On November 6, 2013, Haiyan (known locally as Yolanda) became what many described as the strongest storm on record to make landfall. According to the U.S. National Oceanic and Atmospheric Administration, Haiyan had winds of up to 200 miles per hour, with gusts of up to 225 miles per hour. Haiyan affected 9 out of the 17 regions in the Philippines. With over $86 million in total U.S. assistance, the U.S. military response efforts comprised more than 13,400 military personnel, 66 aircraft, and 12 naval vessels, which delivered over 2,495 tons of relief supplies and evacuated more than 21,000 people. More than 1,300 flights were completed in support of the relief effort, delivering goods and services to approximately 450 sites. As of July 2014, the U.S. Agency for International Development (USAID) estimated that a total of 16 million people were affected by Haiyan.
Many humanitarian aid experts and military leaders noted that civil-military coordination was some of the best they had seen during the response to Super Typhoon Haiyan in the Philippines from November to December 2013. In total, the United States participated in relief efforts together with 57 other nations and 29 foreign militaries. Specifically, the USAID Office of Foreign Disaster Assistance (OFDA), U.S. Pacific Command (USPACOM), and the U.S. Embassy in Manila demonstrated clear understanding of their roles and responsibilities as evidenced by their effective coordination. Moreover, U.S. Government entities provided assistance that reflected their unique capabilities appropriately scaled throughout the response phase.

The USAID/OFDA Disaster Assessment Response Team coordinated with the humanitarian community and validated and transmitted requests for military assistance to Department of Defense (DOD) responders on the ground. With the exception of a few days of water production in Tacloban, DOD focused mostly on large-scale operations, using its unique capabilities to deliver “wholesale” transportation and logistics support. USAID/OFDA was one of the first donors to the World Food Program, enabling its role as the lead coordinator of the United Nations (UN) logistics and emergency telecommunications clusters and as the co-lead of the food security cluster with the UN Food and Agriculture Organization.

Key lessons learned from previous disasters improved the speed and quality of overall U.S. interagency coordination. Most notably, personnel with previous disaster response experience who had personal connections with other major players in the relief efforts considerably expedited interagency and transnational relief efforts. The informal professional networks among relief workers that were built during common training and exercises greatly facilitated the trust needed for effective and efficient cooperation, particularly in the early response phase. Several communication avenues for the responders and for those affected by the typhoon were used, providing alternate means to coordinate operations while the major communication infrastructures were down. Mainstream media, social media, and citizen journalism played a significant role as well in informing responders of the appropriate courses of action for the employment of U.S. resources.

Many noted the impressive demonstration of Haiyan lessons learned put into action in the more recent response to Typhoon Hagupit, which began as a Category 5 storm before weakening to Category 3 when it hit the Philippines in December 2014. The resiliency of the Filipino spirit continues to impress domestic and foreign media. The commitment of foreign humanitarian assistance actors who came to the aid of the Philippines after Haiyan clearly demonstrates the increasingly globalized nature of disaster response. In the coming years, the challenge to find more innovative ways to increase investment in disaster preparedness and to better integrate and leverage local capabilities and capacities with international response will remain.

Super Typhoon Haiyan (Yolanda)

Haiyan entered the West Philippine Sea at 4:40 a.m. on November 8, maintaining its strength throughout the day as it moved across the central part of the country, weakening only late in the afternoon the following day.4 The storm tracked from the east directly across the eastern, central, and western Visayas regions, destroying large swathes of territory spread across a number of different islands. Leyte and Samar were hardest hit, with 90 percent of the infrastructure destroyed in Tacloban City, Leyte’s largest urban center. The typhoon overwhelmed regional capacity at a time when the national government had just faced two major calamities that had drained its resources and significantly stressed the in-country supply chain: the civil conflict in Zamboanga and Basilan on the southern island of Mindanao in September 2013, and the magnitude 7.2 earthquake in Bohol in the central Visayas region, which lay along the path of Haiyan, in October.

When Haiyan slammed into the Philippines, many prepositioned stocks were simply depleted.

