

Indonesia and the Osprey: Impacts and Considerations



By Robbin Laird September 2020

THE V-22 AND INDONESIA: INITIAL CONSIDERATIONS	3
THE OSPREY AND LESSONS LEARNED BY THE USMC: IMPLICATIONS FOR INDONESIA	6
RANGE, SPEED, VERTICAL LIFT: ABILITY TO OPERATE IN AN EXPANDED AREA OF INTEREST OSPREY IN COUNTER-INSURGENCY OPERATIONS	7 9
THE OSPREY AND HADR MISSIONS IN THE PACIFIC: THE INDONESIAN OPPORTUNITY	<u>12</u>
THE V-22 FOR INDONESIA: A CORE CAPABILITY TO LEVERAGE ALLIES AND PARTNERS' AFLOAT FORCES	22
LINKING COALITION WARSHIPS	24
THE OSPREY AND THE T-AKE SHIP: 2012	25
DUTCH WARSHIPS AND THE OSPREY: 2015	25
APPENDIX: THE V-22 OSPREY IS PERFECT FOR INDONESIA AND NOW THEY CAN BUY TH	<u>EM</u>
	<u>28</u>

The V-22 and Indonesia: Initial Considerations

07/24/2020

By Robbin Laird

Earlier this month, the US government provided an announcement of Indonesian interest in and pursuit of acquiring Ospreys.

In a July 6, 2020 press release by the Department of State:

The State Department has made a determination approving a possible Foreign Military Sale to the Government of Indonesia of eight (8) MV-22 Block C Osprey aircraft and related equipment for an estimated cost of \$2 billion. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale today.

The Government of Indonesia has requested to buy eight (8) MV-22 Block C Osprey aircraft.

Also included are twenty-four (24) AE 1107C Rolls Royce Engines; twenty (20) AN/AAQ-27 Forward Looking InfraRed Radars; twenty (20) AN/AAR-47 Missile Warning Systems; twenty (20) AN/APR-39 Radar Warning Receivers; twenty (20) AN/ALE-47 Countermeasure Dispenser Systems; twenty (20) AN/APX-117 Identification Friend or Foe Systems (IFF); twenty (20) AN/APN-194 Radar Altimeters; twenty (20) AN/ARN-147 VHF OmniDirectional Range (VOR) Instrument Landing System (ILS) Beacon Navigation Systems; forty (40) ARC-210 629F-23 Multi-Band Radios (Non-COMSEC); twenty (20) AN/ASN-163 Miniature Airborne Global Positioning System (GPS) Receivers (MAGR); twenty (20) AN/ARN-153 Tactical Airborne Navigation Systems; twenty (20) Traffic Collision Avoidance Systems (TCAS II); twenty (20) M-240-D 7.64mm Machine Guns; twenty (20) GAU-21 Machine Guns; Joint Mission Planning Systems (JMPS) with unique planning components; publications and technical documentation; aircraft spares and repair parts; repair and return; aircraft ferry services; tanker support; support and test equipment; personnel training and training equipment; software; U.S. Government and contractor engineering, logistics, and technical support services; and other elements of technical and program support.

The estimated total cost is \$2.0 billion.

This proposed sale will support the foreign policy goals and national security objectives of the United States by improving the security of an important regional partner that is a force for political stability, and economic progress in the Asia-Pacific region. It is vital to U.S. national interest to assist Indonesia in developing and maintaining a strong and effective self-defense capability.

The proposed sale of aircraft and support will enhance Indonesia's humanitarian and disaster relief capabilities and support amphibious operations. This sale will promote burden sharing and interoperability with U.S. Forces. Indonesia is not expected to have any difficulties absorbing these aircraft into its armed forces.

This announcement comes at a time when several dynamics of change affecting Indonesia are underway.

Clearly, the activities of China in the South China Sea are of significance. The announcement by Australia of a new round of defense changes, in which clearly, Indonesia considered a key partner in regional defense And with the Marines operating in the region, notably from training ops in Australia and the US Navy and Marine Corps reworking how to work more effectively together, operating an aircraft, that both now operate is of significance as well.

While this story was being released, I was travelling to visit the US Navy in both the Naval Aviation Warfighting Development Center (NAWDC) and to San Diego to visit the US Navy's Air Boss as well as the new Osprey Navy command as well. After my return, I learned of this State Department announcement, and realized it would be a good opportunity to discuss what the acquisition of the aircraft would mean for the evolution of the Indonesian armed forces and for Indonesia more generally in the new strategic environment.

This announcement provides a good time to reflect on how such an acquisition would tie into developments in the region and evolving capabilities for Indonesia and its allies working to ensure that the rule of law at sea is maintained.



Figure 1 Range and Speed is a crucial capability for the Indonesian operaitonal geography and topography. Credit Grahpic: Bigstock

A number of considerations can be addressed.

How would the Osprey enhance the capabilities of the Indonesian authorities to deal with humanitarian crises in its unique geography?

Indonesia is a nation consisting of 17,000 individual islands spanning thousands of miles and it would seem clear that the speed and range of the aircraft would provide a unique capability to assist in humanitarian crises much more rapidly than would current capabilities be able to deliver.

How would the Osprey impact of the overall capabilities of the Indonesians to deal with counterinsurgency threats and challenges?

Here it would be useful to examine the experience of the Marines, and the USAF in dealing with how the Osprey has altered the concepts of operations of the joint force dealing with counter-insurgency.

How would the Indonesians be able to leverage the new approaches to training which the Marines have put in place to train the Japanese?

In other words, the Indonesians would not be the first partners to learn Osprey from Marines and there is a clear advantage to this slot in the learning curve.



