

LIAISON

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A JOURNAL OF CIVIL-MILITARY DISASTER MANAGEMENT & HUMANITARIAN RELIEF COLLABORATIONS

UNOCHA's
HuMOCC Platform

Civil – Military
Training & Education
Programs



*Emerging Challenges to
Civil-Military Coordination
in Disaster Response*



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On the cover: Multinational military service members, humanitarian aid organization workers, and rescue and medical personnel unload casualties from an Indian military helicopter to Joint Task Force 505 medical triage area at Tribhuvan International Airport, Kathmandu, Nepal. Photo by Gunnery Sgt. Ricardo Morales/ III MEF Combat Camera

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The Director's Letter
Col. Joseph Martin, USAF

This issue of the Liaison is focused on emerging challenges to civil-military coordination in disaster response. You will see that the articles are written by leaders in their field - humanitarians, military leaders, academicians and partner organizations - to provide a balanced perspective for a way ahead, which maximizes the strengths of both communities.

Articles include a first-glance at challenges and innovative coordination mechanisms faced in response to the April earthquake in Nepal. Another article highlights how domestic lessons learned can be leveraged in international responses as a way to better prepare our partners to overcome the 'tyranny of distance.' This can be mitigated to a degree through joint exercises, training, and familiarization with international guidelines on the use of military and civil defense assets (MCDA) in disaster relief operations. Furthermore, the Australian Civil-Military Centre (ACMC) looks at early considerations on civil-military responses to emerging diseases. This is indicative of how the broad-partnered community can share its knowledge and understanding with a larger audience.

A recurring theme in this issue is the need to develop new concepts to optimize civil-military coordination and to ensure sufficient opportunities for quality training are provided. We have included three archived articles for re-examination in today's atmosphere, including one on civil-military courses available to U.S. and international military and humanitarian personnel.



CFE-DMHA has focused its efforts in the past year on the delivery of expertise in training and education, information sharing, and regional civil-military engagements. This is done in coordination with partner organizations such as UNOCHA's Civil-Military Coordination Section, while remaining postured to support U.S. Pacific Command in planning and response to natural disasters involving U.S. forces in the Asia-Pacific.

The Center would like to thank all of our contributors to this issue. Your insights enrich a diverse civil-military dialogue that this publication seeks to enhance.

We will soon begin work on the next issue of the Liaison. The theme will be "Lessons from Nepal and Other Recent Disasters", to be published in Spring 2016. Submission ideas will be due in November. We welcome your comments, contributions and suggestions. Please visit our website at <https://www.cfe-dmha.org> to learn more about our mission, partnership and training opportunities.

LIAISON

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LIAISON is a publication of the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA) and serves to inform its diverse audience of current and emerging issues related to civil-military relations across the broad spectrum of disaster relief in order to enhance understanding among civilian and military practitioners and policy makers. Content is prepared in accordance with the *Associated Press Style Guide*. Contributions are welcomed and highly encouraged. The editor reserves the right to make editorial changes to any material submitted as deemed necessary.

The authors in this issue of LIAISON are entirely responsible for opinions expressed in their articles. These opinions are not to be construed as official views of, or endorsed by, CFE-DMHA, any of its partners, the Department of Defense, or the U.S. Government.

In addition to the editorial staff and contributing authors, the editor thanks the following people whose efforts made this publication possible: Col. Joseph Martin, Alberto Morales, Jr., James Kenwolf, Douglas Wallace, Mick Korman, Jim Welsh, John Miller, Joyce Blanchard, Mike Sashin, Mara Langevin, Rochelle Nae'ole-Adams, Dr. Imes Chiu, Hilton Lim, Jeff Hensel, James Robinson, Jesse Wolfe, Katie Greenlee, Jenney Tagorda, Melissa Aaron, Allison Symmonds, Tammy Makizuru-Higa, Monique Wheeler, Laurence A. Duaine, Rod Macalintal, Dante Mercado, Robert Reyes, Lloyd Puckett, Karen Michel, Craig Jaques, Nelson Chang, Lt. Col. Grover Harms, Lt. Col. Cecili Sessions and Jeffrey Blau.



LIAISON provides an open forum for stimulating discussion, exchange of ideas and lessons learned – both academic and pragmatic– and invites active participation from its readers. If you would like to address issues relevant to the disaster management and humanitarian assistance community, or share a comment or thought on articles from past issues, please submit them to editor@cfe-dmha.org. Please specify which article, author and issue to which you are referring. LIAISON reserves the right to edit letters to the editor for clarity, language and accuracy.

LIAISON welcomes article submissions

LIAISON is a journal of civil-military disaster management and humanitarian relief collaborations and aims to engage and inform readers on the most current research, collaborations and lessons learned available. If you are interested in submitting an article for consideration, please email your story idea to editor@cfe-dmha.org.

•**Format.** All submissions should be emailed to the editor as an unformatted Microsoft Word file. Footnotes are the preferred method of citation, if applicable, and please attach any images within the document as separate files as well.

•**Provide original research or reporting.** LIAISON prefers original submissions, but if your article or paper is being considered for publication elsewhere, please note that with the submission. Previously published articles or papers will be considered if they are relevant to the issue topic.

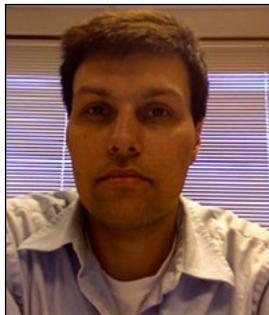
•**Clarity and scope.** Please avoid technical acronyms and language. The majority of LIAISON readers are from Asia-Pacific nations and articles should be addressed to an international audience. Articles should also be applicable to partners in organizations or nations beyond that of the author. The aim is for successful cases to aid other partners of the DMHA community.

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•**Supporting imagery.** Original imagery supporting any and all articles is welcome. Please ensure the images are high-resolution and can be credited to the photographer without license infringement. Images should be attached to the submission separately, not embedded within the Microsoft Word document.

•**Biography and photo.** When submitting an article, please include a short biography and high-resolution photo of yourself for the contributors' section.

CONTRIBUTORS



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Col. James Reilly (Ret.), USMC, retired from the Marine Corps in 2013 after having served 30 years. During his career he served in all four Marine Divisions, deployed to the Middle East in support of contingency operations, responded to humanitarian disasters in the Asia-Pacific, and held senior command and staff positions. His last assignment in the Marine Corps was with Headquarters, Marine Forces Pacific, where he served as the chief of staff from 2010 to 2012, and finally finishing his career supporting Pacific theater engagement and Southeast Asia exercises.



Ronaldo Reario heads the Training and Partnership Unit of the Civil-Military Coordination Section, Emergency Services Branch, U.N. Office for the Coordination of Humanitarian Affairs (OCHA) in Geneva, Switzerland. He manages the global United Nations Humanitarian Civil-Military Coordination (UN-CMCoord) Training Programme, develops and sustains partnerships with various organizations and institutions in promoting and creating understanding on the principles and concepts of humanitarian civil-military coordination, supports training and capacity development requirements of OCHA regional and country offices, national disaster management organizations and other defense and military training institutions, including peacekeeping training centers. As an United Nations Disaster Assessment and Coordination member and UN-CMCoord course graduate, he has deployed to emergency missions in: Darfur, Sudan and Indonesia in 2004; Pakistan in 2005; Mongolia in 2005; Myanmar in 2008; Haiti in 2010; and the Philippines extensively.



Tino Kreutzer is a program manager at the Harvard Humanitarian Initiative, and Brigham and Women’s Hospital, based in Cambridge, Massachusetts. At HHI, he coordinates the development of KoBoToolbox, the leading data collection suite for humanitarian settings, where he is working with UNOCHA, the International Rescue Committee and other humanitarian NGOs on improving speed and quality of disaster assessments. He is also responsible for field implementation and training of HHI’s Peace and Human Rights Data Program. In 2014, he was seconded to the U.N. Mission for Ebola Emergency Response, where he advised local response teams on data collection and data analysis in hotspot areas in Sierra Leone, Liberia, and Guinea. Prior to HHI, he was an Information Management Specialist working for UNDP and UNOCHA. He has 10 years experience working in humanitarian crises and recovery settings in Central African Republic, DR Congo, Uganda, Cote d’Ivoire, Guinea, Liberia, and Sierra Leone.



Pete Novick, a career Surface Warfare Officer (Cmdr., U.S. Navy, Ret.), subsequently worked in Navy Emergency Management as shore installation EM, Navy region EM, Navy Anti-Terrorism Force Protection (ATFP) Assistant Program Manager and lead Navy representative to Joint Project Manager Guardian, and finally as Navy ATFP Program Quality Assurance Manager, supporting command and control and physical security systems acquisition for Navy shore installations worldwide. He now lives in South Newfane, Vermont and owns Hayama Cabinetmakers, LLC.



David Polatty has served as a professor at the U.S. Naval War College since 2008 and teaches numerous courses on military strategy, crisis planning, humanitarian assistance and disaster relief operations, and maritime security. Dave is cofounder and co-director of the NWC College of Operational & Strategic Leadership – Harvard School of Public Health “Joint Civilian-Military Humanitarian Working Group,” which explores academic collaboration areas that can improve humanitarian responses during disaster. He is a graduate of the U.S. Naval Academy, U.S. Naval War College, and U.S. Joint Forces Staff College. He continues to serve part-time as a commander in the Navy Reserve, and has commanded four reserve units in U.S. Forces Korea, U.S. Naval Forces Southern Command, U.S. Strategic Command Center for Combating WMD, and U.S. European Command. He served on active duty from 1992 to 2003.



Kenneth R. Tingman was a Department of Homeland Security Federal Emergency Management Agency (FEMA) Federal Coordinating Officer (FCO) in the Pacific Area Office from 2007 - 2010. During his three years as an FCO, he deployed to 15 disasters across the nation, his final deployment being the earthquake and tsunami in American Samoa, where he spent six months leading the disaster response. Before joining FEMA, Tingman spent 24 years in the U.S. Air Force as a communications officer. During his time in the military, he served in a variety of locations and positions around the world, including serving as a military assistant to the senior U.S. Diplomat on the United Nations staff in Kosovo and was the communications squadron commander at the Prince Sultan Air Base, Saudia Arabia, on September 11, 2001. He is also a certified instructor for the National Disaster Preparedness Training Center.



Humanitarian and military staff members gather at the Humanitarian-Military Operations Coordination Centre in Nepal to coordinate relief after a 7.8-magnitude earthquake struck the nation.

By Ronaldo Reario, Humanitarian Affairs Officer, Training and Partnership Unit, Civil-Military Coordination Section, Emergency Services Branch, United Nations Office for the Coordination of Humanitarian Affairs

Militaries have been increasingly involved in humanitarian response operations in recent large-scale natural disasters. They are particularly evident where affected states request, welcome or accept international assistance, including foreign military assets (FMA). Humanitarian organisations on the ground inevitably interacted with them. This trend creates significant coordination needs in terms of optimising the use of available military assets to support priority humanitarian requirements. These may include capacity gaps in the realm of logistics (transport, air and seaport management, warehousing, commercial transport information, etc.), medical/health (out-patient and in-patient capacity, disease surveillance, public health interventions, etc.), communications (satellite-based voice and data), information management (assessment information, priorities in terms of goods-services-locations, potential gaps within estimated timeframes), and other operational issues that impinge the effective delivery of humanitarian assistance.

The “Three Big Ones” in the Asia-Pacific Region

On 8 November 2013, Typhoon Haiyan (known locally as Yolanda) made landfall in the Philippines. It was one of the strongest and deadliest typhoons in recorded history. The scale and magnitude of the impact of Typhoon Haiyan created overwhelming need in the hardest-hit areas. On the ninth of November 2013, the government of the Philippines accepted the U.N. offer of international assistance and welcomed the deployment of FMA. Twenty-two Member States deployed FMA in the Philippines. However, only 12 stationed assets and deployed “boots on the ground” consisting of various air, sea, medical, engineering, communication assets and personnel.