As of April 3, 2014, authorities from the Philippine National Disaster Risk Reduction and Management Council (NDRRMC)—a working group of various governmental agencies, nongovernmental organizations, and civil and private-sector groups that use the UN Cluster Approach in disaster management administered by the Office of Civil Defense under the Department of National Defense—estimated the typhoon had left 6,293 people dead and 28,689 injured, with more than 4 million individuals displaced. The number of houses damaged by Haiyan totaled 1,140,332, of which more than half (550,928) were completely destroyed.5

Relief Efforts

The Philippines is a collection of more than 7,000 islands separated into 81 provinces in three main geographical divisions: Luzon (north), Visayas (mid), and Mindanao (south). Haiyan traversed the Visayas region, where most of the affected areas were located, for nearly a full day. Tacloban, located on the island of Leyte, Cebu City on Cebu Island, and Roxas City on Panay Island were the three other major areas affected by the typhoon that served as principal centers of regional relief efforts. Cebu, located in the central Visayas, was the primary logistics hub for the Philippines and other international relief efforts. International donations were processed in the one-stop shop inside Cebu’s Mactan-Benito Ebuen Air Base and then distributed to affected areas. Manila, located in Luzon, was the focal point for central coordination among the major responding organizations, with cluster coordination meetings taking place in each of the major cities in areas affected by Haiyan. The United States established its command operations center (COC) at Manila’s Villamor Air Base, home of the Philippine air force. This air base shares runways with the Ninoy Aquino International Airport.
Within the U.S. Strategic Response Framework, USAID/OFDA was assigned as lead Federal agency (LFA) for providing foreign humanitarian assistance (FHA) and coordinating U.S. responses internationally. USAID/OFDA has numerous response options outside of DOD to provide immediate support, including money, resources, commodities, and deployment-ready humanitarian experts and advisors across the U.S. Government. The catastrophic impact of Haiyan, however, required far greater capacity and capability than these response options could provide. Unique DOD airlift capabilities in particular became a key enabler for the entire response operation.

Camp General Emilio Aguinaldo (popularly known as Camp Aguinaldo), the military headquarters of the Armed Forces of the Philippines (AFP) located in Quezon City, Manila, also hosts the NDRRMC and the Multinational Coordination Center (MNCC) led by the AFP. The MNCC provided common situational awareness between the AFP and assisting foreign militaries, facilitated information sharing, and ensured the efficient use of military support locations, capabilities, and coordination.6

Lesson 1: Immediate Request for Assistance and Forward Deployed Assets Saved Lives

Haiyan destroyed critical infrastructure that was essential to support relief operations, including airports, seaports, roads, communications systems, power distribution networks (electrical and fuel), and other key resources. Though difficult to calculate with precision, it is likely that the immediate steps taken by the Philippine government and corresponding USAID-USPACOM decisive actions in the early hours of the response kept morbidity and mortality relatively low, despite the catastrophic impact of the storm and the millions of people displaced.

The Philippine government issued a request for humanitarian assistance to the U.S. Government on November 9 (Washington, DC, time). USPACOM directed Marine Corps Forces Pacific to lead military relief operations in the Philippines, with 3rd Marine Expeditionary Brigade (3rd MEB) serving as the tactical mission commander on the ground, and ordered deployment of the USS George Washington and elements of Carrier Strike Group 5 (CSG 5) to the Philippines.

On November 10, within 6 hours of authorization from USPACOM, 3rd MEB “suitcase staff,” consisting of the commanding general, G3, sergeant major, public affairs officer, and two communications Marines, deployed to the Philippines. Upon arrival, the MEB established the COC at Villamor Air Base and began coordination with the AFP, Joint U.S. Military Assistance Group–Philippines, and USAID/OFDA personnel who had arrived several days
before Haiyan hit. The immediate deployment of the 3rd MEB and the rapid civil-military coordination that followed meant humanitarian aid missions could begin promptly upon the declaration of a national calamity by Philippine President Benigno Aquino the next day.