Figure 2 A U.S. Marine Corps MV-22B and a Japan Ground Self-Defense Force V-22 Osprey conduct aerial maneuvers at Marine Corps Air Station New River, North Carolina, July 9, 2019. (Lance Cpl. Elias E. Pimentel III/Marine Corps)

How would the Indonesians be able to leverage the operational experience of the Osprey nation from operating from a variety of ships in crisis management and combat situations?

With the Australians, and their allies clearly engaged in the region, it will be propitious to be able to operate off of allied ships as well as one' own.

In other words, rather than just looking at the Osprey buy as a platform acquisition, the focus should be upon how the acquisition is leaven for change for the Indonesians in dealing with core threats and challenges.

And with an assertive China in the region, this clearly is of concern for Indonesia and finding ways to better defend their interests interactively with allies and partners is a clear challenge.

How can the Osprey buy contribute to this challenge?

Clearly, Osprey acquisition would take the Indonesian military into the high-speed force insertion world, one which will see new capabilities enter the US and allied forces in the next decade.

Getting experience on how your capabilities and concepts of operations can be adjusted to a high-speed combat asset is a down payment on learning how to fight in the rapidly evolving world of new combat capabilities

The Osprey and Lessons Learned by the USMC: Implications for Indonesia

08/12/2020

By Robbin Laird

I have followed the coming of the Osprey to the USMC since 2007 and our team has visited several global geographical locations where Marines operate the Osprey.

Observations of how the Osprey has impacted Marine Corps operations can be identified which clearly are relevant to the Indonesian military if they were to acquire the V-22.

With the Indonesians indicating their interest in buying and operating the V-22, I am going back over my own experiences with the Marines as they have introduced, evolved and developed the Osprey and the impacts which the Osprey has had upon their concepts of operations. This includes as well, working new ways to get better use out of their other combat assets.



Figure 3 Members of the Indonesian navy don proper protective flight equipment before entering an MV-22 Osprey tiltrotor aircraft, assigned to Marine Medium Tiltrotor Squadron (VMM) 265 (Reinforced), for a tour of forward-deployed assault ship USS Bonhomme Richard, July 31, 2015.

The Osprey provided a key element for disruptive change.

But the adaptation of other combat assets to the coming of the Osprey and the evolution of Osprey conops to those adaptations is a key part of the story as well.

I will deal in this article with two such lessons learned which are clearly relevant to Indonesia, with its geography and topography.

In later pieces I will address additional lessons learned of relevance to the Indonesia case.

Range, Speed, Vertical Lift: Ability to Operate in an Expanded Area of Interest

The first observation comes from when the Osprey first showed up in Iraq.

Because it was the only vertical lift asset which could cover the entire country, a major challenge for the Marines was ensuring that they could use their aircraft for a combat priority.

The problem: VIPs quickly identified this as the aircraft of choice for moving around the country safely, and quickly.

As we noted in a story highlighting the use of the Osprey in 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.

And its impact was immediate.

As <u>Major General (Rtd.) Walsh</u>, then the air boss of Marine Air in Iraq commented:

"With the CH-46s in Iraq, I had to put out Forward Arming and Refueling Points (FARPs) to support them. This meant sending convoys, equipment, and Marines out to operate and secure the FARPs. This also required protecting the FARPs after they were in place.

"With the Osprey, I could simply leap past all of that. The Osprey completely changed how we operated. The demand became to use the Ospreys throughout Iraq because it could go through Iraq in one day easily, and just run around the battle space. It changed completely how we used our heliborne assets."



Figure 4 CH-46 versus MV-22 combat radius in the Middle East

For Indonesia, the area coverage which Osprey provides compared to traditional rotorcraft or the landing flexibility it provides compared with fixed wing lift aircraft are clearly significant.

Almost certainly, VIPs will find this aircraft, with its speed and range and its ability to land in vertical space, a high demand asset.

Ospreys will provide the Indonesian military with new options.

And these options can be exercised in either VIP transport, or HADAR disaster relief management, or an ability to survey the area of interest and to place the insertion force in the most efficacious location in the area of interest.

Osprey in Counter-Insurgency Operations

The second lesson learned was how the V-22 could be used quite differently from rotorcraft in terms of counter-insurgency operations.

This was evident from its initial use in Afghanistan.

In a <u>telephone interview</u> I did with an Osprey squadron shortly after an engagement with the Taliban, it was clear that the capabilities of the Osprey provided significant advantages over traditional rotorcraft in terms of an ability to prosecute COIN operations.

The interview with Lt. Col. Bianca conducted on February 9, 2010 was conducted by phone with the sound of the Ospreys coming back from an engagement with the Taliban.

This was an early combat experience for the Osprey but was a harbinger of things to come.

I will quote that article at length here for its relevance to Indonesia is palpably obvious.

SLD: As you arrived in Afghanistan, can you tell us about the challenges you generally have had to face as a Marine supporting the ground forces?

Lieutenant-Colonel Bianca: "The nature of this particular environment is distributed operations, which – frankly – the V-22 excels at. We operate primarily in the Helmand province, but we do fly to the far reaches of the country, which we have done several times, just because we can. Also, because typically the forces and the leadership want to go places where there is no runway, and the V-22 can get you there.

"Distributed operations are mostly outlying bases and living with the people out in their village and their township. One of the advantages of the airplane is the fact that it allows us to land literally at dozens of these places in a single day, move mail, food, water, and in some cases, building equipment. We have run the whole gamut of support operations. We've done external lift operations. We've done deliberate actions for basic assault insert, looking to kick in the door.

"But day-to-day, we basically circulate and circumscribe the battlefield. And we do that in concert with the H-53s. Typically, the H-53s or the other aircrafts will work closer to Camp Leatherneck, while the V-22s will range out to the far reaches: that kind of burden-sharing works out pretty well for operational support."