On 13 March 2015, Cyclone Pam hit Vanuatu creating widespread damage to property and sources of livelihood. Cyclone Pam is considered as one of the worst national natural disasters in the history of Vanuatu. On 14 March 2015, the Government of Vanuatu accepted offers of international assistance and welcomed the deployment

THE HUM OCC

Typhoon Haiyan, Cyclone Pam and Observations and Lessons Identified in Humanitarian-Military-Police Coordination and the Use of Foreign Military Assets

Nepal Earthquake:



A Nepalese soldier reads a newspaper article on the 7.3-magnitude aftershock that struck just weeks after a 7.8-magnitude earthquake hit Nepal's capital of Kathmandu.

of FMA from seven Member States consisting of air, sea, medical, engineering, communication assets and personnel.

On 25 April 2015, a 7.8-magnitude earthquake hit Nepal's capital of Kathmandu and its surrounding areas. This was followed by a large number of aftershocks, including a 7.3-magnitude aftershock on 12 May. The Government of Nepal requested international assistance through the United Nations Resident/Humanitarian Coordinator (RC/HC) in Nepal. Eight Member States deployed FMA into the country consisting of various air, medical, engineering, communications assets and personnel.

The Typhoon Haiyan After Action Review (AAR)¹ Recommendations

The Typhoon Haiyan AAR recommendations are used as baseline for comparison and analysis to draw some commonalities and differences among the “three big ones.” The facilitating and hindering factors for effective civil-military coordination during the emergency response were examined to develop solid and realistic recommendations.

The recommendations deduced from analysis of faci-

¹ The unabridged article, including a comprehensive list of facilitating and hindering factors, can be found here at https://www.cfe-dmha.org/liaison/The-HuMOCC_Full-Article

tating and hindering factors are:

1. It is important to establish a humanitarian civil-military coordination mechanism at the national level to assist and inform the National Disaster Management Authority and the humanitarian clusters in order to establish and maintain common situational awareness, as well as prioritize the use of FMA in supporting humanitarian activities and operations.

2. A humanitarian civil-military coordination capacity in domestic and international rapid response mechanisms should be institutionalized in order to optimize interaction and interoperability and contribute to the establishment of a common situational awareness. The humanitarian civil-military coordination capacity should also contribute to informed decision-making and response activities as well as facilitate integration with response actors and activities.

3. FMA must deploy with competent liaison officers that are able to explain available capabilities and limitations as well as to extract valuable information to define priorities. In this respect, it is important to keep the line of communication or coordination simple. In addition, the capabilities and complementary support needed should be determined and it is important to provide geographical, situational and actual information and awareness. Liaison officers should also try to avoid duplication and prevent confusion.

4. A co-location strategy for humanitarian civil-military coordination, where appropriate and feasible, should be adopted to understand host nation priorities based on humanitarian needs through open, efficient, fast, and transparent information sharing. A co-location strategy promotes humanitarian civil-military coordination effectiveness and efficiency and enhances deliberate planning. It also enables rapid coordination, cooperation, prioritization and decision-making based on needs. In addition, co-location maximizes communication and sharing of information among all stakeholders, actors and key players from national and local government levels, foreign and local NGOs, as well as foreign and national military forces. All of these contribute to having a common situational awareness as the operation progresses and the optimal utilization of unique military capability to support humanitarian priorities.

5. An emergency response should include a simple, transparent tracking system in order to keep national and subnational level informed about military air transport and activity and to contribute to the situational awareness of the humanitarian community. Moreover, a tracking system serves to inform the humanitarian community on movements of relief items; it deconflicts operations with civil aviation and can directly control ground time of military aircraft.

6. Last but not least, it is important to invest in humani-

tarian civil-military coordination capacity building to improve interoperability, to increase mutual understanding and to achieve and/or strengthen unity of efforts.

Cyclone Pam Observations and Lessons Identified

The Director-General or Director of the National Disaster Management Office (NDMO) in Port Vila, Vanuatu, chaired and instituted daily cluster coordination meetings. It was clearly identified that the UN-CMCoord officer was best placed within the NDMO structure to have close liaison with the NDMO Director-General, other relevant government staff, and the various cluster leads to facilitate the effective use of FMA.

The civil-military coordination mechanism established accurately recorded requests for the use of military assets to fill-up humanitarian capacity gaps and support humanitarian priorities. This mechanism incorporated an approval process from the NDMO Director-General in terms of priorities and a corresponding vetting process in which the FMA (by country) is identified as best suited to support the requests for assistance (RFA). At noon each day, various requests for the use of military assets for the delivery of humanitarian aid or essential passenger movement were presented to the NDMO Director-General. Upon granting authorization, the requests were given to liaison officers (LOs) of the FMA identified as best suited to perform the task. The task was then authorized that afternoon via a delegate of the approving authority and then actioned by the identified FMA. The expected turnaround time for actioning the request was advertised as 48 hours but often was achieved within 24 hours as the system became more streamlined and efficient. This system gave the transparency that was required by the Vanuatu Government, showed that the use of the FMA was essential in supporting the humanitarian response efforts, and promoted effective and efficient use of FMA.

A hindering factor identified was the different decision-making processes of FMA. Every nation that deployed FMA had its own decision-making authority, which became problematic and resulted in delays in accomplishing urgent tasks requested by the clusters.

International humanitarian organisations, foreign military forces and NDMO did not co-locate due to various reasons including issues with the size of facilities. However, the frequency and acceptance of both humanitarian-civil and military actors to take part in information sharing, task division and planning activities contributed significantly to achieving common situational awareness and informed decision-making.

A good practice in respect to joint planning was in conducting the second assessment to gather and/or validate critical information in key clusters and thematic areas of work. This involved the FRANZ Joint Task Force, Pacific Military Partners, the Vanuatu Humanitarian Team,

United Nations Disaster Assessment and Coordination (UNDAC) Team and UN-CMCoord officer. The plan entailed the deployment of 22 teams to four provinces within a relatively short window, which is only doable through military transport assets. This planning process showcased how humanitarians and militaries could work together to achieve the same objectives. The assessments provided a comprehensive picture of the humanitarian situation in the affected areas, validating residual humanitarian needs and gaps in life-saving assistance. The assessment also gave a greater understanding of the overall loss and damages in properties and livelihoods, which will feed into early recovery and longer-term reconstruction planning.

The FMA that deployed either engineers or medical teams to the hardest-hit areas in the initial period of the response were self-sufficient, using their own assets and supplies for the duration of their mission in terms of transport, fuel, food rations, water, sanitation and communications.

A simple and transparent tracking system that accurately recorded the request, assignment and identification of military transport assets used was established with the assistance of World Food Programme (WFP). All requests were logged on a service request form (SRF) that identified either goods (T) or passenger (P) movement. The SRF was scanned and filed into a dropbox for permanent record. An Excel spreadsheet was also developed which could easily identify the status of each request and accessed by relevant entities.

The deployment operation emphasized the great cooperation between the Government of Vanuatu, the Vanuatu Humanitarian Team, UN-CMCoord and the foreign militaries in Vanuatu at the time as a great success.

An invitation to attend the UN-CMCoord Course in Fiji 6-11 September 2015 was extended to the commander of the Joint Task Force to allow senior Civil-Military Cooperation (CIMIC) officers from the FRANZ partners that deployed to Vanuatu to participate in the course. Their attendance in the course will significantly reinforce their experiences, enhance their knowledge and understanding of U.N. and humanitarian systems, and validate their understanding of the principles and concepts of humanitarian civil-military coordination as provided for by the Oslo Guidelines and the APC-MADRO Guidelines. This will be an investment that will yield dividends in future emergency response operations in the Pacific.

Nepal Earthquake Preliminary Observations and Lessons Identified

Four civil-military coordination officers were deployed to Kathmandu as part of the UNDAC Team. Three weeks into the Nepal earthquake response operation, the RC/HC decided that humanitarian hubs would be established

in Gorkha and Chautara. Following this decision, dedicated UN-CMCoord officers were deployed in each of the humanitarian hubs.

The Government of Nepal established a Multi-national Military Operations and Coordination Center (MNMCC). The Nepal Army chaired the MNMCC with the participation of foreign military liaison officers from Algeria, Bangladesh, Bhutan, Canada, China, Israel, India, Japan, Pakistan, Singapore, Spain, Sri Lanka, Thailand, U.K. and the U.S.

UNOCHA was invited by the MNMCC chief to have a permanent liaison function within the MNMCC to facilitate information sharing and coordination, as well as common situational awareness between the MNMCC and the UNDAC Team's On-Site Operations Coordination Centre (OSOCC).

The Humanitarian-Military Operations Coordination Center (HuMOCC) was established by the UN-CMCoord team as part of the Nepal Earthquake response operation. It was co-located with the MNMCC. The HuMOCC objective was to provide a predictable humanitarian-military-police coordination platform. Complementary to the OSOCC, the HuMOCC aimed to provide the physical space dedicated to facilitating the interface between humanitarians, national and foreign military actors, as well as the national



Humanitarian and military staff members use the Multi-national Military Operations and Coordination Center (MNMCC) and the Humanitarian-Military Operations Coordination Centre (HuMOCC) in Nepal to coordinate relief operations after a 7.8-magnitude earthquake struck the nation.



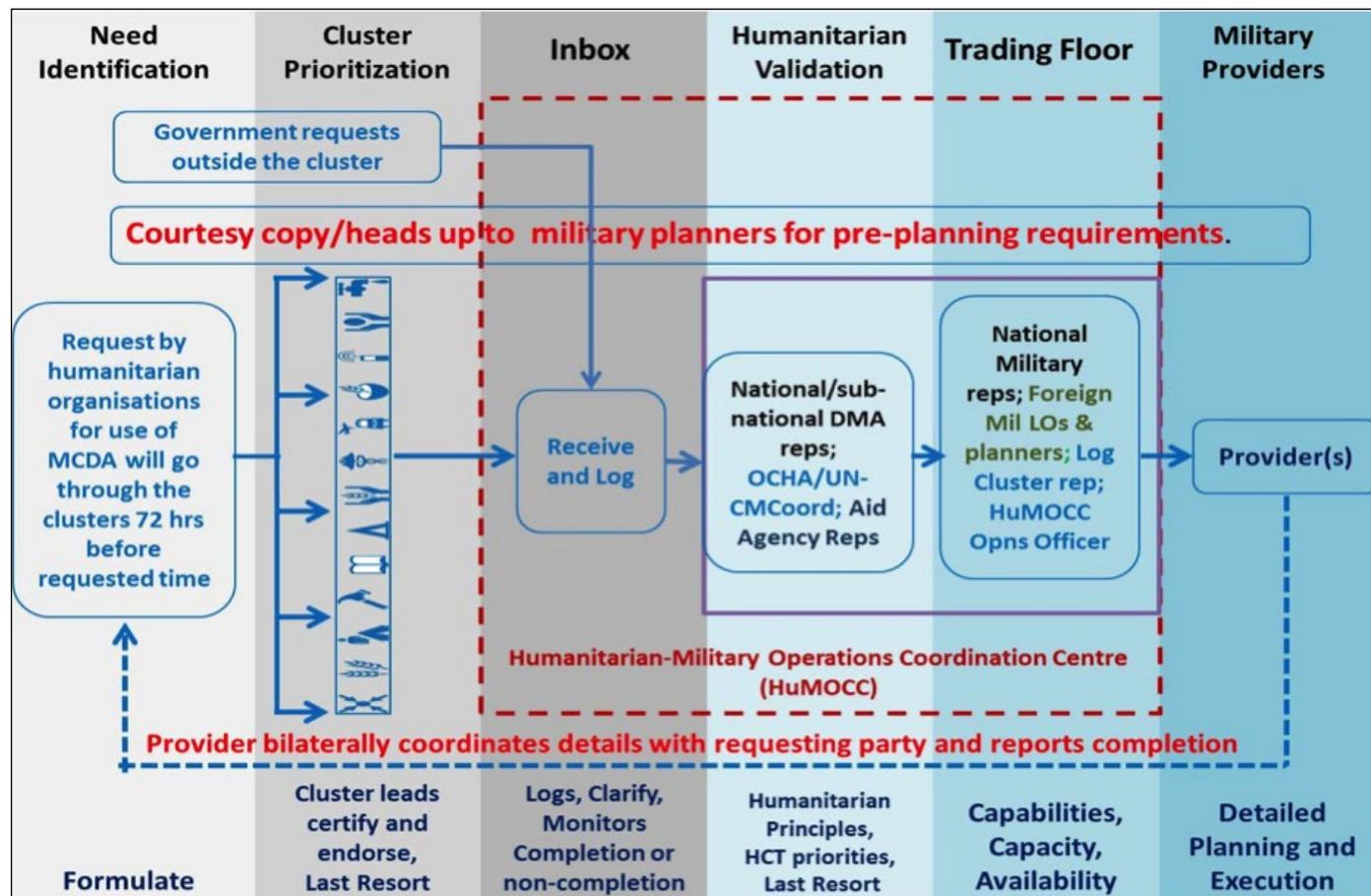
police.

