for assault operations from the beginning, but over time the role would expand as the support structure matured, readiness rates grew, and airplane availability become increasingly robust. From the beginning the aircraft impressed and foreshadowed later developments.

As General Walsh, now deputy commanding general, Marine Corps Combat Development Command, noted in an interview at the Cherry Point Air Station in 2009, after a year in Iraq with the withdrawal of U.S. forces from Iraq, there was a roll-up of forward operating bases. This meant that the remaining forces had to cover more ground and to provide protection at greater distance. Enter the Osprey, which did not require forward operating bases to provide lift and support to forward deployed forces.

Indeed, General Walsh underscored that as the U.S. forces withdraw, there was demand for more—not less—airpower.

"This happened on several levels.

"On one level, this was due to the drawdown of the number of combat posts, which supported operations in Iraq. American forces continued to work with Iraqi forces but now had to commute from distance to do their work, rather than being in close proximity to combat posts. This meant that airpower had to provide regular support to the transit of U.S. forces working with Iraqis. "At one point we had 140 combat posts; while we were there, we went from 36 to 4 combat posts; so air was relied on more frequently for convoy protection. As we drew down combat posts and associated capabilities, air was relied on for capabilities which had earlier been largely provided by the ground forces."

"On another level, this was due to the need to protect the convoys moving equipment out of Iraq. "As you close down and do retrograde, you have to move further out in road miles and that requires air support."

"In addition, transport needs to move support elements to work with Iraqis increased demands for air transport. We were increasingly asked to provide support for partnering operations."

Iraq was the beginning and a consciousness raiser for troops and commanders. One story told to us in 2010 by a battle-hardened Marine, who highlighted the change, was as follows:

Major Lee York: "We took some soldiers out to the West of Iraq. The crew chief comes up to us and tells us that the guys won't get out of the plane. We're like, what are you talking about? They said we're not there yet. And we said, "What are you talking about?" He then said, "The last time we did this flight it took an hour and a half. We've only been in the plane for 40 minutes so we can't be there yet."

"The last time we did this flight it took an hour and a half. We've only been in the plane for 40 minutes so we can't be there yet." We told him to tell the Marines that "we were cruising at 230 rather than at 120 so we were there. I swear we're here, you know, we're not going to send him somewhere where he is not supposed to be."

Deployment to Afghanistan

Next on the agenda was the beginning of deployments to Afghanistan, which of course continue. The Afghan phase of deployments has seen the aircraft and its operators' transition to more assault combat operations over time, to the point where the latest Osprey squadron just came back from Afghanistan with record-setting assault operations for the Osprey. A metric to measure the transition can be seen in the

number of named operations the Osprey squadron participated in in Afghanistan.

Over time, the Osprey squadrons have significantly increased their involvement in what the military calls named operations, and these operations are air assault operations in support of U.S. and coalition forces. The squadron VMM-365 (the Blue Knights) that returned in the summer of 2012 conducted nearly 200 named operations, which was a 20-fold increase over the squadron that preceded it in Afghanistan.

In the words of the head of 2nd Marine Air Wing, Major General Glen Walters, upon his return from Afghanistan: "The Ospreys had their normal fair share of general support, resupplies, etc. But we started accelerating their use as my time there went on, and used them for both the conventional and Special Forces operations. The beauty of the speed of the Osprey is that you can get the Special Operations forces where they need to be and to augment what the conventional forces were doing and thereby take pressure off of the conventional forces. And with the same assets, you could make multiple trips or make multiple hits, which allowed us to shape what the Taliban was trying to do.

"The Taliban has a very rudimentary but effective early warning system for counter-air. They spaced guys around their area of interest, their headquarters, etc. Then they would call in on cell or satellite phones to chat or track. It was very easy for them to track. They had names for our aircraft, like the CH-53s, which they called "Fat Cows."

"But they did not talk much about the Osprey because they were so quick and lethal. And because of its speed and range, you did not have to come on the axis that would expect. You could go around, or behind them and then zip in. We also started expanding our night operations with the Osprey.

"We rigged up a V-22 for battlefield illumination. A lot of these mission sets were never designed into the V-22 but you put it into the field and configure it to do the various missions required. And we have new software for the Ospreys in Afghanistan where you can pick your approach, angle, approach speed and let the aircraft do it all. That is a huge safety gain."

The start of this transition to a tip-of-the-spear air assault capability was seen at the beginning of the Osprey's deployment in Afghanistan. In a phone interview interview that we conducted with the Osprey squadron commander in early February 2010, the evolving role was evident.