SLD: It seems like one way to look at what the V-22 is doing is providing a very different kind of infrastructure than a classic rotorcraft or a fast jet can provide for the operational commander: would you agree?

Lieutenant-Colonel Bianca:" I would say that is absolutely correct. And this is true not just for pure military operations, but also in support of the political process closely associated with the military and

security operations. For example, when a Shura Tribal Council is to be held, a big issue is getting everyone together in a timely fashion to reduce the security risk to the council from Taliban attacks. The Osprey can uniquely bring folks together and move them after the meeting in a very timely manner.

"There have been one or two times where we had to go get a guy literally on the border with Iran and another guy from the other end of the country from the border of Pakistan. And if you didn't have V-22s, you could not have done that without taking several days to transport these guys."

SLD: So, just to underscore this point, the Marines talk about distributed operations and the role of the V-22 in those operations. But what you are highlighting is how, in addition, it fits the real political context of Afghanistan, as well as the need to bring the dispersed tribal leaders together to support the effort in Afghanistan and to prepare for the transition, is this correct?

Lieutenant-Colonel Bianca: "Well, that is correct. And again, we are trying to put people, and policy makers, people who can have an impact together in certain places at certain times.

"The nature of mobility is characterized by three things; speed, range, and payload. If you need mobility, -"hey, I just got here in Kandahar, and I need to go see this place and this place and this place, so I can get this non-government agency eyes-on" – well then, we are your platform, and I guarantee you, we are going to get that mission.

"The same thing with most of the VIPs who come from America, e.g. the undersecretary for agriculture, the various service committee members, representatives, etc. If you need to see a lot of things, then we're going to put you on a V-22, because you're going to see everything in this province in a day. We'll get you there and back in a day. There are no airports; we carry the airport with us."

SLD: A recent press piece focused on the role of the V-22 in Afghanistan as "ferrying around" troops. Given what you are saying and the impact which you have in shaping operational capabilities, it looks like the Osprey's role is going rather beyond just transporting troops and doing something akin to classic rotorcraft transport: would you agree with such an assessment?

Lieutenant-Colonel Bianca: "Well, you are absolutely correct. 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."

SLD: So basically, isn't the V-22 providing a very different understanding of mobility in terms of leveraging operations, timeliness, and ability to create a result that a classic rotorcraft just could not deliver?

Lieutenant-Colonel Bianca: That is correct.

That was from 2008.

It is also the case that because rotorcraft operate a certain way and the insurgents prepared their defenses in terms of how rotorcraft operate, the tiltrotor's ability to fly over the fight and land flexibly meant that in Afghanistan the Osprey became a force multiplier for sure.

In an interview I did with the recently retired Assistant Commander of the USMC after his return from Afghanistan in 2012, <u>General Walters</u> highlighted the Osprey impact:

"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.

"There is more to learn from how the Marines have shaped a way ahead for the Osprey and evolved their integrated combat capabilities and I will discuss further lessons learned in future articles."

But for now, one can highlight a number of characteristics of the Osprey demonstrated by the Marine's operating experience and clearly of central relevance to Indonesia.

First, the greater speed and operational reach of the Osprey compared to rotorcraft means that the insertion time for the force is significantly reduced.

And the ability to combine speed with vertical landing, means that the Osprey can operate without the landing space of a fixed wing lift aircraft.

Second, the Osprey has been used to provide for tactical surprise in COIN operations.

The long-range infiltration, runway independence, and endurance of the aircraft compared to rotorcraft contributes to the kind of tactical surprise crucial to special mission units.

And the Marines experience in this area can be seen in conjunction with how the USAF has used its aircraft as well.

Third, clearly, the range, speed, landing flexibility of the Osprey allows the Indonesian military to rethink how they can exercise operational influence across the archipelago.

In short, Indonesia faces a significant opportunity to not just buy a new aircraft, but to leverage the USMC experience of leveraging it for disruptive change which enhances force capabilities, rather than undercut them.

The Osprey and HADR Missions in the Pacific: The Indonesian Opportunity

08/01/2020

By Robbin Laird

As the Osprey gained operational experience in the Pacific, it became a frequent enabler for US assistance in Humanitarian Assistance and Disaster Relief missions. As Brigadier General "Stick" Rudder, then the Commander of the USMC 1st Marine Air Wing put it in a 2014 <u>Stars and Stripes</u> article:

Simply put, the Osprey can respond faster and farther to any situation where we might be called, including our most frequent mission — humanitarian assistance and disaster response. The Osprey is the ideal aircraft to respond to a disaster or any remote area because it can go so far and fast, carry a great deal of supplies or personnel, and it does not need a runway to land.

In fact, during Operation Damayan, Ospreys flew about the same distance — 1,118 miles — to the Philippines in three hours. The Ospreys evacuated 1,200 people and delivered more than 20 tons of

supplies to remote areas where neither traditional airplanes nor helicopters could reach. That gives you an idea of the tremendous capability the Osprey brings.

Now Rudder is Lt. General Rudder, the USMC's CG in the Pacific as head of MARFORPAC with the Japanese now enhancing the Osprey presence in the region with their own acquisition of V-22s and the possible addition of the Indonesians to the Osprey Nation.

In interviews we conducted in 2013, we talked with the Osprey squadron which came to the Philippines as part of the effort to support relief efforts in the Philippines in the wake of Typhoon Haiyan.

VMM-262, the "Flying Tigers, functioned as the lead presence force to assist in standing up relief efforts in the immediate wake of Typhoon Haiyan.