As of 10 May, an Integrated Planning Cell (IPC) was created within the MNMCC. The primary objective of the IPC was to reinforce the planning and coordination “trading floor” function that is usually activated as part of the standard “MNCC” structure. The following representatives composed the IPC: Nepal Army, WFP Logistics Cluster and UNOCHA. Other actors would take part in the

IPC on a case-by-case basis. As a result of the establishment of the HuMOCC and the IPC, a procedure was initiated for the submission of requests for assistance (RFA) coming from humanitarian partners.

As part of the hand-over process, the UN-CMCoord team leader organized a debriefing session with the team members to discuss the UN-CMCoord strategy for Nepal and formulate key recommendations.

Typhoon Haiyan AAR Baseline Recommendations	Relevance of Baseline Recommendations	
	Cyclone Pam	Nepal Earthquake
1. Establishment of a predictable humanitarian civil-military coordination mechanism at national level to assist and inform the NDMO and the humanitarian clusters	✓	✓
2. A humanitarian civil-military coordination capacity in domestic (national) and international rapid response mechanisms should be institutionalised in order to optimize interaction and interoperability and contribute to the establishment of a common situational awareness.	✓	✓
3. To deploy FMA with competent liaison officers who are able to explain available capabilities and limitations as well as to extract valuable information to define priorities. In this respect, it is important to keep the line of communication or coordination simple. In addition, the capabilities and complementary support needed should be determined and it is important to provide geographical, situational and actual information and awareness. Liaison officers should also try to avoid duplication and prevent confusion.	✓	✓
4. A co-location strategy for humanitarian civil-military coordination, where appropriate and feasible, should be adopted to understand host nation priorities based on humanitarian needs through open, efficient, fast, transparent sharing of information. A co-location strategy promotes humanitarian civil-military coordination effectiveness and efficiency, and enhances deliberate planning. It also enables rapid coordination, cooperation, prioritization and decision-making based on needs. In addition, co-location maximizes communication and sharing of information among all stakeholders, actors and key players from national and local government levels, foreign and local NGOs, as well as foreign and national military forces. All of these contribute to having a common situational awareness as the operation progresses and the optimal utilization of unique military capability to support humanitarian priorities.	✓	✓
5. An emergency response should include a simple, transparent tracking system in order to keep national and subnational level informed about military air transport and activity and to contribute to the situational awareness of the humanitarian community. Moreover, a tracking system serves to inform the humanitarian community on movements of relief items; it de-conflicts operations with civil aviation and can directly control ground time of military aircraft	✓	✓
6. It is crucial that foreign military forces and organizations should be self-sustaining during the duration of the mission in terms of transport, fuel, food rations, water sanitation, maintenance and communications so as not to create additional burden on the host local governments and/or communities.	✓	✓



The Humanitarian-Military Operations Coordination Center (HuMOCC) process flow shows how straightforward and simplified the process is, yet flexible enough to be tweaked to adapt to the national coordination structure of the affected state.

As of 16 May, the following foreign military forces were present in the country: Bhutan, Canada, China, India, Japan, Pakistan, U.K. and the U.S. It is expected that most of these forces will be transitioning out from the operation by the end of May 2015.² The focus of civil-military coordination will therefore be placed on the dialogue and interaction with the Nepal Army, the Nepal Police and the Armed Police.

Preliminary Lessons Identified

1. One key lesson identified in relation to FMA provided by assisting Member States is that FMA should be offered to the affected state and plugged into the existing national coordination mechanisms. The bilateral allocation of FMA to specific clusters and humanitarian partners posed challenges in the context of the Nepal operations. This modality does not promote the optimal use of FMA to support the broader humanitarian priorities that is beyond one cluster and/or humanitarian organisation. Discussions about the modality for the request/offer/acceptance of FMA should be an integral part of the country preparedness planning process.

² By 5 June Nepalese Army announced the departure of all foreign military personnel involved in relief efforts.

2. Military-military coordination mechanisms such as the MNMCC in the context of the Nepal earthquake response should have the capacity to contribute to achieving common situational awareness, facilitate joint planning and clarify task division. This means that humanitarian priorities are given the first opportunity for the use of FMA in the absence of civilian alternatives during the critical period.

3. Requests for the use of FMA at the sub-national (hub) level were passed through the MNMCC. Decision-making and tasking normally takes place in Kathmandu at the MNMCC for use of FMA at the hub level. This was not seen as a robust mechanism that expedites decision on requests to the MNMCC for tasks that are carried out by FMA stationed at the sub-national (hub) level.

4. Another identified lesson is the limited understanding of the national military forces at the sub-national level about the presence of humanitarian actors and FMA present in the area. This resulted in a minimum level of coordination between the humanitarian actors and FMA on one hand, and the national military on the other hand. It was recommended that a civil-military coordination cell be established at the sub-national level.

Way Forward

Figure 1 validates the Typhoon Haiyan AAR recommendations in two different emergencies. “No two emergencies are the same” is a common phrase we hear from colleagues who have responded to multiple natural disasters. I would add that there will always be constants and variables in every large-scale emergency. The former would be overwhelming humanitarian needs, need for resources and the need for coordination among responding organisations; the latter would be more on the “how much of which is needed by whom, where and when” or “how to get the right assistance to the right people, at the right time, in the most appropriate way.” Let me delve on the “constant” that is the need for humanitarian and military coordination in the context of natural disasters in peacetime. The Humanitarian-Military Operations Coordination Centre (HuMOCC) offers the predictable platform that can provide the space and a simplified process that adds value to the work of others and also

strengthens humanitarian coordination in general.

Perhaps in preparation for the next big natural disaster, the HuMOCC concept can be incorporated in the preparedness planning processes and activities of natural hazard-prone countries. Member States that traditionally deploy FMA bilaterally or otherwise may also benefit from understanding the HuMOCC concept.

I share the HuMOCC process flow on the previous page, which explains how straightforward and simplified the process flow is, yet flexible enough to be tweaked to adapt to the national coordination structure of the affected state.

Acknowledgements

This article was culled from the Typhoon Haiyan AAR Report of March 2014, Cyclone Pam AAR Report drafted by Dale Potter, UN-CMCoord Officer, and the Nepal Earthquake UN-CMCoord Mission Report submitted by Viviana de Annuentis, UN-CMCoord Team Leader.



Nepalese military personnel speak with United Nations and International Federation of Red Cross and Red Crescent Societies staff to coordinate relief operations after an earthquake struck Nepal April 25, 2015.

UNOCHA



International Committee of the Red Cross



Natalie Hawwa/USAID

with widespread damage, a large number of deaths and injuries, and inaccessible or difficult-to-reach villages in need of assistance. Yet, despite the need for heavy lift equipment to clear roads blocked by landslides and rotary-wing air assets to reach remote villages, there was a fairly modest international military presence in Nepal and a notably small U.S. military presence. Although there were roughly 1,000 personnel that comprised the Joint Task Force in Kathmandu, Okinawa, and U.S. Pacific Command, the actual numbers of U.S. personnel operating in the field in Nepal was small compared to their Chinese and Indian counterparts.

This is especially true when the response is compared to those that took place in Haiti in 2010 and the Philippines in 2013. Part of this can be explained at least in part by the relatively easy accessibility of Haiti and the Philippines compared to the inaccessibility of Nepal. It is also possible that close U.S. ties with the Philippines, and Haiti's proximity to the U.S. explain the comparatively much larger U.S. efforts in these two countries as

compared to the limited presence of the U.S. in Nepal. A better understanding of

why the Nepalese government and the international humanitarian community did not request greater support through OFDA should help explain why the U.S. military played such a limited role in this disaster. As the lead United States federal agency, it is the Office for Foreign Disaster Assistance, which through its Disaster Response Assessment Teams (DART), assesses whether U.S. military assistance is needed.

Challenges

In comparison to other recent disasters, humanitarian relief efforts in Nepal were late to arrive and faced a multiplicity of hurdles that hampered

A Red Cross volunteer checks on a woman shaken by Nepal's devastating earthquake.

DART Member Mike Davis speaks to Nepali Army and the community in Bhaktapur, Nepal to figure out where people may be trapped.

The Use and Coordination of Civil-Military and Defense Assets in Nepal

By Vincenzo Bollettino, Ph.D., Director, Resilient Communities Program
& Tino Kreutzer, Program Manager, KoBoToolbox, Harvard Humanitarian Initiative

Late morning, April 25, 2015, a magnitude-7.8 earthquake struck Nepal, followed by a second devastating magnitude-7.3 earthquake on May 12. Centered in the Ghorka District, the initial earthquake destroyed entire villages, especially in Sindhupalchok and Ghorka. The capital of Kathmandu was fortunate to have escaped what would have been enormous destruction, had the epicenter been closer to the city. Despite the distance, the earthquake still leveled homes and buildings, including many of the nation's historical, religious

and cultural monuments. As geologists predicted, the earthquake's complete destruction of 489,000 homes and damage to another 260,000, underscored the country's inadequate level of preparedness.

Despite clear forecasts that an earthquake in Nepal was inevitable, and plans in place to coordinate a response with international humanitarian agencies and national and international militaries, it still took in excess of two weeks for aid to reach villages in Nepal's mountain regions. This is somewhat surprising given that the

airport, major roads and bridges in Kathmandu remained intact, and the markets quickly reopened.

During the response to the initial earthquake, forces from at least 18 foreign militaries were deployed to Nepal. By May 15, 2015, militaries from 10 countries had already departed, all of whom represented search and rescue, engineering, or medical staff. As of May 15, the largest presence was from China and India (844 and 611 troops, respectively). The U.S. presence included at least 286 troops from Joint Task Force 505, tasked with air support and providing at least seven rotary-wing and 12 fixed-wing aircraft.¹ The United States ultimately "delivered about 114 tons of emergency relief

supplies, including plastic sheeting, shelter kits, blankets, water, medical supplies and emergency and supplemental food in support of USAID. In addition to delivering aid, the task force transported 534 personnel and conducted 63 casualty evacuations."² By contrast, China's military support had a very minor focus on air transport, with two helicopters flying daily from a base in China to Kathmandu airport to carry personnel and supplies to remote areas.