According to Lt. Col. Bianca, the Osprey squadron commander: "Here is something that no one ever thinks about until one gets here. It is one thing for me to do an assault support mission where I insert troops to a location. It is quite another to talk about distributed operations. In other words, if I am here at this airport, the troops I have to move are way over there, and the place I got to get them to is way over that way and if you want to do this in one cycle of darkness, you are going to have to put some speed on it, or you are going to have to make this a two-day evolution to move the troops here, and then get them there, so that you can do the mission.

"You cannot lose sight of that either. So, even if it was to be characterized very placidly as "ferrying" of troops, there is that speed component.

"Football is a game of inches: combat is a game of minutes or even seconds, and that can matter. From the distributed angle, never forget that the troops just get on the airplane here at Camp Leatherneck: they are not here at Camp Leatherneck; they are always somewhere else.

"We have to go there first and then, move them to wherever the operation is going to go. And whatever one's characterization of the

operation—whether it is an assault or a town meeting—it is time-urgent mobility. We are moving folks to places in this country that you just cannot get to in a timely manner any other way.

"You simply cannot. You cannot get in a car and drive there. You can get in a helicopter and fly there, but that is going to take you two and a half or three hours. Your only option is to get into a V-22, because "I got to get to that corner in the open world—no roads, nothing there—we got to go do it," and that, then, becomes our mission."

The Osprey Working with the U.S. Navy-Marine Corps Team

The plane was clearly not a rotorcraft; it was not a replacement for the CH-46. But it took a while for the concepts of operations to change and commanders to understand fully that they did not have to operate in a fairly constricted operational box of a couple of hundred miles for the ARG-MEU and could think about a 1,000-plus-mile operational area.

As one Marine described the transition and the challenge to adapting to what the Osprey can do with fast jets: "The speed and range of the aircraft is a game changer. But it's the endurance of the aircraft itself. Basically you might say once it's flying, it's flying. And we had a lot of missions that required flight time above six hours, which is very taxing for the jet guys and for us, it is as well, but maybe not so bad because we can trade off in the cockpit.

"The fact is that you can have airborne assets, both as a package as well as a trap for sensitive site exploitations, being airborne all at the same time for hours at a time to respond to something that happens in the AOR. It will give you the maximum flexibility for response time

down to something like thirty minutes, depending on where it is. And then sanitize the scene from there and then everybody returns home. It's a capability that I'm not going to say it's been overlooked but it just hasn't been utilized like that.

"We just didn't really have that capability before, especially on much longer ranges and in sort of response time. So by marrying those two, the fixed-wing aviation asset we can do operations differently. We could neutralize a target and then you can immediately have a strike team insert to confirm that whatever happen, happened, give whatever materials they need, get back on an aircraft and leave in under thirty minutes in any location that we're operating on a 600-mile ring. This is just so amazing for me."

The ability to link seamlessly support services ashore with the deployed fleet via the Osprey allowed the Harriers aboard the USS Kearsarge to increase their sortie rates dramatically. By providing a whole new speed and range enablement of the strike fleet aboard a large-deck amphibious ship, the future was being redefined by the Osprey.

As Lt. Col. Boniface, commanding officer of VMM 266, but the Osprey leader in Operation Odyssey Dawn, argued:

"A complete transformation to how we are doing business has been involved by operating the Osprey. In order for the USS Kearsarge, the ARG and the 26th MEU to stay in their operational box during Operation ODESSEY DAWN, and enable the Harriers to continue their strike mission, we were reliant on other assets to supply us. For many supply items, the Osprey provided the logistical link to allow the ARG to stay on station and not have to move towards at sea re-supply points and meet re-supply ships. Without the Osprey you

would have to pull the USS Kearsarge out of its operational box and send it somewhere where it can get close enough to land or get close enough to resupply ships to actually do the replenishment at sea. Or you would be forced to remain where you are at and increase the time you're going to wait for this part by three, four days or even a week.

"The ARG ships are only moving at 14–15 knots. At best, let's just say they move an average of 13 knots per hour, and add that up for the 300 miles that you have to sail. Now you're looking at least a day to get the needed folks, parts or equipment and then the transit time back to the operational box. The V22 will do that in a couple hours and allow the ARG/MEU to keep executing its mission."

And now fast-forward to Bold Alligator 2012, the largest amphibious exercise held since 1996. Bold Alligator was about rethinking the role of the seabase in terms of the future of power projection, of the sort that needs to be crafted for the Pacific.