Having integrated capability for the point of the spear is crucial and the Osprey clearly functioned as the tip of the tip of the spear for rapid insertion in this HADR operation.

As one senior Marine put it:

1st MAW had Ospreys and Hercs in Tacloban about 72 hrs after the storm passed.

And I am not talking just about people on the ground but real, self-sustaining capability to move the mountains of relief supplies to where it was needed and where nothing else could get the job done so effectively.

There is no question it is a just a small effort against an immense catastrophe but the combination of rapid deployment and true capability is a crucial part of getting the response in play.

The "Flying Tigers" squadron formerly flew CH-46E Sea Knight helicopters. The Osprey transition for the squadron was the squadron's fourth redesignation since its activation in 1951. It has supported operations in Lebanon, the Dominican Republic and Vietnam from its duty station at Marine Corps Air Station Cherry Point, N.C. It relocated to MCAS Futenma in 1992, going on to participate in humanitarian assistance and disaster relief efforts in Indonesia, the Republic of the Philippines and Japan.

At the ceremony for the Osprey transition for the Flying Tigers, <u>Col. Brian W. Cavanaugh</u>, the MAG-36 commanding officer noted: "For more than 60 years, 262 has earned many honors ... I'm confident that their great legacy will continue."

"I said 262, not HMM or VMM because in aviation units it's the last three numbers that really matter. There are many units that transition to different aircraft, but it's those three numbers that carry the full weight."

The Sea Knight helicopter, nicknamed "The Phrog" has served the Marine Corps since before the Vietnam War.

"What you see here today is the transition from the mighty battle Phrog, which earned its mettle in Vietnam and many engagements after, to the journey of another combat-proven aircraft, the MV-22B Osprey," said Cavanaugh. "Today's ceremony honors those who have gone before us, not only in the CH-46 community, but the pioneers whose dedication allows us to provide this great capability (of the Osprey), not only to our nation, but to our partners."

The Osprey has a speed of 280 knots, an altitude ceiling of 24,700 feet, and a lift capacity of 20,000 pounds. The tiltrotor aircraft can carry 24 Marines with full combat load and can travel a combat radius of 325 nautical miles.

These capabilities make the Osprey twice as fast, able to carry almost three times the payload, and have four times the range of the CH-46E.

The Marine Corps role in the 2013 HADR effort to support the Philippines was the opening of a new chapter in which the Osprey could operate as a lead element in enabling US forces to aid and assist in an island(s) nation with the speed and range which the Osprey could bring to the table.

In this 2013 operation, the Ospreys worked closely with KC-130Js to manage the initial insertion for HADR support

Similar to the Philippines, the Indonesians clearly could benefit from what the Osprey can bring to a HADR operation. Indonesian V-22s would add speed and range to the current Indonesian capabilities for HADR response. For example, if there was a humanitarian disaster affecting Lombok and Sumbawa and the Indonesian military was responding from the Ahmed Yani Airbase in Semarang, the V-22s would be able to arrive to the affected area in 1.4 hours vs 3.9 hours for their Mi-17s or in 4.4 hours for their S-70s. And compared to the two helicopters mentioned, the v-22s would also be able deliver significantly more cargo and evacuate far more people.

An Indonesian V-22 force would also allow the Indonesians to make more effective use of their other assets for HADR operations domestically as well as for assistance in the region.

The Indonesian V-22s could operate as a trigger for change in the force packages which would be used in HADR operations, and reduce the demand on fixed wing airlift and provide capabilities in its rotorcraft mode to go into areas where no fixed wing aircraft could go when there is significant HADR disruption. The V-22 would enable the TNI-AD (Indonesian Army) to handle the crisis with more of its own organic assets, freeing the fixed-wing transports for longer-range intra-theater lift.

The range of the Osprey can provide significant coverage for Indonesia and its extensive island chains.



• Range is the maximum VFR range of the aircraft traveling at Long Range Cruise speed with all passenger seats occupied. **Figure 5 Credit: Bell Helicopter**

The Osprey coming to the Pacific over the past decade has brought a new capability for HADR operations in the Pacific. And the Marines have demonstrated through the past few years, what this new capability can bring to the challenging conditions which HADR operations entail in the Pacific.

See also, the following:

Editor's Note: We published this article on January 25, 2013 which looked back at Operation Damayan.

2014-01-25 By Robbin Laird

While many TV commentators seemed to have spent their time covering the Philippine relief situation doing little but to criticize the performance of the Philippine government (Anderson Cooper certainly comes to mind), key contingents of the USMC and USAF were working rapidly to establish the infrastructure for setting in motion the relief effort. And these contingents were working closely with the Philippine forces, and under the authority of the Philippine government.

On the US side, the story is rather a straightforward one: the USMC, the USAF and the USN came rapidly, created infrastructure within chaos to allow for the relief effort to follow and then within two weeks the core insertion force had left.

This is a story of coming to the aide of the Philippines rapidly as only the military can do, and bringing core pieces to the effort which allowed the follow-on forces, in this case relief agencies and personnel to follow.

I have had a chance to interview several of the participants on the US side in the relief effort from the USMC and the USAF and based on their first-hand information, a picture emerges of prevailing in very difficult conditions to stand up a relief effort able to start the task of coping with such a significant natural disaster. Two of the persons interviewed had participated in the relief effort in New Orleans after Katrina, and saw distinct parallels.