It is precisely in situations like this that a major international military response is expected: a natural disaster in a relatively conflict-free country,

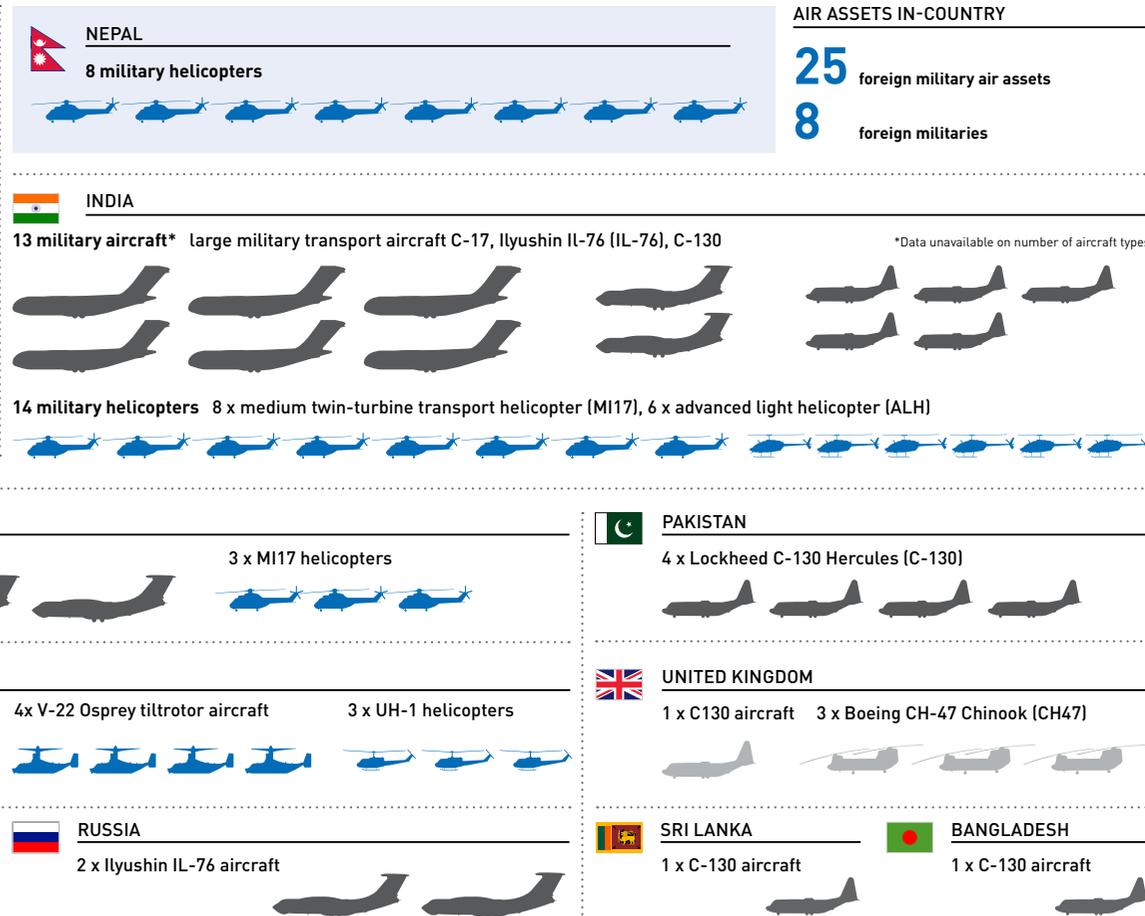
¹ CDIR 26 May 2015
² "Nepal Joint Task Force Begins Drawing Down," in Joint Task Force 505 News Release, accessed on May 29, 2015 at <http://www.defense.gov/news/newsarticle.aspx?id=128860>

OVERVIEW

- In-country
- Delivering cargo (not positioned in-country)
- Pending arrival

The Multi-National Military Coordination Centre (MNMCC) is coordinating all foreign military assets through daily meetings. The Nepalese Army has appointed a dedicated liaison officer from the MNMCC to the National Emergency Operations Centre of the Ministry of Home Affairs.

The Humanitarian-Military Operations Coordination Centre (HuMOCC) was established to provide the physical space dedicated to facilitating the interface between humanitarian and military actors.



Creation date: 12 May 2015
Data source: UNDAC
Feedback: cmcoordnepal@gmail.com
www.unocha.org www.reliefweb.int

A U.N. Office for the Coordination of Humanitarian Assistance infographic on Nepalese and foreign military air assets in Nepal as of May 12. Numbers continued to rise as response efforts grew.

the efficiency of the response. There were numerous logistical challenges posed by the single runway at the Kathmandu airport, an apron that could not accommodate more than six aircraft on the ground at any one time, landslides along some roadways, persistent aftershocks, and a second large earthquake. Even with the Nepalese military at full deployment capacity, there were not enough helicopters operating to deliver humanitarian aid in the first weeks following the disaster. As of May 8, the United Nations had a total of two helicopters at its disposal to deliver aid and conduct missions in Nepal. Both the Nepalese and supporting international militaries had helicopters (21 in total), but more were needed to reach the many communities af-

ected by the earthquake.

While air transport is essential after most natural disasters, the situation in Nepal has shown that relief in such a particularly mountainous area requires a much larger pool of helicopters, experienced pilots, and potential alternative landing locations.

Even had enough helicopters been available, there were other challenges that would have made them difficult to use, especially early on in the response. For one, the logistical challenges mentioned were exacerbated by the absence of a reliable register of potential helicopter landing spots – exposing crews to risks and slowing down deliveries. In addition, the terrain and extremely dangerous changing weather conditions in Nepal reduced the speed of relief efforts, as

was highlighted in two crashes by the Pakistani military on May 8, which killed the ambassadors of Norway and the Philippines, and a fatal crash of a U.S. UH-1Y Venom helicopter on May 12 that resulted in the deaths of six U.S. Marines and two Nepalese soldiers.

Despite the U.N.’s well-organized and very well attended cluster meetings across Kathmandu, aid agencies also faced a frustrating set of bureaucratic obstacles to the efficient delivery of aid. These included the build up of goods awaiting customs clearance at the Kathmandu airport, difficulties faced by some countries in acquiring landing permits at the airport, and restricted time slots when flights carrying humanitarian goods were permitted to land. In

one of the cluster meetings, a British official mentioned that there were two Chinook helicopters ready to be flown in from nearby India. As of this cluster meeting (week ending May 8), these flights were not given clearance either to leave India or to enter Nepal; the official did not say which. There were also restrictions on flights carrying relief items being flown to Nepal over Indian airspace. These flights had to stop in India first for inspection. Finally, there was a fleet of 25 trucks requisitioned by the World Food Programme (WFP), and stationed at the humanitarian staging area at the Kathmandu Airport, which were underutilized in the initial weeks.

In terms of civil-military coordination, it was also apparent from the Multi-National Military Coordination Center meetings (MNMCC), at least in the first two weeks, that the Indian and Chinese militaries were only marginally interested in utilizing this forum. Despite the fact that both militaries had the largest foreign military presence on the ground, they operated within their own geographic areas of interest and were hardly present in the MNMCC. This was despite the fact that the Indian military ran their operations from their own command center a mere 50 meters away from the MNMCC tent.

The setup of the MNMCC by country-desks, rather than by functional desks, may have encouraged bilateral coordination and discouraged more multi-lateral discussions by functional area. United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) did demonstrate considerable flexibility and creativity in the face of the numerous logistical constraints mentioned, including the establishment of a Joint Operations Cell to discuss daily requests for logistics support, medical evacuation, engineering requests and security issues. This Joint Operations Cell was to be comprised of UNOCHA, WFP, and the Nepal-

ese military and Nepalese police.

As with many emergencies, the location of multiple coordination centers makes effective coordination across the response a challenge. There were five major coordination centers in Kathmandu alone, spread out across the city, including the Onsite Operations Center (OSOCC), the National Emergency Operations Center (NEOC), the MNMCC, the Ministry of Health, and the humanitarian staging area at the airport, as well as the urban search and rescue team (USAR).

Technologies

Interestingly, the humanitarian response in Nepal included the use of an unprecedented number of new technologies and information applications. These included the widespread use of digital data collection tools (e.g. UNOCHA’s use of KoBoToolbox in rapid assessments), satellite-based mapping, real-time satellite imagery provision from Digital Globe and Google’s SkyBox Imaging, and the use of crowd-sourced community mapping. The emergence of large volunteer networks and community-based initiatives around the world are transforming the humanitarian landscape – and they were in full swing in Nepal. Moreover, these groups are empowering local communities to play an active role in disaster response. For example, in the aftermath of the earthquake, Kathmandu Living Labs coordinated more than 4,300 people to crowd-source information on the disaster in just one week. More importantly, they were able to take the reports they produced every two hours and send them to the Nepalese military, Nepalese governments agencies, and international NGOs. However, the accuracy and concrete applicability of these reports in comparison to more traditional forms of communication remain to be evaluated.

The use of unmanned aerial vehicles (UAVs), or “drones”, was an-

other notable feature of this response that distinguished it from previous responses. There were at least nine independent teams flying drones over Nepal (excluding journalists). Drones are a promising technology because of their ability to provide high-quality imagery, virtually anywhere. Regrettably, drone operators faced significant challenges in Nepal, largely because they failed to properly organize themselves and to adhere to an emergent code of conduct put together by the Humanitarian UAV Network (UAViators). A number of drone operators failed to register with the Nepalese government and faced arrest and confiscation of their equipment. Moreover, an opportunity to better coordinate with local communities and to offer a shared platform for the repository of imagery being collected never fully materialized. Invariably, in the future, these glitches will need to be worked out, with drone operators professionalized and more formally folded into the humanitarian architecture.

Whereas the response to Typhoon Haiyan in the Philippines was largely heralded as a success for civil-military coordination – a textbook response even – the same is unlikely to be said about Nepal. Instead, a number of lingering questions need to be answered. Why, for example, did it take two weeks or more for aid to reach some mountain villages? How did the Nepalese government and the international humanitarian community assess needs and prioritize delivery of aid? Why was the U.S. military presence so small and restricted largely to the provision of flights? What services did international militaries provide and were these effective?

A formal study of the civil-military coordination and international and domestic humanitarian response is thus needed to better understand what did and did not work well in the response to the Nepal earthquake.



By Judy Swann,
Director Concepts and Capability,
Australian Civil-Military Centre

The Australian Civil-Military Centre (ACMC) is an Australian Government initiative to improve Australia's effectiveness in civil-military collaboration for conflict and disaster management overseas. ACMC hosts Quick Impact Workshops (QIW) - with representatives from across government (Australian and international), civil society, private sector and the Australian Defence Force - to draw on the experiences and observations of Australians who have been part of an international response. The QIW supports civil-military-police capability and understanding through multiagency engagement, case studies and shared information.

In February 2015, the ACMC hosted a QIW on 'Early Considerations on Civil-Military Responses to Emerging Diseases: Ebola as a Case Study'.

Overview - The International Response to the Ebola Outbreak in West Africa

In August 2014, the United Nations (U.N.) Security Council declared the Ebola virus outbreak in the West African subregion a 'threat to international peace and security'. The U.N. request for assistance from member states resulted in the mobilization of technical expertise, medical capacity, humanitarian assistance, and both military and civil defense assets. The Australian Government contributed approximately AU\$45 million to the international Ebola response, including the management of an Ebola treatment center in Sierra Leone contracted to Aspen Medical, and a regional Ebola response preparedness package focused on the Indo-Pacific. Other countries, including affected states, responded in a variety of ways, some through civil-military intervention. The United States and United Kingdom provided a civil-military health response in Liberia and Sierra Leone respectively.

The Ebola outbreak has again raised concerns about the potentially devastating impact emerging diseases pose

Staff of the United Nations Mission in Liberia (UNMIL) and the United Nations Mission for Ebola Emergency Response (UNMEER) helped an orphanage for Ebola affected children with food, toys and cash in March 2015.

Simon Ruf/UNMEER

Early Considerations on Civil-Military Responses to Emerging Diseases:

EBOLA As a Case Study

to human and economic welfare. The response in West Africa has highlighted the need for robust regional health architecture, and indicates a likely role for the military (either within affected states or through international assistance) following an outbreak or pandemic in the Indo-Pacific region.