A major difference from 1996 to 2012 was the appearance of the Osprey. Indeed, the existence, deployment, and appearance of the Osprey changed the entire approach to thinking about amphibious assault. While observers stood on the beach waiting for the assault, Ospreys were already part of taking an "enemy" fort deep in the terrain. And not only that but one of the Ospreys deployed from a supply ship!

Next up, was the challenge of understanding what the Osprey brought to the fight seen from

Prior to commenting on where the dynamics of change may move forward in the near to midterm, it should be noted the path whereby innovation has occurred. It takes time, as one Marine told us. The Marines built up over the past few years a significant and growing

number of members of the "Osprey Nation," and these folks then generated further capacity to learn and change.

Moving forward, we can see glimpses of the future that could lead to a cascading of change in operational approaches and capabilities if leadership will allow.

Three prospects for change are clearly evident already from the performance of the Osprey and its use in operations.

First will be the impact of the "self-deployment" capability of the Osprey. The Osprey is able to with tanking fly directly to the area of operation. Try doing that with a helicopter. In fact, self-deployment is now being used in bringing Ospreys back from Afghanistan and used regularly in exercises. Self-deployment means that there is a possibility of rethinking how the seabase can work with land-based air. Ospreys can move with the fleet but be reinforced from land based Ospreys in plussing up air assault capabilities.

Second is the impact of a new system like the Osprey on removing problems that threaten our warriors.

There is a significant dimension to combat that can refer to problems avoided because of the performance and reliability of the new systems. The Osprey has avoided strikes that would have taken down CH-46s whether from Manpads, RPGs, or other weapons fire. The Ospreys have proven robust in combat, where aircraft damaged by ground fire have used their digital management systems and redundant systems to self-correct and like the Timex watch in the ad, keep on ticking.

The third will be the pairing of the F-35B, the first vertical-lift supersonic aircraft ever built with advanced sensors and C2 capabilities built in. The F-35B coupled with the Osprey will lead to a whole new level to begin shaping distributed operations over a large operational area.

In the words of Lt. Col. Boniface, in will lead to a "tsunami of change."

"I sort of think of it like a game of chess. I think of a traditional or legacy ARG-MEU as being able to move a pawn one space at a time towards the enemy. If you have ever played chess it sometimes take a while to engage your opponent. We now have the ability to move a knight, bishop, or rook off of this same chess board and attack 180 degrees towards the rear of our enemy. We can go directly after the king. Yes, it's not really fair, but I like that fact.

"The speed, range, and don't forget the reliability of the MV-22 allows me to do this. We talk about staying ahead of the bow wave. Well there is a tsunami of change coming when we talk about the ability to fight an enemy and to support Marines ashore. We can increase our area of operations (AOR) exponentially because we can spread out our ships; now we have an aviation connector that can move Marines a tremendous amount of distance and in a very short amount of time. We can also use this capability to leverage our other aviation assets like our AV8-Bs, CH-53's, AH-1Ws and UH-1Ys to support the MAGTF and ultimately damage the enemy's will to fight. Let's not just move 50–100 miles ashore, but let's move 200–500 miles ashore, and do it at an increased speed, range and lethality."

Creating a New Capability: SPMAGTF

Recently, the Osprey has been used to create a new Special Purpose MAGTF for operation in Europe to cover the Mediterranean and African operations.

According to Brigadier General James S. O'Meara who currently serves as commander, U.S. Marine Forces Europe, and as deputy com-

mander, U.S. Marine Forces Africa the newly formed Special Purpose or SP is designed to do several tasks.

First of all it is the basic Marine Corps air ground team or MAGTF approach but applied to a Special Purpose Mission. Special means it's uniquely tailored to a particular mission or a few mission sets. In this case, the focus is upon security embassy reinforcements or a noncombatant evacuation. Also, it is a rotational force, which provides a strike force able, to deal with EUCOM and AFRICOM needs.

General Dempsey provided strategic guidance, which was looking for a force, which operates with a small footprint, and is low-cost, and rotational. This is the answer to that guidance.

"The SP-MAGTF meets the need to respond rapidly to a developing situation either proactively or reactively with a small force with a small footprint and has its own organic air, which means that it has operational reach as well. The force is trained and operational and currently operating from a USAF base at Moran in Spain . . . . We can operate over a significant combat radius and of course, refueled with our C-130Js can reach throughout the region and all while carrying equipment, and/or two-dozen Marines inside.

"It gives AFRICOM commander a unique tailored operational tactical level force with significant operational reach. The V-22 allows for a paradigm shift and enables a force like SP-MAGTF. The V-22 gives you that C-130-like distance and speed with the versatility to land in confined, limited area, with no runway or an expeditionary LZ like a helicopter."