Figure 6 Air department Sailors assigned to the U.S. Navy's forward-deployed aircraft carrier USS George Washington (CVN 73) remove chocks and chains from a U.S. Marine Corps MV-22 Osprey on the flight deck after refueling in support of Operation Damayan. Credit

One of these participants was Lt. Col. "Sniper" Brown, the Commanding Officer of the Flying Tigers or VMM-262, which is an Osprey squadron. As Brown described the parallels:

"We knew we would enter a situation of chaos in the ground. We planned for our initial operation and got our planes and personnel ready. That is all that you can do when you don't know what is about to happen. I had this experience when working on New Orleans relief after Katrina, so I had a sense of how immense the devastation from such an event could look like."

Brown added: "When I first prepared to land in both situations, what I saw was things I was used to seeing simply gone. That was the baseline from which you worked."

Another participant was Col. James from PACAF, who was involved in the delivery of aid through the PACAF structure. James is on the operations staff of PACAF and has been working on preparing and executing support for the effort from before the time the Typhoon struck.

His comment on the parallels with New Orleans were as follows:

"I was a reservist and flew in the second commercial plane into New Orleans after the Hurricane hit; in some ways it was just as bad as Typhoon Haiyan. I think it is difficult for someone who has not experienced this to know just how daunting it is to launch a relief effort when everything is simply gone."

The overall effort was an engagement by the USMC with its integrated air and ground forces to start the relief effort.

Ospreys working closely with their KC-130J tankers were inserted from the outset and shaped the initial support effort. Shortly thereafter, the unique USAF 36th Contingency Response Wing arrived on their C-130s at Tacloban airfield to shape a forward operating base to support relief efforts close to the key areas of devastation.



Figure 7 The Osprey's being refueled by a KC-130J. The Marines twin the assets to provide for greater range and endurance in the mission. Credit Photo: Lt. Col Brown.

These two forces worked closely together to open up Tacloban as the forward edge of the hub operating from Clark airfield, which functioned as the de facto "Fed Ex" supply base, because Clark had not been damaged by the Typhoon

The USN came with its large deck carrier the USS Washington, which in turn was relieved, by two USN-USMC amphibious ships to continue the operation. Within two weeks of coming, these forces had more or less departed in favor of other key relief elements.

How this came together is the focus of this story.

According to the Commanding Officer of the 36th Crisis Response Group, based in Guam, the Ospreys played a unique role. Col. Livingston noted:

"The Ospreys provided a significant early entry force. The Filipinos loved the way the Ospreys could get into remote locations that had no roads, no infrastructure and could be used to bring assessments teams of civilians and representatives for the Filipino government to what what people in the remote areas needed immediately."

One might note that only a few months earlier most of the news in the Pacific were protests against the arrival of the Ospreys to Okinawa. Now they are part of the infrastructure for Pacific defense and what the US military calls HA/DR or Human Assistance/Disaster Relief missions.

Indeed, one of the key Osprey squadrons, VMM-262 had only been formed as such at the end of August. Within a very short period of time, the squadron was being tested in very difficult HA/DR conditions.

In an interview with "Sniper" Brown late on Sunday November 17th when he had returned from the day's activities to Clark Airfield in the Philippines, the CO provided insights into the process and challenges facing the Marines. As it became clear that a Typhoon would hit the Philippines, the Marines began to organize for a possible relief effort. This meant changing gears from preparing for a relaxing holiday weekend (celebrating the USMC birthday through to Veteran's Day) to ensuring that personnel and planes would be ready for action.

For Brown, it started with working with his next-door neighbor, <u>Lt. Col. "Julio" Julian</u>, the CO of the Sumos, the KC-130J squadron (VMGR-152) stationed at Marine Corps Air Station Futenma, in Okinawa, Japan.

It meant getting the maximum number of Ospreys in his squadron ready for action. Two of his 12 planes were in heavy maintenance cycle, and they needed a 4-ship group for the initial operation. They had 5 ready when first contemplating a response (ready for tasking); the other five were in process of being prepared for operations. The maintainers worked hard to get additional planes ready, which meant that two 4-ship groups would be ready for the initial engagement. The plan was to have the planes ready for operation by the 10th the day of the USMC birthday ball.

"When we realized that the storm was going to be as strong as it was, we knew we needed to have the 10 planes ready to go out of town. Over just two shifts of maintenance we had 10 birds ready to go. We then waited for the official launch order, but we were ready to go."

They needed to shape an initial engagement plan as well.

When the call to fly into the devastated areas came on Veteran's Day weekend, the challenge was to put together the ability to fly. "We flew with the Sumos who kept us fueled and carried our logistical needs as well. But we needed to sort out where to go and what the priorities would be in the initial 72 hours."

According to Brown, the first mission was go to Villamor Airbase, the home of the Philippine Air Force. They went there because it has significant storage of supplies as well as a command post. "We dropped off a couple of liaison officers as well on day one. We did not know what to expect, or where to go day one."

When they faced day two, they did not know what to expect.

"But we were up and running and flying by 0830 on a four ship on day two. We went to Villamour to pick up supplies and then had to determine where to take those supplies."

Brown highlighted that the disruption of the networks was significant as well, which meant that the satellites and other communications and support systems were in scarce evidence. Anticipating a lack of normal support on the ground such as even electricity, the CO had his Ops team put together a flight schedule for a week's worth of operations. When the "hold tight" became the go order they were ready when they landed to immediately fly to the people suffering.

"Major "Papi" Guzman who is my assistant operations officer and with whom I flew lead and wing together interchangeably for the first three days and I looked at a story in the Philippine Inquirer newspaper and said lets go to where they said a town was destroyed. We operated with visual reconnaissance to determine where to go and when. At one point we read the local paper to determine which Island needed us most. We decided to fly to Guian peninsula, and when over Guian decided to land on what looked like a soccer field. But it turned out to be a school, with hundreds of children on the field."

So what happened when they landed in the schoolyard?