The unfolding of the crisis – initially a health response and then a ramping-up as it became more than a health crisis – enabled Australia to build its response accordingly, including the development of National Health Guidelines to manage domestic preparedness and management arrangements at the border. Notably, the Australian Defence Force (ADF) had a minimal role in this instance, but would likely be involved in a health crisis response in our region.

The following key observations were drawn from the workshop presentations and discussion.

Key Observations

International and Regional Health Architecture

Global health architecture - The global health architecture is increasingly seen as not ‘fit for purpose’. There is a global capacity gap in response mechanisms for global infectious disease outbreaks, including in coordinated planning, decision-making, resource sharing, resource management, and communications and information management. The current reform of the World Health Organisation may go some way to address this; however, it will remain a technical/standards agency with emergency response dispersed across the organization.

Health security risk in the Indo-Pacific region - Underdeveloped and stretched health systems in the region make Australia’s immediate neighborhood particularly vulnerable to a major health security risk. The Indo-Pacific region has experienced increased travel, trade and urbanization based on recent economic growth. At the same time there are concerns with increasing drug resistant malaria and tuberculosis in the region. Australia is working to help strengthen regional cooperative mechanisms for health security to address this, and other, potential health risks.

Operational Learnings

Stakeholder relationships - Work should continue to proactively build and nurture relationships in non-crisis periods. Well-established, long-term relationships were central to ensuring Australia was able to respond effectively, both domestically and internationally. Relationships between the Commonwealth and State and Territory Governments were important, particularly in Australia’s early response when the focus was primarily on domestic protection and information to travellers.

Bilateral relationships with international governments, military-to-military cooperation, and international and domestic health partnerships all contributed to the suc-

cessful outcomes of the response in West Africa. Civil Society engagement was crucial. The Red Cross and Medecins Sans Frontières were key first movers and were operating on the ground instantly. They were quickly supported by international advocates (including the U.S. and U.K.) and were direct in their expectations and advice about where Australia could and should best support other efforts.

Private sector engagement - It is becoming increasingly clear that the private sector is an active responder in crisis situations. The Ebola Treatment Center established by Firestone Natural Rubber Company in Liberia became a best-practice example of a quick and effective response. The Australian Government’s engagement of Aspen Medical to deliver services in Sierra Leone also highlights the flexibility and availability of the private sector to support a government crisis response. Building understanding and partnerships with the private sector, both domestically and overseas, would enhance Australia’s ability to respond more effectively to crises in the region.

Command and control structures - The establishment of the United Nations Mission for Ebola Emergency Response (UNMEER) and insertion into affected countries saw some confusion about mandates and responsibilities. Clear lines of responsibility and reporting must be established from the outset if a mission is to operate effectively. For Australia, this means ensuring robust inter-agency coordination structures, as well as governance mechanisms for working with international partners. Effective command and control arrangements are essential to avoid duplication and counter-productive effort.

Interagency coordination - The Ebola crisis underlined that Australia’s interagency planning and response is highly effective. The Australian Government Interdepartmental Task Force (IDETF) model is well developed and works well. DFAT’s coordination of overseas response is central to managing Australia’s international assistance efforts. However, it is also important to note that line agencies may be called on to lead (e.g. in this case the Department of Health), and good practice indicates that early centralized coordination of effort is essential including early identification of lead agencies and points of contact. This process supports coordinated planning, timeliness of decision-making and coordination of resources.

Planning and preparedness - Tactical off-the-shelf contingency plans play an important role in operations but there is a requirement for strategic flexibility and agility in planning. Early in the Ebola response, the Australian Government established clear direction on priorities. However, as international priorities and responses changed, it was important for civil-military agencies to be flexible while strategic direction was being realigned with international partners.

Good practice also indicates that there is a need for



Sgt. 1st Class Nathan Hoskins/ U.S. Army

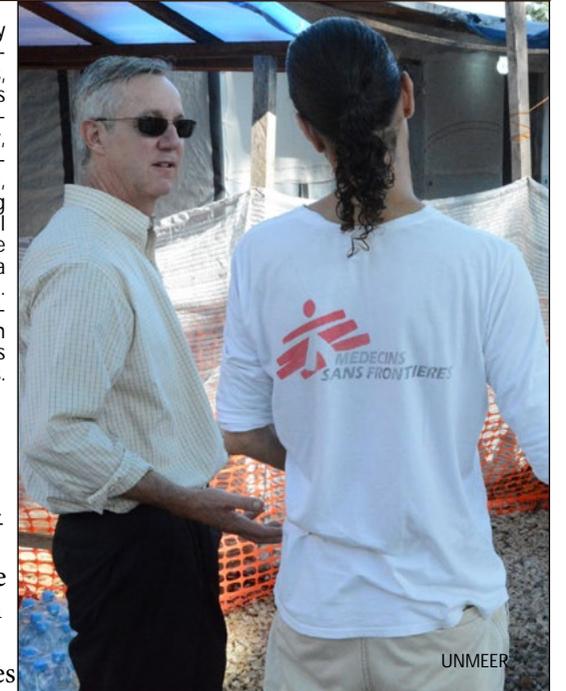
long-term transition planning in every crisis. In the case of Ebola, Sierra Leone and other affected countries will have to grapple with a false economy over coming months that has been generated by substantial hazard-pay for medical teams, as well as dealing with the recovery of mainstream health systems.

Communication management - The media response in any crisis will deal with perceptions more than reality, as was the case with the Ebola crisis particularly in local communities and regarding international travel. Effective crisis management requires careful attention to messaging, media management and communications. These are necessities in achieving a successful outcome and must be factored in at the start of every crisis response.

Media and messaging - Media pressure in a crisis can lead to ineffective allocation of resources, particularly if it leads to ‘being seen to act’ taking priority over good planning and the coordination of response efforts. Crisis responders, both government and nongovernment, need to establish as quickly as possible common clarity of vision as the basis of their respective engagement with domestic

(Above) From right, Sam Sells, military liaison officer, U.S. Agency for International Development, Lt. Col. Lee Hicks, JFC-UA command engineer, Armed Forces of Liberia Capt. A. J. Halley Moore, 1st Battalion commander, Maj. Gen. Gary Volesky, commander of the Joint Forces Command - United Assistance, Scott Dehnisch, military liaison officer, USAID, and Gregg Gross, engineering contractor, talk to local medical officials Nov. 3, 2014, about the placement of a planned Ebola treatment unit in Ganta, Liberia.

(Right) U.N. Secretary-General Special Representative Anthony Banbury speaks with medical personnel from Médecins Sans Frontières in Ebola affected countries.



UNMEER

and international media.

Information sharing - There is common theme in recent crises response that management of information, analysis of data and sharing knowledge is increasingly important in inter-agency international operations, and increasingly complex. Protocols and procedures for multi-stakeholder

communication management and information sharing should be incorporated in all crisis management planning.

Cultural sensitivities and gender considerations – The international Ebola response highlighted the importance of gender, civilian protection and cultural considerations, particularly in areas such as women’s healthcare, and safe and dignified burials. Every crisis response needs to take account of cultural sensitivities and gender considerations. Rapid identification and protection of the most vulnerable in the community (e.g. children, the elderly, pregnant women and lactating mothers) should be a priority.

Learning from others – The Ebola response in West Africa highlighted several best-practice models from across civil-society, the private sector, U.K. and U.S. military, and government. The U.K. and the U.S. responses, led by DFID and USAID respectively, chose to deploy substantial military assets in West Africa. There is potential to consider these models as a template or framework should an ADF response be required in the region. The sharing of lessons reports domestically and interna-

tionally maximizes opportunities for continuous improvement.

Managing resources – Placing the right people in the right jobs is essential and experienced human resources are fundamental to effective outcomes. Effective coordination of resources on the ground in overseas operations is also key. For infectious disease outbreak, there are considerable duty of care issues relating to deployments. The management of resources should include robust arrangements for the wellbeing of personnel.

Alignment of strategic priorities – The priorities of the Australian Government are unlikely to fully align with those of the host nation, the international community, the U.N. or nongovernment organizations. In formulating policy advice to government, Australian agencies need to articulate how our contributions can do the most good, while balancing the needs and expectations of the wide range of interested parties.

Engagement with the U.N. – The effectiveness of U.N. missions is contingent, not only on their internal leadership, but on national and international engagement with those missions. This means that national

agencies need to expose their staff to U.N. training programs and multinational U.N.-focused exercises. It is too late to build this capacity once an operation has commenced. More staff needs experience in providing operational leadership for complex missions, including where the source of authority may be unclear or non-existent.

Conclusion

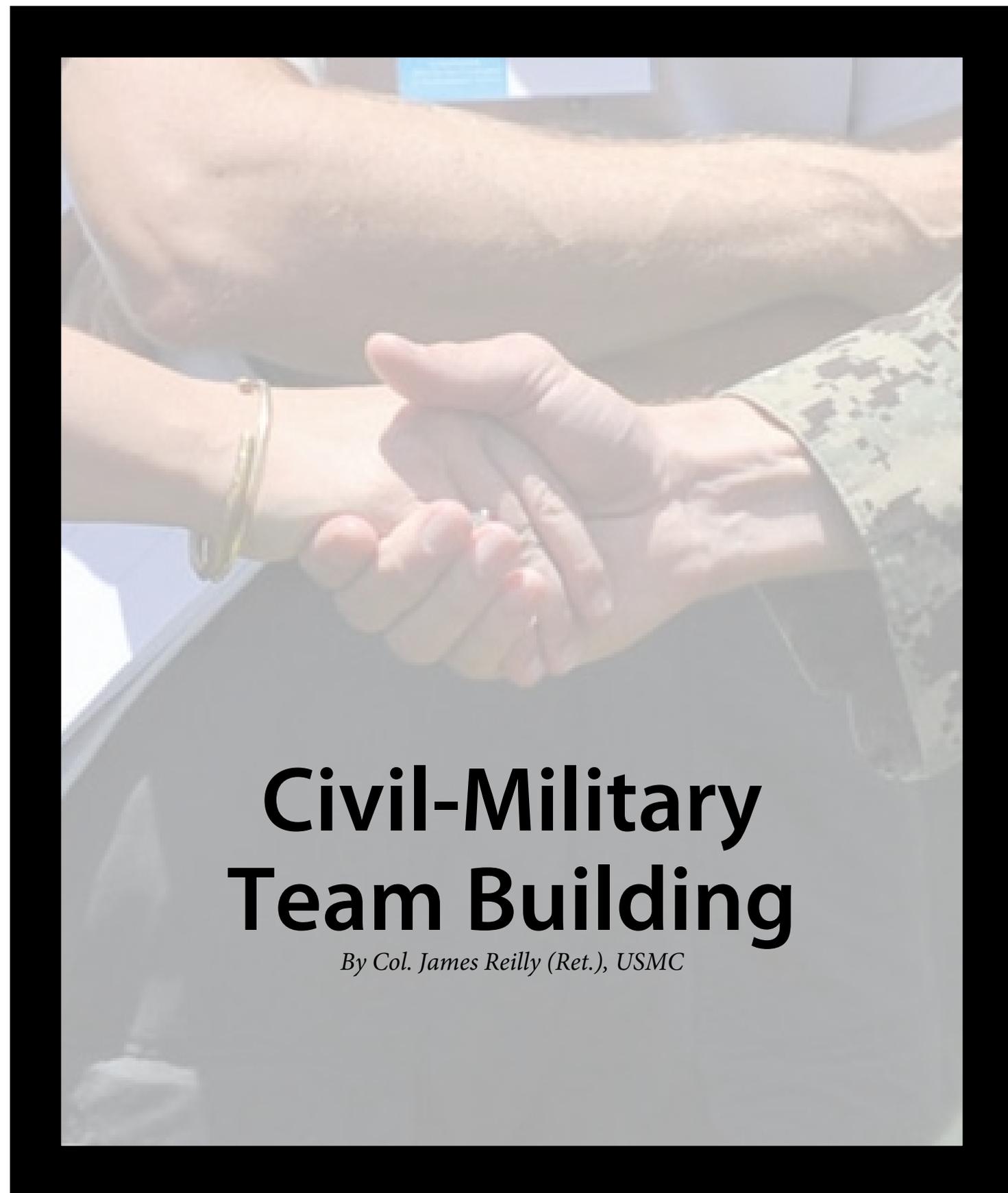
The ACMC’s role in identifying lessons from interagency international operations is growing. Each crisis and operation is fundamentally different but our experiential learning indicates similarities in many areas. Robust planning, integrated and straightforward advice and central government coordination are the key lessons arising from recent operations. Australian agencies can learn from these operations and increase their preparedness to lead future Australian contingencies.