The Osprey and the Pacific Reset

The new technologies intersect with new approaches to create new options, such as the Special Purpose MAGTF discussed above.

In the case of the Osprey, the operation of the aircraft provides a very different way of thinking about basing options compared to older helicopters or rotorcraft.

The commanding officer of First Marine Air Wing, based in Japan, highlighted this change in an interview that he did with me.

We discussed recent exercises that his Marines conducted that presage changes in Pacific operations.

The Perspective of 1st MAW

Question: Could you start by providing an update on Forager Fury?

Owens: "What was unique about Forager Fury was this was the first time we deployed MV22s in the exercise.

"This was just the first demonstration of the capability that aircraft brings to our AOR. And it went very well; the aircraft self-deployed, nonstop, supported by our KC130 aerial refuelers. They also worked in a fixed wing escort with the Hornets for a training opportunity we don't often get, complete with aggressor air en route. Once we got the Ospreys to Guam, they did troop lifts, they did logistics flights; and then, the culmination was a Tactical Recovery of Aircraft and Personnel mission, to an island 200 miles away from Guam. We simply couldn't have done this with helicopters without doing front side and backside fueling stops in Tinian or Saipan.

"With the Osprey, we were able to do it nonstop flying from Guam. Question: There is a broader strategic point, which emerges from your exercise and the range and speed of the Osprey and the multiplier effect, which it and the coming F-35Bs could have on Pacific operations. There are many islands in the Pacific. With the flexibility and relocation skills evident by the USMC (e.g., with regard to expeditionary airfields), islands can be a useful compliment to amphibious to provide the kind of presence which we may well need in the years ahead. What is your thinking along these lines? Owens: This makes sense. We have a relative paucity of amphibious shipping.

"When I was a young lieutenant and captain, I think we had somewhere in the neighborhood of 65 amphibious war ships in the Navy inventory. Right now, we have 28 and they're spread about as thin as they possibly can be. We're running through their lifecycle faster than anticipated, and yet they're never enough. Going back to the whole challenge in this AOR is getting to where you need to be with some capability. Being able to stretch the legs of the aircraft and operate from austere sites is critical.

"A good case in point is that we just brought a couple of KC130s back from disaster relief in the Philippines, a typhoon rolled through Mindanao and Palawan a few weeks ago. And we deployed a couple of KC130s to haul relief supplies from Luzon to Mindanao. The KC-130J was the aircraft of choice because there was a useable airfield at the southern end, at the affected end. But had there not been an airfield, which is often the case after tsunamis and typhoons, we could have done the same thing with the Osprey; flown it to Clark Field, operated out of Luzon—loading supplies in Luzon and dropping them to a point landing site in Mindanao supported by KC130s in the air, providing aerial refueling.

"And it's a capability we've never had before, and I expect that within the next couple of years, we'll have an opportunity to demonstrate that the Osprey may be the only aircraft that can get in to an affected area at the distance that we'll be required to support from. Whether it would be from an intermediate staging base, like Clark or flying directly from MCAS Futenma here in Okinawa."

Question: So in effect, an airborne infrastructure that allows you to have the reach and range to affect the situation on the ground?

Owens: "That is a good way to put it. When we put the KC130 into the mix, we can bring some forward basing capability in the form of the maintenance crews that are required not only for the KC130s, but also for MV22s or whatever else that the tanker can drag to the objective area. If, in a time of conflict, we were going someplace and an adversary wanted to deny us the ability to put in a refueling point or intermediate support base, they would have to now take into account a much greater number of islands. With only helicopters, an adversary could draw a 100-mile ring around a base and know where we could operate. Ospreys, particularly when supported by KC-130Js, would

significantly complicate an adversary's attempts to predict our movements and operations."

The Osprey and the Pacific Reset: The Case of the 31st Marine Expeditionary Unit

The 31st MEU is the only permanently forward-deployed MEU and is deployed to the Pacific. It is also the unit that is working with 1st Marine Air Wing to generate Osprey deployments in the Pacific. And given the centrality that Secretary of Defense Hagel has placed on Ospreys as part of the reinforcement of Japanese defense, the role of Ospreys and the deployment of 31st MEU in the region highlight some fundamental dynamics of change in the region.

This interview was conducted with Col. Merna, the commanding officer of the 31st MEU in early May 2013.

Question: What is the plan for Ospreys to come to the MEU?

Merna: "VMM 265 will be chopped to us later this month. We are going to ease into the deployment much as was done with the East Coast MEUs to ensure that we execute wisely with the Ospreys. They will be part of our training with the Australians when we participate in Talisman Saber this summer.