"The first thing were a met with is hundreds of kids. I looked at this and thought of my own children. What if these were our kids? Our crew chief started offloading supplies; the kids are waving at us and smiling to us. The local police walked out and then the crowd organized itself into a nice orderly line, even though they have not had food or water for 3 or 4 days. It was amazing to behold. We were blown away by it for we were expecting a press of bodies from the crowd; but they were lined up and waiting for their turn. Amazing."

In a situation of ground chaos, sorting out the priorities for taking supplies to target points is a key challenge.

"Captain Casey Nelson and his crew did an emergency medevac of a 16-day old baby girl who was dying. They flew here to Manila for emergency treatment and she survived. The co- pilot was a young pilot with 30 hours of flying experience in the squadron. They had to fly alone and over water even though not an experienced crew.

"We are a young squadron and our maintainers and support personnel are incredibly dedicated to the round the clock job which we face."

I did an interview with Guzman as well which filled out the picture of those first few days of disaster relief. According to the Major when they began to touch base in what they thought was a soccer field:

"The area was completely devastated and all we saw was rubble. It was a never-ending path of destruction. My eyes scanned with total amazement. I would see images of families and little kids running around in the streets as we passed over. At first, the area looked deserted. But after we landed hundreds of children and older people came out from under the rubble or from cardboard boxes to approach the plane.

"You really do not imagine that many people in such a devastated area, coming out from the woodwork. And older gentlemen came up to the plane and shunted the children away from the plane so we could safely shut it down. If we had not had the newspaper, we would not have had a good idea where to start the relief area."

I asked him how the first-time flyers on the Osprey responded to the experience in such conditions.

"Like most first-time flyers, they were amazed when we transition from rotor to propeller mode and become a plane. The crew chiefs noted that eyes open wide open when the acceleration takes place and smiles came on the passengers faces. Normally we hold 24 in the back; here we had more than that. I remember we put a man with babies on both shoulders into a jump seat."

The Major also emphasized the challenge of flying in these conditions. "Normally we do 3 hours of flight planning for each hour of flight; needless to say we were doing 0 hours of flight planning in these conditions on a contingency task."

As the Marines established some support structure on the ground, they were able to establish Forward Air Refueling Points (FARPs), which could refuel various flying assets, Ospreys and helos being the key focus. When the USS George Washington showed up, those FARPs were established so that the Navy helos operated forward and were refueled by the Marine Corps FARPS. The Ospreys began to land on the carrier as part of its refueling runs. There have been tests of Ospreys landing on large deck carriers, but not in a situation like this one. It was a case of innovation on the fly, quite literally.

The picture of the first few days can only be completed if one includes a largely ignored USAF asset. The USAF has two Crisis Response Groups, one based in New Jersey and the other in Guam. I spent two days in 2011 with the one in New Jersey, and learned that this 120-person unit is organized around modules to provide support to HA/DR or combat missions in conditions of disruption. They have security units, mobile communication unites, airfield repair units, and mobile landing capabilities to handle the need to support incoming lift assets.

All of this was tested in Operation Damayan.

As Colonel Livingston identified in an interview on December 5, 2013:

"A few days prior to the storm hitting the Philippines, we provided a scalable capability input to support any effort. Then when the storm hit, we were tasked to provide an on site assessment of Tacloban airfield.

"We were tasked to determine what damage to the infrastructure had occurred, primarily in terms of air traffic control capability, the surface and subsurface of the runway, the stress of the map and the security challenges. Would the airfield be able to support a C-17 or simply C-130s?

"We first sent the assessment team in to determine answers to these questions. And the team traveled in on a C-130s initially.

"We had a planner operating in Manila on the 10th, we did the airfield assessments on the 14th and the team moved into the airfields on the 15th.



Figure 8 The Ospreys have landed at a school field to provide aid to the survivors of the Typhoon. Credit: Lt. Col. Brown

"A major challenge from the outset was security. We sent a security team, which worked with the Philippine police to provide for crowd control and management so that we could get the airfield operational.

"Conditions were difficult. Our standard package to go out the door is between 90 and 120 people. Originally, we hoped to put 100 into Tacloban but quickly discovered that we had enough dry ground only to have a 50-person team there, and the rest of the team went to Clark."

"It was clear that working under these conditions must be stressful for the airmen involved in the effort and the Colonel responded to a question about the stress and the compressed time line under which they had to work.

"Everyone on the ground was working continuously and under extreme pressure to get the supplies flowing into the area. Within 12 hours, the team was able to open the runway for C-17s, and given the condition of the airfield and the swirl of humanity which had to be brought under control, this was not a given.

"It was hair on fire for 96 hours until we could establish a way to set up a steady operational flow.

"And there were continual challenges. For example, many of the coalition aircraft arrived without rollers in the back of their C-130s so we could not unload and offload pallets.

"This meant that everyone would have to pitch in and move cargo by hand."

The approach here is as well to shape more capability with allies to augment similar HA/DR capabilities as well.

According to the Colonel:

"One outcome of the relief effort is expanded interest by the Philippine forces in building CRG like capabilities, something we would work with them on if they wished."

Of course, given the US past in the Philippines there was a certain irony in the US playing a lead role in shaping the initial infrastructure.

When asked about this bit of irony, the Colonel told this story.

"It is ironic as you say. A key requirement was getting drinking water to those affected by the storm. The equipment necessary to do this was brought in by C-17s. We offloaded the water purification units and moved them into Tacloban city.

"These all terrain forklifts, which we brought into the airfield, were driving through three or four feet of mud. And we put the kits down right there by MacArthur Landing Memorial Park where he did his landing.

"So now the water purification units pumping 20,000 gallons of water to the locals was laid down at <u>an</u> <u>historical point</u> in the US-Philippine history."