More information on the ACMC, and a summary of the workshop can be found on www.acmc.gov.au



Staff Sergeant Tom Robinson/UK MOD

British military personnel of 22 Field Hospital arriving in Sierra Leone as a part of Britain’s military response to the Ebola epidemic in West Africa on October 16, 2014.



Civil-Military Team Building

By Col. James Reilly (Ret.), USMC

While serving on active duty, I participated in a number of foreign disaster response (FDR) operations in key leadership and senior staff positions in the Philippines and Thailand, and in support of operations in Burma and Japan. These experiences offered me the unique opportunity to view civil-military relationships from the tactical to the theater strategic levels. My positions included serving as the officer-in-charge for the III Marine Expeditionary Force (MEF) Disaster Response Assessment Team (DRAT) in the Philippines and Thailand; commander, Combined Support Group-Thailand and senior CSF 536 liaison officer to the U.S. Embassy Jakarta during Operation Unified Assistance; future operations officer, U.S. Marine Component during Operation Provide Comfort; and chief of staff, Marine Forces Pacific during Operation Tomodachi. The purpose of this article is to convey those intangibles I believe contribute to the development of solid civil-military

relationships and exercising this relationship. However, given the differences in government culture, personal experiences and preconceived prejudices, building the relationship between civilian and military personnel tends to be harder than expected, compounded by the ad-hoc nature and stressful circumstances under which a FDR operation is executed. To mitigate some of these distractions, I believe the adoption, or consideration, of the following leadership-based intangibles will contribute to the development of a successful civil-military relationship.

I found there are three universal intangibles a civil-military team needs to focus on when developing their relationship in support of a FDR operation: (1) trust that all stakeholders are professionally adept and uniquely qualified in their field; (2) develop a mutually respectful relationship based on that trust; and (3) capitalize on the perspectives and expertise that each stakeholder brings to the success of the team. None of this is rocket sci-

ence, and has been addressed by more qualified people than myself, but we are constantly relearning what should be a natural effort. We have now come to a point where the civil-military relationship has been operationalized and exercised both in conflict and in response to humanitarian support operations throughout the globe. The capabilities, capacities and cultural uniqueness each individual brings to the civil-military team have been tested time and again. Consequently, we now have a generation of service members, humanitar-

ians and diplomats with enough experience working in these civil-military environments that developing and enhancing these relationships should be second nature. Unfortunately, it remains a struggle.

In that light, the following are observations of best practices learned during my experiences in support of FDR operations, and executing U.S. Pacific Command-

directed humanitarian assistance and disaster response security engagement exercises and seminars. These observations are based on primary and secondary relationships where I was in a position to either directly contribute to or benefit from well-defined and equally beneficial civil-military relationships.

Setting the Atmosphere. From the outset, I found that the initiation of the civil-military team concept was driven by the shared singularity of the mission. Adding to the concept was the extended strategic view of post disaster engagement through the identification of second and third order effects, and their impacts to both the affected nation's and the U.S. and United Nation Country Teams' future recovery, reconstruction and development efforts. The success of this relationship is primarily balanced on trust, respect, engaged civilian and military leadership, and a shared understanding between stakeholders.

This aspect was most visible when I observed Lt. Gen. Rusty Blackman (USMC), U.S. Ambassador Ralph Boyce of Thailand, and U.S. Ambassador B. Lynn Pascoe of Indonesia set the conditions for success during Operation Unified Assistance. Their shared vision and visibly solid relationship directly influenced and positively impacted the development of a cohesive civil-military team. Furthermore, the vulnerability aspect of bringing together a disparate group in a high-stress environment was diminished when everyone was treated as a key member of the team. An appreciation for open and frank discussions led to transparency, a greater awareness of the problem, and was necessary to ensure a unified purpose.

Trust and Respect. This point is worth emphasizing only because it is the foundation for all relationships, both personal and professional. Without trust and respect, and an appreciation for one's capabilities in their chosen field, everything that follows is a wash. The uniqueness of experience and personality should be viewed as a strength and seen as a conduit to the development of a strong and diverse team, not a detriment.

Having worked with both Tom Dolan, U.S. Agency for International Development Office of U.S. Foreign Disaster Assistance (USAID/OFDA), and Sebastian Rhodes Stampa, U.N. Office for the Coordination of Humanitarian Assistance, during multiple operations and exercises in Thailand and the Philippines, I was able to observe both gentlemen approach their relationships with the military in a constructive, respectful and mutually supporting fashion. Their approach went a long way to facilitating the development of a strong and united effort with the military task force. These two gentlemen immediately established a level of trust and respect with their military counter-parts, not only due to their extensive experience and acknowledged credentials, but also by the manner in which they presented themselves.



Courtesy Photo
Civilian and military personnel discuss Operation Unified Assistance tsunami relief efforts in the Combined Support Group – Indonesia operations center.

Inclusion. Inclusion is not merely providing a liaison, but involves consistent and constant leadership engagement and discussion. Establishing doctrinally correct organizations, centers and agencies does not, in and of itself, describe inclusion. Inclusion is the effort taken to invite either a civilian or military person into the folds of the team, more from a relationship-building point of view rather than as an organizational necessity. Giving equal say to recommend direction and decisions is the foundation of teamwork and unity of effort.

While commanding 3d Marine Expeditionary Brigade during an FDR operation in the Philippines and as the J-3 Combined Task Force 536, Lt. Gen. (then Brig. Gen.) Ken Glueck was very adept at ensuring all stakeholders were welcomed into the team. He accomplished this in a variety of ways, to include personally welcoming new members to the team, making himself and his staff available to everyone equally, and conducting team-building events outside of the work environment to solidify the inclusive nature of the ad-hoc command.

Acknowledged Authorities and Responsibilities. USAID/OFDA is the designated U.S. federal agency to coordinate foreign humanitarian assistance. Under this designation, OFDA's ability to fulfill this responsibility resides in its 'coordinating authority' relationship between departments and agencies, which provides the ability to 'compel' but not the authority to 'direct.' For the most part, all stakeholders understand this authority and the subsequent relationships it generates. However, during a disaster it is easy to misinterpret compelling from directing, and vice versa, thus creating a level of misunderstanding that may lead to an increased separation between a civilian and military unified effort.

Additionally, the public assumes that the military is the default organization in charge of U.S. disaster response



Courtesy Photo
Col. James Reilly (third from left), commander of Combined Support Group – Thailand, briefs Ambassador to Thailand Ralph Boyce and Lt. Gen. Robert Blackman on disaster response actions to date.

relationships.

Published doctrine provides the accepted framework, architecture, mechanisms and authorities to enable a successful civil-military relationship. Mid-level and senior-level military education addresses this doctrine, military exercises familiarize and train to the doctrine, and civil-military training emphasizes the importance of establish-

efforts. This misconception can be explained by the very visible capabilities the military possesses, the news attention the military receives, and the organizational structure the military is known for. Eliminating this misunderstanding becomes the military's responsibility. It is important for external agencies to understand the United States disaster response authority, and for the military to ensure that the doctrinal authorities are not impacted by the military's influence.

Where I saw the civil-military relationship truly benefit both parties was OFDA prioritizing and validating the requests the U.S. military executes. This role protects the military, while also validating OFDA as the face of U.S. coordination efforts with the affected nation and the international humanitarian community. Due to the very visible presence of

the U.S. military and allows the military to focus solely on executing the approved requests for assistance.

This fact was most noticeable when 3d Marine Expeditionary Brigade executed a FDR operation in the Philippines in December 2004. U.S. Embassy Manila assigned their political-military advisor to the Philippine National Disaster Management Agency to assist in the prioritization of Philippine requests for support from the military joint task force. By the embassy's direct involvement with the Philippine relief effort, they were able to convey a realistic expectation of support, assist in the prioritization effort, position the Philippine Government for recovery and reconstruction efforts, while concurrently freeing the military joint task force to execute the requested assistance.

To paraphrase Lt. Gen. Blackman when he served as the commander of CSF 536: the military's goal is to depart the stage while the audience is still applauding. That audience is both the affected nation and the U.S. Embassy Country Team. The objective is for the U.S. military to work themselves out of a job while also posturing the affected nation, the U.S. Embassy, and the international humanitarian community for future success during the

recovery and reconstruction efforts. A strong civil-military team will work together to ensure that not only are the immediate response requirements synchronized and aligned, but the enduring post-disaster requirements are addressed also.

In conclusion, there is no cookie-cutter approach to establishing a

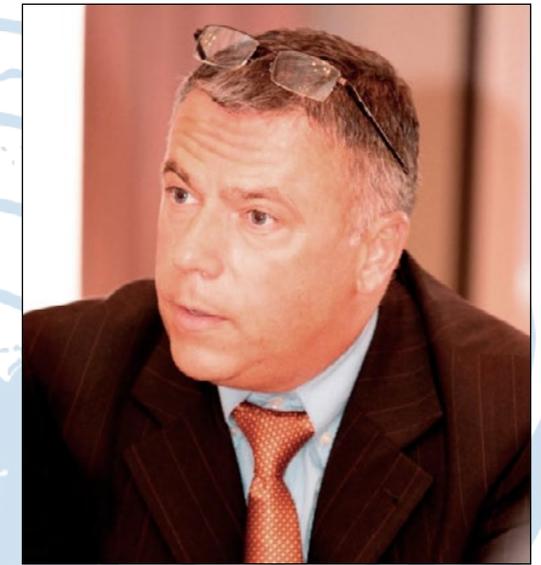
solid civilian-military relationship. Quite frankly, what works for one set of individuals, or in one environment, may not work for another. It all comes down to putting one's ego aside and recognizing that the United States is represented by a multitude of agencies, all experts in their field, all oriented towards achieving the objectives – meeting the needs and requirements of the affected nation – while simultaneously acting as a trusted and valued partner to the world. Our list of successful disaster response operations far exceeds those of our failures, with the deciding factor being the strength of the team, a team forged on solid leadership, trust, respect, acknowledged roles, and an inclusive shared vision.



Courtesy Photo

U.S. Army medical personnel and staff from International Medical Corps work together to treat victims after Haiti was devastated by an earthquake Jan. 12, 2010.

the U.S. military in FDR operations, there is a natural tendency for independent humanitarians, local organizations, and even the affected nation to go directly to the military, primarily because the military possesses the capability to accomplish the task immediately. Having a proactive OFDA presence alleviates this pressure on



Interview with Josef Reiterer, Civil-Military Coordination Section Chief, United Nations Office for the Coordination of Humanitarian Affairs

LIAISON Staff

United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Civil-Military Coordination Section Chief Josef Reiterer has spent the better part of two decades working to improve civil-military coordination. Beginning his international career with the civil-military community in 1991, he served in Syria as a military observer and later as a weapons inspector. He joined the UNOCHA office in Geneva in 1999 where he led the training program on humanitarian civil-military coordination for nearly eight years. In June 2008, he spent the next two years with the Department of Peacekeeping Operations, also leading a training program before returning to UNOCHA in 2010. Since June 2013, Reiterer has spearheaded the U.N.-system's focal point on humanitarian civil-military interaction in his current position in Geneva.