The USPACOM Deployable Joint Task Force Augmentation Cell (DJTFAC) deployed and played a critical role in setting up an operational joint headquarters, aligning operational design and assessment plans, establishing an operational rhythm with the AFP, OFDA, and UN, and implementing the USPACOM FHA concept of operations (CONOPS). DJTFAC provided joint expertise, regional and local expertise, and detailed knowledge of USPACOM organization and processes. It provided rapid stand-up and execution to establish Joint Task Force (JTF) 505. Although some geographic combatant commands do not have a DJTFAC, it proved an indispensable capability for the USPACOM response to Haiyan.

On the same day, November 10, the Joint Special Operations Task Force–Philippines (JSOTF-P),7 located in Mindanao, about 600 miles south of the affected region, began conducting aerial surveillance to assess airfields, ports, routes, and distress signals, and obtaining information critical for search and rescue operations in the affected areas of Leyte, Samar, and the Western Visayas.8 JSOTF-P, which performs an advise-and-assist role to Philippine security forces throughout the southern part of the country, sent the first U.S. military personnel to respond. It also provided critical needs and damage assessment to the operational plans of the responders.

According to witnesses on the ground, the AFP and the interagency task force, despite having lost family members, extricated themselves from the rubble to clear the initial runway, providing the “initial main door” that allowed the entry of the first group of U.S. forces into Tacloban airport. According to Colonel Restituto Padilla, Jr., the AFP liaison officer to USPACOM, the AFP Vice Chief of Staff, Lieutenant General Allan Luga, recounted how the AFP and the interagency task force, while comprised of less than 100 individuals, “clawed their way back to the airport inch by inch” to assess the conditions for the entry of the responders and relief supplies in Tacloban. Colonel Padilla recounted:

Upon reaching the airport hours after being drenched, tired, hungry and with a [minimum of equipment salvaged from the devastation, the AFP and interagency [task force] mustered the remaining personnel in the airport and linked up with the surviving Philippine Air Force Tactical Operations Group (PAFTOG) contingent (whose camp at the airport grounds was totally destroyed) and began to painstakingly clear the runway.

This effort paved the way for the first PAF C-130 flights that brought the initial interagency and NDRRMC assessment team, medical teams from the AFP and limited medical supplies to the city of Tacloban. Their efforts too became the enablers that allowed for the first group of U.S. forces to arrive there the following day. If not for these men and women whose sacrifices got lost when more prominent responders arrived, none of the follow-on and similarly critical activities could have happened.9

The combined Philippine-U.S. efforts resulted in a capability that allowed tactical military forces to provide immediate relief, while the government and humanitarian aid community organized and prepared capabilities to deploy. On November 11, President Aquino issued Presidential Proclamation No. 682 declaring a state of national calamity—the same day USAID humanitarian relief supplies started arriving into Tacloban, 535 miles south of the COC at Villamor Air Base.

In the initial hours of Typhoon Haiyan, the U.S. military, working alongside AFP counterparts, was able to respond quickly due to the many prepositioned U.S. assets throughout the region. Military assets based in locations near the Philippines enabled responders to provide rapid provision of lifesaving assistance in the immediate aftermath of the storm, made particularly critical when host-nation prepositioned goods were exhausted by recent disasters. These forward-deployed assets and capabilities allowed for the immediate civil-military coordination needed to establish and execute a rapid response plan with the Philippine government.

Lesson 2: Centralized Planning and Decentralized Execution Facilitated Coordination

A hub-and-spoke concept of operations was stood up 18 hours after approval from USPACOM to deliver USAID humanitarian supplies from the primary hub at Villamor Air Base to Tacloban, Guiuan, Borongan, andOrmoc in Leyte and Samar. U.S. military aircraft enabled USAID/OFDA to conduct the needs and damage assessments required for relief planning and coordination without delay. DOD civil-military coordination focused primarily on airlifting supplies to affected areas for onward distribution.

The first shipment of USAID/OFDA relief commodities arrived in the Philippines on November 12, and U.S. military forces began regular distribution of these commodities on November 13, 5 days after the storm made landfall. Assets from the aircraft carrier USS George Washington and CSG 5 commenced relief operations on November 14.