The V-22 for Indonesia: A Core Capability to Leverage Allies and Partners' Afloat Forces

09/10/2020

By Robbin Laird

I have followed the Osprey since 2005.

It has clearly been a driver of change for the USMC and the joint force.

And one key area of change became evident early on: it can land on a wide variety of ships in the U.S. or allied fleets, and thereby expand the utility of sea bases for Humanitarian and Disaster Relief Operations (HADR) or combat operations.

With the allies and partners of Indonesia building out their fleets, there will be obvious opportunities to land on and leverage those allies and partners sea bases, whether it would be with Australia (recapitalizing its Navy), with the United States (sorting out the best ways to address sea control and sea denial in the Pacific alone with SLOC defense and offense), with South Korea (building out its amphibious fleet) or with Japan (building out its amphibious fleet as well), just to mention the major players in the Pacific region.

Or put more broadly, the allies and partners are building out their fleets, and with ships on which clearly Indonesian Ospreys can land and operate.

And a key advantage of working with ships is, of course, is both operational flexibility and political agility in a crisis.

But one does not need a specialized ship for the Osprey to land on and to provide connectors for the force.

We followed closely the Bold Alligator exercises held in the last decade, and in one of those, the Osprey landed on a T-AKE supply ship.

In another exercise held off of the Carolina coast, an Osprey landing was done on a Dutch warship and then later in the year, during a NATO exercise, a second landing was conducted.

We interviewed the T-AKE captain involved in the Osprey landing as well as the Dutch Captain of the *HNLS Karl Doorman*, and both interviews highlighted how the Osprey expanded their ability to work with the joint or allied force.

This is a key capability which clearly rotorcraft (with more limited range and speed) or fixed wing airlifters (which require landing bases) cannot bring to the Indonesian force.

The Osprey creates a new combat or HADR capability by its range and speed and ability to land vertically on a wide range of shipping, including supply and combat ships.



Figure 9 The flexibility of sea-basing would allow Indonesian V-22st to work with a wide variety of allies without requiring a pre-commitment to do so in any particular crisis. Credit Graphic: Bigstock

Linking Coalition Warships

We published an article on Jun 22, 2015 which highlighted the evolving role of the new aircraft in working with the fleet.

We entitled the article "The Osprey as enabler: Linking Coalition Warships."

This was a summary of efforts to that date, so Indonesia would not need to worry about buying an untested capability for fleet connectivity; it was already there mid-decade.

I argued the following in that article:

The speed and range of the Osprey is a key combat enabler.

It also provides significant reach and range to connect US and allied warships into a 21st century sea base.

The capability to provide for resupply has been demonstrated many times, but the capability delivered in <u>Operation Odyssey Dawn</u> whereby Ospreys flew roundtrip from the USS Kearsarge to Sigonella to resupply Harriers was a clear statement of new opportunities.

As the Osprey has become a fixture of USMC and USAF global operations, the Marines have been working operations off of foreign warships as part of the process of building out an Osprey-enabled sea base, writ large.

Among others are the UK, French, Japanese, South Korean, and now Dutch warships.

https://sldinfo.com/looking-back-usmc-ospreys-and-harriers-aboard-the-hms-illustrious/

https://sldinfo.com/the-mv-22-operates-off-the-dixmude/

https://sldinfo.com/the-osprey-globally-engaged-this-time-landing-on-a-japanese-ship-in-the-apr/

https://sldinfo.com/the-osprey-as-an-enabler-and-connector-first-landing-on-republic-of-koreaamphibious-assault-ship/

During Bold Alligator 2012, the Osprey landed on a T-AKE supply ship which expanded the lily pads from which an assault force can be launched.

The Navy is looking to expand the size of the hanger aboard the T-AKE so that an Osprey can be kept in the hanger and one on deck for a total of two as needed.

Now the two dynamics – landing on a supply ship and on a foreign warship – have been combined during training off of the East Coast of the United States with a Dutch supply ship on June 12. 2015.

In the remainder of this article, we are taking our readers back to those two experiences, the Osprey working with the T-AKE supply ship, and the USMC working with the Dutch Navy.

The Osprey and the T-AKE Ship: 2012

Second Line of Defense visited the USNS Robert E. Peary (T-AKE 5) while it was in port in Norfolk.

The ship caught our eye while we were covering Bold Alligator 2012 because of the first operational engagement of an Osprey aboard a T-AKE ship. Captain Little is a graduate of the Merchant Marine Academy and has operated off of virtually every asset Military Sealift Command operates, since he joined in 1989. He was the first chief mate for the T-AKE 5 when it was delivered to the Navy in 2008. He and his crew had just returned from a 9 ½ month tour, which included action off of Libya as well as participation in the Bold Alligator 2012 exercise. And the ship is extremely flexible in providing supplies of various kinds, including ammunition and fuel. During the Libyan operation, the USNS Robert E. Peary worked with several allies as well.

SLD: Captain, could you talk a little bit about the Osprey landing on the T-AKE ship?

Captain Little: "The Osprey landing was a long range supply demonstration.

"It took off from New River, landed on our ship, got refueled and then participated in a raid on Fort Pickett more than 180 miles inland.

"The Osprey was on deck for about 30 minutes, loaded four pallets, was able to refuel, and took off with her cargo to support the Marines ashore in Fort Pickett...."

Dutch Warships and the Osprey: 2015

According to a story published by the USMC on June 16, 2015 by Lance Cpl. Fateh Saad, the first landing of an Osprey aboard a Dutch warship occurred on June 12, 2015.