LIAISON: How does the Civil-Military Coordination (CMCoord) section fit into the overall coordination picture?

Josef Reiterer: The objective for our section is clear: we work with international civilian and military organizations to bring appropriate aid faster to the people in need. Now, how our coordination work fits into the overall coordination landscape is a bit more difficult; in most circumstances, a coordination umbrella exists with the humanitarian coordinator and the Humanitarian Country Team. In some situations, in particular where crises do not recognize international borders, it becomes more complicated. I am not saying that humanitarian civil-military coordination becomes an end in itself, but it takes a different dimension when we are trying to deconflict regional military action from a more localized humanitarian aid system. At the local level, we are responding in small pockets, whereas the military traditionally responds to the whole region.

L: How can U.S. and foreign militaries best plug into UNOCHA's coordination initiatives?

JR: Here, we must do much more on our side; good initiatives are underway. We would wish that every nation intending to respond with military forces to humanitarian crises participated in our global forums on humanitarian civil-military coordination. We do not see nations being fully represented at this moment. This is one area at the strategic, global level. On the operational level, we would ask all responding militaries buy into a predictable interface where assistance is prioritized based on humanitarian principles and criteria. On the tactical level, we would wish that

foreign military forces deploy with knowledgeable civil-military liaison officers.

L: What challenges do you see repeatedly between civilian organizations and the military in disaster response operations?

JR: An inconsistency of approaches; this starts with adherence to existing guidelines and policies on humanitarian civil-military coordination, continues with the infrequent collaboration with on-site coordination platforms, and ends with the lessons to be learned from joint response operations. The challenges have changed over time: two decades ago we were discussing if international militaries should or should not

evolved quite a bit, if not to say it is completely different. In the 90s, we were mobilizing military and civil defence assets for international disaster relief operations. From 2000 to 2010 our focus was mainly on the coordination challenges related to so-called integrated peacekeeping missions, and after 2010 we are involved in access negotiations and talking to armed, non-state actors. Just by looking at the three major eras, it is obvious that the skill set of a humanitarian civil-military coordinator was completely different in 1999 from the one required in 2015. In 1999 we were really emergency managers. Now we are diplomats, mediators, negotiators, we are focusing much more on communication techniques



UNOCHA personnel discuss humanitarian aid operations in the Humanitarian-Military Operations Coordination Center in Nepal.

be involved in humanitarian work, now we are mainly discussing how best to coordinate with them. By default, militaries are on-site already.

L: How has the coordination environment evolved over the course of your career? Have there been improvements in specific areas?

JR: Since I joined in 1999, it has

with talking to people all across the spectrum of actors one can find in a humanitarian crisis. And, we have made huge improvements, in particular at the policy side, but also on building a coordination capacity to respond.

L: Have you seen any lessons learned become best practices in the

international disaster response environment? If so, where?

JR: Yes. I think some military forces are buying into the Multi-National Coordination Centre (MNCC) concept – this is progress. This provides us with a clear starting point when we want to establish the dialogue with the humanitarian international responders and the host nation.

On communications and information technology, many militaries deploy with an open, unclassified system. This helps us a lot, since we are working with a simple virtual platform to coordinate. There are many more areas such as joint training and exercises where we made progress and prepare our people better to respond jointly.

L: Are there any civ-mil challenges that are specific to the Asia-Pacific?

JR: Speed! The Asia-Pacific is the most disaster prone region in the world. The more sudden an emergency occurs, the faster the response must be. In protracted humanitarian crises hours do not count, in earthquakes they do. The only way to be fast now is training and capacity building, response preparedness, joint training, joint exercises, and the other preparedness work of the regional UNOCHA office and actors.

L: Do you think it is easier for the military to plug into the humanitarian structure or for humanitarians to plug into a military structure?

JR: It won't work. The military has specific needs for coordination and the humanitarians have specific needs for coordination. So one concept, which is under development and was now applied for the third time in the Nepal crisis is the Humanitarian-Military Operations Coordination Center (HuMOCC). It's a concept, which bridges from the military MNCC to the humanitarian response operations. Maybe the way forward is to provide a gateway - the

humanitarian-military gateway – a concept that comes from Haiti and Haiyan, Vanuatu, and now Nepal, which we are trying to conceptualize, so we can navigate from one platform to the other without becoming one and the same.

L: Are there any new challenges that are emerging with the military response to mega-disasters?

JR: Yes, there are. When I started my work as a civil-military coordinator in the 90s, I could not imagine that 15 years later I would be sitting on a Chinese medical ship. What I want to say is there are new actors responding to mega-disasters. Some for the right reason, some out of geopolitical interest. We are not questioning any of the decision-making processes back home leading to the deployment of military forces, we are dealing with the massive challenges on-site when military forces less trained in international disaster relief operations hit the ground.

L: Moving forward, what would you like to see to improve coordination?

JR: When we tour around the world and visit our military training and learning institutions, we still see us – UNOCHA – teaching humanitarian civil-military coordination policies and guidelines. Learning does not happen with one speech of an UNOCHA staff. The Oslo Guidelines, the Military and Civil-Defence Assets (MCDA) Guidelines in complex emergencies, the Inter-Agency Standing Committee Reference Paper on Civil-Military Interaction and the Guide for the Use of Armed Escorts must become part of the learning curriculum of all militaries supporting humanitarian action - and preferably before and not after an operation.



By Kenneth Tingman, Retired Federal Coordinating Officer, Pacific Area Office, Federal Emergency Management Agency

THE TYRANNY OF DISTANCE

XXX HOW DOMESTIC LESSONS CAN BE APPLIED XXXXXXXXXXXX
 XXXXXXXXXXXX TO OTHER NATIONS WITHIN THE ASIA-PACIFIC XXXX

C. S. Lewis, the great British author once wrote, “True friendship begins when one person says to another, ‘What, you too? I thought I was the only one.’” Around the world, when personnel involved in disaster and emergency management domestically share experiences with others who work internationally, they may experience this sentiment. I write this based on a spirit of friendship and partnership borne from experiencing a common problem, which transcends unique circumstances.

Emergency management personnel domestically and abroad experience many of the same challenges as they prepare and respond to disasters. In a practical sense, individuals performing disaster response activities speak the same language, regardless of country, program, agency, funding source or type of disaster. In the profession of disaster and emergency management, domestic and international humanitarian disaster responses are frequently viewed as distinctly separate, however, this article postulates that there are more critical similarities than differences and it behooves all of us to learn and share information, build and foster relationships with international partners, and recognize we may be able to improve outcomes for disaster relief victims and responders.

In recent months, two events have reinforced my belief that domestic and international disaster work are similar, have applicability to each other and are not mutually exclusive. The first was a presentation I attended at the Civil-Military Interaction Workshop, organized by the Australian Civil-Military Centre and hosted by the



An Antonov AN-225 cargo plane, the world's largest fixed wing aircraft, approaches Pago Pago airport in American Samoa. The plane carries generators contracted by the Federal Emergency Management Agency to assist the nation with electrical power restoration after an earthquake and tsunami struck in 2009.

Casey Deshong/ FEMA

Malaysia Peacekeeping Centre. One of the speakers was a Malaysian Army physician, Lt. Col. Mohd Arshil. Lt. Col. Arshil spoke about his disaster experiences, which included the Indian Ocean Tsunami, United Nations missions in East Africa and East Timor, the International Security Assistance Force mission in Afghanistan, as well as domestic disasters in Malaysia. He spoke passionately, intelligently and universally, drawing no distinctions between his disaster work at home and his disaster work abroad. On the contrary, his emphasis was the common experiences in all of his work. Specifically, he shared that most of the medical work and many of the cultural challenges were the same for him at home and abroad. I had never heard anyone talk so seamlessly about domestic and international disaster response.

The second event was the 2015 International Tsunami Symposium, “Making the Pacific Ready for the Tsunami Threat” at the National Oceanic and Atmospheric Administration (NOAA) Headquarters in Pearl Harbor, Hawaii. Laura Furigone, NOAA deputy assistant administrator for Weather Services and deputy director, National Weather Service, spoke about the United States domestic program known as NOAA’s Weather Ready Nation. The program addresses building community resilience in the face of increasing vulnerability to extreme weather and water events. She highlighted that she intended to take this program global and include other nations.

I was again energized at the prospect of a domestic disaster program being modelled for use internationally; that a domestic disaster program could have applicability beyond the borders of one country and be used to help equip disaster responses internationally.

In the U.S. Pacific Command area of responsibility (AOR) international disasters occur on a frequent basis. In addition, there are a number of significant conditions that all disaster responders must meet head on and eventually overcome in the AOR to be successful. I would offer that in the Pacific there are more commonalities based on the unique AOR than there are differences based on domestic policies. For example: the “tyranny of distance”; logistics; Pacific Island Nations (the insular

nature); culture considerations; language considerations; unique military perspective; unique sheltering; host nation fatigue; unity of effort; lead federal agency; disaster declaration process; and employment of the humanitarian principles. As the Federal Emergency Management Agency federal coordinating officer (FCO) in the Pacific Area Office from 2007 – 2010, I faced many of these challenges. In 2009, the earthquake and tsunami that struck American Samoa was my last disaster as an FCO.

The earthquake and tsunami struck early in the morning of September 29, 2009 and wrapped around the main island of Tutuila. Thirty-five people were killed, with hundreds injured; 2,750 houses damaged; 275 houses and 28 rental units destroyed; four schools substantially damaged; one school destroyed; and the Satala Power Plant was substantially damaged and inoperative. I believe the disaster response to the earthquake and tsunami in American Samoa has applicability to future disaster responses in the Pacific and I offer the following observations.

Disaster Declarations and Leadership

The “tyranny of distance” will complicate disaster responses in the Pacific, both domestically and internationally. As a result, the Solomon Islands include a discussion on the tyranny of distance in their domestic disaster response planning. One of the best ways to mitigate the tyranny of distance is to ensure that a disaster declaration is granted as quickly as possible. A timely declaration will energize personnel, funding and outside assistance, but without this first step all other steps are delayed. It is incumbent upon government personnel at all levels to be familiar with the thresholds and processes required to request a disaster declaration from either regional or national leadership.

In response to the earthquake and tsunami in American Samoa, we were able to get a Presidential Disaster Decla-

ration (PDD) within six hours of the event. Interestingly, Governor Togiola Tulafono of American Samoa was in Hawaii when the tsunami struck, leaving him without an emergency management staff to write up the request for a disaster declaration. Through a series of phone calls with Gov. Tulafono, I was able to coordinate a disaster declaration request that had been drafted by my regional headquarters. He reviewed it and with minor corrections, signed it, and it went from the regional headquarters to FEMA’s national headquarters, then to the White House for action by the President. This process was coordinated throughout the day and each level was waiting for the request and ready to expedite it.

Due to the quick granting of a PDD, we were able to activate other federal agencies, as well as the military. A robust team of more than 50 federal personnel was deployed on a Coast Guard aircraft that very night. In less than 24-hours after the event, the team was on the ground in American Samoa performing a variety of response work. From the perspective of the affected population, a large team of federal and military response personnel arrived before they woke up the next morning. This act of government coordination was a firm symbol of full commitment to the people of American Samoa.

In both domestic and international disaster responses, there will be a disaster declaration process and all levels of government must be prepared to act quickly and collaboratively. Familiarizing the disaster declaration process at each level to prevent delays to the process should be the first step by governmental leadership.

Logistics

The tyranny of distance can also wreak havoc with logistics and movement control. I know there were numerous logistics hiccups; however, to those of us on the ground in American Samoa, most of those problems were invisible. Although this was a U.S. domestic response,

logistics and movement control decisions were being made from the east coast of the United States, relayed through California and Hawaii and then to American Samoa. With as many potential points of failure as there were in the thousands of miles the coordination crossed – like with an international response effort in the Pacific – things worked relatively smoothly as we received supplies and personnel. It may not have been easy every step of the way, but all of the logistics professionals, both civil and military, worked hard to overcome problems, collaborated as one federal team and kept the affected population of American Samoa at the forefront of their actions.