"We will be training with them as well at Bradshaw Field, which is a training area, which is used during the rotational involvement of the Marines with the Australians. This training will contribute to the Australian effort to get ready to use their own forthcoming amphibious capability as well.

"We are intending to operate with a full compliment of [sic]10 Ospreys during the exercise, with 3 self-deploying from Okinawa, and

we are steaming away with the rest of them. For us, the big deck amphibious ship will be the USS Bonhomme Richard."

Question: This is part of the process whereby the Osprey will become a normal part of Pacific defense?

Merna: It is. "There are clearly political sensitivities in the region, but the Japanese forces find the capability of interest and we are working with the Japanese Ground Self Defense Force to familiarize them with the capability. The potential sale of the Ospreys to the Israelis has made an impact in the region as well in terms of understanding understanding the normalization of the Osprey as a key element of future defense capabilities. The options the aircraft provides us are significant. For example, we can reach mainland Japan or the Philippines from Okinawa on one tank of gas, and, of course, with refueling the reach expands significantly.

"This will also give our large deck amphibs a significant operational advantage as the Ospreys come onboard in the Pacific . . . ."

Question: As the Japanese think through their evolving defense approach, they seem increasingly interested in the capabilities which the USMC and its blue team partners brings to the table?

Merna: "They are. During the last two cycles of our deployments, we have embarked Japanese Ground Self-Defense Forces with us to become more accustomed with our operations. We've integrate with them, we live with them, we train with them and certify with them. When we went to Thailand for an exercise, they came with us as well. They did remain aboard the ship during the exercise, it should be noted. We are a maritime contingency force, which responds to any type of contingency ranging from humanitarian assistance to disaster relief to security operations and to higher end contingencies. As such, we are key element in the Japanese perspective for their defense as well.

" Being out in the Pacific and engaging regularly and consistently, the 31st MEU, is extremely important to our Asia-Pacific strategy, not just combat ops on the Korean Peninsula. It's an across the board presence and capability."

Question: In many ways, the Osprey is the most visible example of the transformation of Marine Corps operations. The F-35B will be very significant, but for the average Pacific citizen, they will see the impact from the Osprey in very clear ways. Does that make sense to you?

Merna: It does. "When the next humanitarian assistance mission, disaster relief mission takes place in the Asia-Pacific, and we start impacting quickly, and immediately with relief supplies or people on the ground digging, filling sandbags, whatever it is helping somebody, all of our partners and allies in the Asia-Pacific region are going to see the immediate impact of the Osprey.

"And when they start seeing that big old ugly bird come flying in and dropping off supplies from areas that we could not reach previously, or as rapidly, they're going to see what they get out of the Osprey operating in their area."

Question: And for the full range of missions, the F-35B will be most visible in the lower end missions as its C2 and ISR mapping capability becomes evident in such crises. That is why figuring out how to translate F-35B data to security operations will be a key requirement as well. But let us go back to the upcoming exercise with the Australians. Could you discuss further?

Merna: "We're going to go down there and will do some live fire training for about a week. We are demonstrating to the Australians the impact of an amphibious capability. We're going to be able to take a battalion sized unit down the middle of nowhere, where there

are saltwater crocs, there's nasty bugs, it's right in the middle of the outback that they very rarely use for military training. And we'll use Ospreys probably in an insertion role, and set up everything in a C2 structure from the sea.

"That's the big piece here and if I can get the big deck to stick around, we're going to demonstrate really for the first time, an amphibious operational area southwest of Darwin. We would be operating in a large area. The distance is around 400 miles and a minimum of 6 hours driving time. And then we're off the coast 70 miles at sea. And we will support a battalion size element training live fire for about a week, across all classes of supply, and then get them back on the ships. And then, we'll take off from there. We will be exercising the range and scope of amphibious operations today. We're going to demonstrate an incredible capability across all classes of supply.

"We will be able to be heavy on the aviation footprint, light on C2, but with significant operational capability to cover a significant area of operation."

Question: A final question would be how does the 31st MEU fit into the Pivot to the Pacific?

Merna: "In one sense, the Marines are going back to the force levels we had in the region prior to 9/11. So it is simply a restoration rather than a build up or buildout. But the way the force is being configured is very different. We are emphasizing building out a rotational force, notably in Australia, but elsewhere as well.

"Because we are building out a rotational force, the new capabilities we are adding are crucial to success. Rotational forces require greater capability for reach and speed, key aspects of the Osprey-F-35B combination coming to the Pacific."