MARINE CORPS AIR STATION NEW RIVER, N.C. -

Spirits ran high aboard the Karel Doorman, a warship with the Royal Netherlands Navy, as U.S. Marines with Marine Medium Tiltrotor Squadron 261 made the first MV-22 Osprey landing aboard a Dutch ship during an interoperability test conducted near Marine Corps Air Station New River, North Carolina, June 12.

"What we normally do is support the forces ashore," said Capt. Peter van den Berg, the commanding officer of the warship.

To better support ground forces, the amphibious unit recognizes it needs aircraft support, said van den Berg.

"That's why the Netherlands Navy is very interested in cooperating and integrating with the U.S. Marine Corps and operating the Osprey from our decks," said van den Berg.

"The Osprey is capable of doing large airlifts at a time, instead of a smaller helicopter – an Osprey can take much more personnel back to shore."

The landing was the first of its kind and tested the interoperability of the two military entities, as well as the Dutch's ability to host the American aircraft aboard their ships through carrier landings.

"The majority of people live within 300 nautical miles of the ocean," said Capt. Matthew Thompson, a Marine with VMM-261 and the pilot and operations officer for the exercise.

"With that in mind, the true Marine aspect of 'from the sea, to the shore," is increasingly important. Being able to land on a ship, or sea base from a ship, and move people, things, to the shore is increasingly important."

The test included five landings aboard the warship along with a refuel check to test the Osprey's ability to receive fuel from the Dutch warship.

"[This test] supports the mission of the 2nd Marine Aircraft Wing because when units from 2nd MAW move forward, they sometimes work in concert with coalition partners and that may include the Dutch one day," said Thompson.

Thompson said building a stronger relationship and testing the units' ability to integrate was the central focus of the carrier landings.

"The MV-22 Osprey provides commanders with unprecedented agility and operational reach," said Thompson.

The U.S military has a long-standing history working with their Dutch counterparts, a partnership both units expressed an interest in deepening.

"Having the knowledge that we learned today can help us when we move forward, if we ever work with the Dutch, which I think is a very real possibility ... especially when we saw the amount of compatibility that we have from a simple exercise like today," said Thompson.

First published by 2nd MEF on 6/12/15.

We added to this USMC article, with an article of our own.

And that article was based on a phone interview prior to the landing event with the Captain of the *HNLS Karl Doorman*, Peter Van Den Berg.

We discussed the the interoperability exercise and its origins was discussed.

Where is your ship now?

Van Den Berg: "We are in Norfolk undergoing demagnetization.

"We will perform an interoperability test later in the week with regard to landing an Osprey onboard our ship.

Your ship is a new logistical support ship.

What are its primary missions?

Van Den Berg: "It's designed as a logistical support ship, with its primary tasking is refueling at sea.

"And having that capability and also this space, we also have a secondary tasking, which is strategic transport for heavy equipment.

"And there's a third task for providing the logistics from the sea base.

"We can do that with the use of small landing craft or by using our very long, and large helicopter deck".

How did the test come about?

Van Den Berg: "We were undergoing sea trials when we were tasked last year to support the Ebola emergency relief effort.

"We had only four sea weeks on the clock when we were tasked to go to West Africa.

"And while on station we witnessed the performance of the Osprey and decided that we would like to work on working with the Osprey onboard.

"We requested such a test, and combined that with our visit to Norfolk for our demagnetization requirement.

"Dutch naval engineers determined that we could support the weight of the Osprey and any heat generated by the engines, so we worked with the USMC to set up this test.

"I should note that we only requested this test, six or seven weeks ago, and it was pushed forward by our commander general in the Netherlands with the leadership of the USMC."

You are a supply ship with some clear capabilities to operate more traditional rotorcraft, but how do you see the potential role of the Osprey for your ship as part of a coalition seabase?

Van Den Berg:" I think the Osprey in amphibious warfare is a real game changer.

"The Osprey will allow us the ability to sustain our support missions because of its ability to link us for a distance and with real speed.

"There is a shortage of decks; we need a connector like the Osprey able to link up those ships into an operational seabase for a coalition effort.

"And from an amphibious point of view, you can operate an Osprey deep and with speed inland.

"It changes the nature of the meaning of amphibious operations.

"It not only expands the operational reach, but can allow ships to be further from shore and be more secure."

Appendix: The V-22 Osprey Is Perfect for Indonesia And Now They Can Buy Them

In an article by Tyler Rogoway, published on <u>July 6, 2020</u> by *The Drive*, the author argued why, in his views, the V-22 Osprey fit Indonesian needs.

"The V-22, although its capabilities don't come cheap, is particularly well suited for Indonesia, a country that is made up of a whopping 17,000 individual islands spanning thousands of miles. The ability for the V-22 to carry significant loads at turboprop speeds, while still being able to land and take off near vertically will drastically improve the logistics capabilities of the Indonesian military.

"This is especially true when it comes to natural disasters, which, sadly, the country is no stranger to.

The MV-22s will also be a huge boon for supporting operations against radical Islamic groups, such as Jemaah Islamiyah, an offshoot of Al Qaeda, that continue to plague the country. The Osprey will give counter-terror operators far more flexibility when it comes to quickly responding to terror incidents and for executing preemptive counter-terror operations across Indonesia's highly challenging terrain."

He later noted that the extant inventory of Indonesia Aircraft did not have capabilities similar to the Osprey within the force.

"Indonesia has a highly diverse air arm, with aircraft from the U.S., Europe, and Russia filling out its inventory. While the country does have a number of turboprop transports and helicopters of various types on hand, none of them have the Osprey's unique remote island-hopping over long-distance capabilities."

And he closed with this point: "If you want an aircraft that can land on a dime after flying over 1,000 miles at twice the speed of a normal helicopter, there is still just one choice, at least for now."