Determining the allocation of resources and the use of DOD assets was critical to the relief efforts. Satisfying requests for assistance was based primarily on field assessments. Manila served as the main aerial port of debarkation for U.S. efforts due to its focus on wholesale support of operations, while the government and humanitarian actors focused on performing humanitarian assessments, administering medical care, and engaging in direct distribution of relief commodities.

The decision to use Manila as a hub avoided burdening the affected areas in the Visayas with internal logistics needs and freed up space for humanitarian actors to operate in the affected areas. Personnel in Manila, comprised of U.S., Filipino, and international humanitarian personnel, made frequent visits to
affected areas. Responding organizations and coordination mechanisms in the affected areas were somewhat slow in setting up due to the magnitude of the devastation, necessitating coordination in Manila.

Missions were cleared in Manila by the OFDA mission tasking matrix (MITAM). Forces and assets returned to base in Luzon at the end of each day to receive orders for the following day. President Aquino assumed direct control of the relief operations (at one point based directly out of Tacloban for several days), but they largely operated out of Manila for the duration of the response efforts.

**Lesson 3: Direct Planning to Ensure Command and Control Are Part of Course of Action Analysis**

USPACOM ordered the activation of JTF 505 on November 16 to lead the tactical mission, replacing the 3rd MEB. Lieutenant General John E. Wissler, commander of III Marine Expeditionary Force (III MEF), assumed command of JTF 505, which established operations in the Philippines on November 18 and reached full operational capability on November 20. (III MEF is the parent command of 3rd MEB.) JTF 505 led U.S. military relief operations until it was disestablished on December 1, 2013.

After 6 days of full operational capability, JTF 505 presented a transition confirmation briefing to the USPACOM commander on November 26. It stated that “unique DOD capabilities [were] no longer required” and recommended mission transition through first observing relief operations with U.S. Navy and Marine Corps amphibious forces in an “operational reserve” role, able to react to any sudden emergent requirements, and, second, by disestablishing the JTF and releasing all major U.S. forces for redeployment by December 1.

According to OCHA Situation Report No. 13, relief operations scaled up substantially, especially in Tacloban City, with access and logistics dramatically improving by November 19. All Tacloban residents had access to clean drinking water by this time, and hygiene kits began reaching various municipalities. In Cebu, less cargo was arriving daily and fewer people were requesting transport. After MITAM requirements were satisfied, the U.S. military response to this disaster was nearly complete.

JTF and USAID/OFDA leaders recognized that the emergency phase of relief operations terminated on or about November 26. While there was a significant multinational military effort, U.S. forces limited their efforts to the emergency phase, with U.S. command and control (C2) conducted largely out of Manila. Other foreign militaries arrived later and focused a large amount of effort on what could be considered the recovery and rehabilitation stages of the operation, with a major focus on all activities in the mission area.

By the time JTF 505 fully activated for this crisis, almost all USAID/OFDA-requested U.S. military assistance had been delivered. The JTF supported requirements established in one final OFDA MITAM to deliver relief commodities. Key considerations in the JTF 505 after action report included suggestions on ways to improve agility and effectiveness in manning, equipping, training, and readiness.

Through the employment of the most appropriate C2 option for the commander and staff, in conjunction with component input, unnecessary transition delay during execution was minimized. USPACOM opted initially to command its relief operations through its Marine Service component (U.S. Marine Pacific) instead of directly activating a JTF.

Once the establishment of a JTF had been decided, it took several days before adequate command, control, and communications were set up between the JTF and HQ USPACOM.

While the various C2 arrangements and the shift between them did not negatively affect operations, it did not enable a more rapid response. In mega-disaster scenarios in which it is not always clear how long the response phase will last, a key consideration from the Haiyan experience is whether a JTF should have been established sooner, but rather that the right course of action was planned for and decided upon at the outset to ensure that the appropriate C2 is employed.

**Lesson 4: International Coordination Team Synchronized Effective International Support**

The International Coordination Team (ICT) serves as an enabling mechanism for the effective and speedy provision of military capabilities and resources to support international efforts in the USPACOM area of operation. Operating from the headquarters at Camp Smith, Hawaii, the ICT meets regularly (Phase 0: bi-annually) and on an ongoing basis during a crisis situation (Phase 1–5: minimum daily) for the purpose of joint planning, sharing information, and creating a synchronized holistic awareness of the theater among USPACOM international military liaison officers (LNOs).

While the ICT meetings are open to all staff and strive to be as inclusive as possible, the core structure during Operation Damayan included the USPACOM DJ3 (Chair); a Canadian LNO (Deputy-Chair); a Japanese LNO; the Philippine LNO and Deputy LNO; an Australian LNO; a British LNO; representatives from USPACOM directorates, including training, plans, logistics, information technology, finance, and operations; the OFDA representative; the Foreign Policy Advisor; and an All Partners Access Network (APAN) representative.

Originally stood up in November 2013 in support of Operation Damayan, the ICT serves as a one-stop shop for international LNOs to clarify their roles, help posture international military support appropriately before the urgent formal host-nation request for assistance, and avoid potential confusion with the MNCC team during crisis situations.

Intended to provide a proactive, strategic, and high-level operational perspective, the ICT paves the way for the smooth establishment of the MNCC by alleviating the initial burden of the affected nation to collect, organize, and identify overlaps,
gaps, and potential opportunities across the full spectrum of response operations during the critical lifesaving rapid response phase.

To be effective, the ICT core members collect and monitor five main aspects of international military-related contributions during a crisis:

- initial government and military intents vis-à-vis projected support
- current capabilities in the region, their locations, and their projected duration(s) of stay
- determining where, when, and for how long capabilities will be deployed
- information requirements to better enable deployments and support
- any support required to facilitate movement into theater.

In addition, the ICT provides a platform for sharing lessons learned and best practices across all partner nations to promote alignment with USPACOM allies and partner militaries, particularly before a crisis makes landfall. The ICT also assists in the creation, review, and revision of military response plans, CONOPS, the dissemination of relevant operational information, and the coordination of sourcing additional military support of strategic theater military requirements.

Lesson 5: Preplanned Scalable Force Packages Optimize Humanitarian Assistance/Disaster Relief Support

Based on lessons learned from Operation Damayan, the newly revised and comprehensive USPACOM FHA CONOPS discusses in detail the strategic framework, strategy and policy considerations, mission statement, commander’s intent, lines of effort (LOE), various frameworks for each LOE, staff processes, event flow and decision point descriptions, operational planning team processes, transition assessment templates, and other supporting documents.11

The USPACOM FHA CONOPS is the authoritative reference for USPACOM FHA operations, actions, and activities. This document builds the strategic and operational construct for planning, preparing, executing, and assessing FHA operations, and will be applied in situations when U.S. agencies request DOD assistance (for example, foreign disaster relief, pandemic and emerging infectious diseases, and chemical, biological, radiological, and nuclear accidents). This CONOPS provides:

- prescriptive USPACOM guidance to military commanders performing FHA operations
- a framework to inform partner nations on USPACOM support during FHA operations
- a baseline for the development and conduct of training to prepare USPACOM commanders and forces to execute FHA operations.

Lesson 6: Other Tactical Considerations
Operational insights captured in the after action reports include lessons learned and best practices in major disaster response operations. Responders across different service components reported the following lessons that could be adapted to other geographic combatant command operational environment and disaster scenarios:

- Coordination and correspondence during an FHA response should be unclassified as much as possible to maximize information-sharing. If we cannot communicate, we cannot coordinate. Operating in the Secret Internet Protocol Router Network resulted in wasted time and effort, delaying shared situational awareness with partners.
- Ensure communications are in place prior to major transition. Prioritize the deployment of equipment as necessary to ensure sufficient communication capability is available to support the anticipated growth of C2 requirements.
- Ensure that the J5 rapidly establishes joint planning groups at the onset of operations to provide timely return to Phase 0.
- An assessment framework needs to be extant at the onset of operations. The incorporation of an assessment framework into the FHA CONOPS will help to ensure assessments are possible at the onset of an event.
- Ensure proper procedures to determine the supported valid requirements by USAID/OFDA. Confirmation of OFDA requests down to the Service components was initially difficult to obtain. There is a need for a real-time formalized reporting process of all OFDA requests, especially during the initial state of operations, to better identify which Service components will fulfill which requirements. Ensure that the MITAM is accessible and can handle the high volume of use from all constituents.
- USPACOM had the appropriate interagency advisors collocated with the HQ USPACOM staff, and this greatly enhanced the command’s unified action during Operation Damayan. Combatant commands should ensure their own personnel are appropriately staffed with interagency advisors pertinent to their area of operations. They should also initiate the situational awareness group at the earliest point after the identification of a major storm system and establish the operational planning team at least 24 hours prior to landfall for greater mission analysis and course of action selection.
- Units and organizations must identify stakeholders and LNO locations at the onset of a crisis. LNOs should be emplaced immediately to ensure situational awareness, coordinate operations, and ensure mutual support.
- Develop a simple checklist to determine the capabilities of airfields in the affected area(s). This checklist could be used to calibrate the required U.S. footprint.

Conclusion
Within 2 weeks, the emergency response phase of the humanitarian crisis was essentially over. While the U.S. military ceased major operations on November 26, some contributing-country military assets continued to stay on the ground in the affected areas supporting Philippine government efforts. The commitment of assisting actors who came to the aid of the Philippines clearly demonstrated the increasingly globalized nature of mega-disaster response.

Despite the magnitude of the damage and its wide reach across multiple islands, recovery began 2 weeks after Haiyan’s first landfall. This allowed JTF 505 to begin disestablishment. Remaining true to the United Nations Office for the Coordination of Humanitarian Affairs Guidelines on the Use of Military and Civil Defense Assets in Disaster Relief (Oslo Guidelines), DOD assets provided unique capability in the Haiyan response efforts when it was clear that no comparable civilian alternative existed.

When this unique capability was no longer required, DOD began to phase out its operations in coordination with the affected nation. The timeliness of the DOD response as the last-in and first-out resort speaks to the importance of mutual training and readiness, such as the annual bilateral Philippine-U.S. Balikatan military exercise, to allow for combined planning, interoperability, and a speedy and smooth transition of operations.

More than a year had passed since Haiyan made first landfall on November 8, 2013, in Eastern Samar, when Typhoon Hagupit (known locally as Ruby), the second most intense tropical storm in 2014, threatened the same area. Hagupit intensified to Category 5 on December 4, 2014, before weakening to Category 3 when it made landfall in Eastern Samar. This time, the Philippines applied lessons learned from Haiyan.

While a total of 4,149,484 persons were affected, only 18 deaths were reported. More than 1 million people evacuated to 3,640 shelters in advance of the storm’s landfall, an impressive feat in any country. The preparation activities of the local and national governments, including the prepositioning of road clearance teams, were applauded by numerous international governmental and nongovernmental experts and officials.

In suggesting best practices in the Haiyan response, this article aims to provide insights into the effectiveness of the U.S. response to a mega-disaster such as Haiyan. It hopes to inspire other geographic combatant commands to adapt some of the organizational models and tactical approaches suggested herein for their particular environments. It also aims to start a dialogue on ways to achieve unity of effort in a complex catastrophic scenario. As a testament to U.S. partners
and allies, the commitment of the United States to assist, advise, and stand ready to help its partners is best captured in the words of President Barack Obama: “One of our core principles is when friends are in trouble, America helps.”

Notes

5 Ibid.
7 At the request of the Philippine government, the Joint Special Operations Task Force-Philippines (JSOTF-P) assists and advises the Armed Forces of the Philippines (AFP) and Philippine civilian authorities in coordinating and sustaining counterterrorism operations in Mindanao as part of Operation Enduring Freedom.
9 Brigadier General Restituto Padilla, Jr., AFP, interview, January 8, 2013.
11 Headquarters, U.S. Pacific Command.