The military is often the tool of convenience when facing large, logistics problems in disaster response – they are very good at quickly moving things and people from one place to another. We had a requirement to deploy a large number of power generators, plus all of the associated equipment (transformers, cables and fuel), in a short amount of time. We did not want to ship any equipment separately and find ourselves with generators but no way to connect them to the power grid, so we wanted to receive the shipment as one package. As the logistics team examined the requirement and tried to find a resource to match this requirement, it became clear the distance would require multiple trips for military assets to bring all of the equipment in. A decision was made to contract two flights of the Antonov, the world’s largest aircraft, instead of military airlift. This was a good example of having a requirements process that could match a need with the most appropriate resource. At times civilian solutions are a better fit to mitigate the logistical challenges posed by the tyranny of distance, and governments need to maintain strong civil-military relationships to best meet those challenges.

Use of the Military

The United Nations Office for the Coordination of Humanitarian Affairs’ (OCHA) Oslo Guidelines are “guidelines for the use of foreign military and civil defense assets (MCDA) in disaster relief”. One of the most basic tenants of the Oslo Guidelines is that of last resort, which

states, “military and civil defence assets should be seen as a tool complementing existing relief mechanisms in order to provide specific support to specific requirements, in response to the acknowledged ‘humanitarian gap’ between the disaster needs that the relief community is being asked

Support to Civil Authority (DSCA) program, which provides unique military resources in support of civil authorities, similar to the international Oslo Guidelines.

The local U.S. Army Reserve unit had just returned home from a deployment to Iraq and was not going

to be denied supporting their family and friends; they all showed up in uniform and ready to work the first day! The reserve soldiers performed a number of tasks, but the most noteworthy was working with the Red Cross and FEMA Corps

tsunami completely destroyed one of the two power plants. A joint power committee was formed consisting of personnel from the territorial emergency management office, FEMA, the American Samoa Power Authority and USACE. Within two weeks, this committee had developed a three-phase approach for restoring power. The first phase required the deployment of 52 FEMA generators that would be distributed at critical locations along the power grid. The phase-one generators were operational in six weeks and stayed in place for three months. The second phase called for the placement of 28-megawatt generators at the site of the destroyed power plant and was to last for 18 to 24 months, until a permanent power solution was implemented. Remarkably, five years later, the phase-two solution, which was conceived within the first weeks of the response, remains operational. The role the USACE team played was simply invaluable and the stopgap measures they helped create are now having long-term effects.

Every disaster that I have responded to had some very prominent commonalities: an affected population, a host government that needed assistance, unique cultural sensitivities, a process to request assistance, a planning process, logistics and prioritization of resources, response objectives, the use of unique military capabilities, and the necessity that agencies coordinate and collaborate on response activities. The tyranny of distance makes these challenges even more acute in the Pacific. The more information that we can share with each other about disaster experiences, especially in this vast region, the better prepared we will be to respond to the next disaster, whether domestic or international; the mission is still the same – to save lives and mitigate suffering, and in the process, foster international partnerships.

to distribute supplies to the villages. Culturally, the distribution of goods is done through the village chief, or Matai. As it turned out, many of the reserve personnel held Matai titles, and they could speak Matai. Using uniformed Matai led to an unprecedented level of transparency for the distribution and made the entire effort run extremely smoothly. The lesson here is that, while use of the military to distribute goods is not a common practice by humanitarians around the world, it is effective in the Pacific, especially among the island nations.

Power Restoration

Loss of power and the restoration of power is a huge challenge among Pacific Island nations simply because there is no way to borrow power from neighboring nations. The lack of backup power, based on the tyranny of distance, is a common theme. In American Samoa, the

to satisfy and the resources available to meet them.”

Throughout the Pacific, however, many military forces are the first responders in their countries, so it is common to see militaries early in the disaster response process. Many populations in the Pacific even expect to see military personnel perform vital roles in disaster response; seeing uniformed personnel provides a degree of comfort and reassurance to the affected population, such was the case in American Samoa. The military response was unusual because it consisted of Hawaii National Guard personnel, active duty personnel in the form of a Defense Coordinating Office and Defense Coordinating Element (DCO/DCE),¹ a local U.S. Army Reserve unit and U.S. Army Corps of Engineer personnel (USACE). Domestically, the DCO/DCE is activated as part of the Defense

¹ Of note is that USPACOM's Joint Task Force – Homeland Defense (JTF-HD) and a Navy Frigate, the USS Ingraham, all supported the DCO/DCE.



Casey Deshong/FEMA

Federal Coordinating Officer Kenneth Tingman and American Samoa Governor Togiola Tulafono sign a memorandum of agreement Oct. 7, 2009. The memorandum outlines the roles and responsibilities between the territory and the Federal Emergency Management Agency in disaster recovery after an earthquake and tsunami devastated the country.

Operational Contract Support: Mitigating Challenges Faced with Civil-Military Coordination in Disaster Relief Missions

By Maj. Chris Hearl, Deputy Operations Division Chief, Air Force Installation Contracting Agency - Operating Location Pacific

After a disaster, there is no shortage of personnel and organizations with good intentions who want to drop in on the scene and assist those in need. This is both a blessing and a curse. While having boots on the ground can be helpful to organize relief efforts, it can also be a strain on communication and resources; resources that could otherwise be directed toward survivors. Around the globe, the assumption can be made that any relief effort associated with a disaster will involve some variant of a civil-military response. Poor coordination between civil and military organizations may bring additional challenges and constraints beyond the damage and despair already experienced by the population. Proper planning, coordination, and where appropriate, integration, can help mitigate the realities faced during a humanitarian assistance/disaster relief (HA/DR) event.

There are many ways to coordinate in a multi-agency landscape. One of the most effective routes is to engage appropriate stakeholders before an incident occurs and open up a fruitful dialogue. Most relief supplies are in some way non-organic to the organization providing the relief

(i.e. most supplies are contracted out to commercial sources, either in advance or under a just-in-time philosophy). On the military side, the process of acquiring goods and services from commercial sources coupled with the necessary planning for, coordination with, and integration of contractors, is known as Operational Contract Support (OCS). As part of this concept, coordination

and integration with all stakeholders is stressed as a key element. Another element is the understanding of the secondary and tertiary effects of executing contracts in a given area, such as positive or negative implications to economic stability, host nation politics, etc.

OCS is not simply the art of buying things, that's known as contracting or procurement. OCS takes into



Tech. Sgt. Beth Anschutz/U.S. Air Force

One of the most effective ways of coordinating civil-military operational contract support in disaster response environment, is through the Joint Contracting Support Board platform, which gathers the necessary players before a disaster strikes.

account the broader process and impacts across a given landscape. For example, taking OCS into account when responding to a HA/DR event, the supporting nation may choose to obtain non-critical, readily available supplies from local businesses instead of bringing those supplies in with organic forces, as a way of infusing money into the local economy. One has to be careful to not compete for critical or limited resources, but if readily available, injecting currency into the local economy may increase efforts to stabilize the area, maintain or increase employment, build coalitions of support networks, and so on. These positive effects of applying OCS will not only support the immediate needs of the disaster, but also garner stronger relationships in the long-term.

When applying OCS, it's also important to understand ways to leverage the whole-of-government approach to a given operation. While OCS is not exclusive to HA/DR events, nor is it based solely on civil-military interaction, through effective use of OCS, the military can facilitate an effective platform for working with their civilian counterparts during a HA/DR event.

One of the most expeditious ways of doing this is through holding a recurring Joint Contracting Support Board (JCSB) in your joint operating area (JOA). A JCSB is an OCS concept discussed in Joint Publication 4-10, and is initially held during military operation phase "zero", to bring various agencies together to understand constraints and capabilities, deconflict common contracting requirements, and even determine the most appropriate contract mechanism to execute requirements for the customer. Doctrine gives us flexibility in when to hold the JCSB and who to invite. As such, the JCSB platform is a great venue to have open communications between civilian and military representatives. Having a

JCSB established drives the dialogue early in planning, effectively getting the right people around the table early enough to establish relationships, and understand any limitations or poor assumptions that either side may have in a given contingency event. With respect to HA/DR response, the primary two agencies who work closest with the military in determining the appropriate level of response are the Federal Emergency Management Agency (FEMA), when stateside, and the United States Agency for International Development (USAID) for events taking place in a foreign country. These two organizations are the U.S. lead for HA/DR response efforts and will rely heavily upon military support in areas such as airlift and other logistical matters. Integrating these two organizations as appropriate into a JCSB process will streamline the broader coordination efforts. When outside the U.S., USAID is the lead agent for coordinating with other civil organizations such as the International Committee of the Red Cross (ICRC) and United Nations Organization for Coordination of Humanitarian Affairs (UNOCHA). Although ICRC nor UNOCHA need to necessarily be invited to all JCSB iterations, having USAID participate, can serve as a critical link to sharing information accordingly. On the military side, the primary stakeholders for a JCSB include any unit in the JOA charged with procuring goods or services for their customer, to include the associated senior contracting official, related contracting units (squadrons, brigades, etc.) and representatives from the U.S. Army Corps of Engineers (USACE), Defense Logistics Agency, and General Service Administration, just to name a few. Furthermore, once an event occurs, those same stakeholders already have a relationship established and can continue to meet and coordinate their efforts through a joint response.

Furthermore, before going into a particular environment, it's important for planners to focus efforts on conducting an analysis of the operating environment. Doing so will allow planners (and those later in charge of execution) to best posture for and respond to any contingency. This analysis includes an assessment of the available infrastructure, currency conditions, employment situation, economic factors, military and cultural conditions, nongovernmental organization (NGO) presence, and any other information providing a clear picture of what to expect when going into a given JOA. Situational awareness is extremely challenging when developing priorities and assessments associated with a disaster. Both civil and military organizations conduct various versions of analysis on locations within a given operational area. As the response is underway, this analysis should continue and serve leaders with the need for any adjustments to decisions on the ground. Civil and military organizations sharing information of their respective analysis before, during, and after an event is critical to success. The JCSB and subsequent working groups provides for a platform for all stakeholders to share information at the unclassified level.

The footprint, organic capability, politics, costs, chain of command, constraints, responsibilities, and even objectives are often very different between civilian and military organizations. Understanding upfront where these factors cross will allow both sides to be more effective and minimize any negative secondary or tertiary effects to either party. Competition for resources and undue strain on existing infrastructure are two of the biggest areas where poor communication between the civil and military agencies pose a problem. If the military is not communicating about how many aircraft are bringing in

supplies, civilian agencies may be expending unnecessary effort to obtain the same supplies. If the civilian agencies are not communicating assessments of infrastructure capacity such as airfield or roadways, the military may be making poor assumptions in their planning efforts and in turn, making false promises to government leaders in terms of the level of support the military can provide.

Ultimately, civil authorities are in charge of HA/DR activities. This puts the military in a supporting role. This often means the military needs to be very careful to allow the local government or appointed civil authority to lead the response and provide them with as accurate information as possible. The forces and equipment the military brings to bear can be substantial, but are often misunderstood by civil authorities. That means the military needs to be as transparent as possible and even proactive in sharing information. Likewise, as the requirements generator, the civilian leadership needs to provide clear, accurate, and timely information to the military so that they may support in the most efficient and least disruptive manner. There are multiple automated tools out there for facilitating this coordination, but given the rate of change and other dynamics associated with HA/DR events, human discussion at the face-to-face and telephonic level often proves most accurate. For contracted solutions, the JCSB represents a defined solution for communication challenges.

There are still other challenges that a better understanding of the OCS concept can help mitigate or avoid. Competition for resources is an often overlooked challenge. Personnel on the ground want to be proactive and responsive to the needs of the people. Not factoring in the reality of others on the ground doing the same thing will bring confusion and inefficiency at best. Addition-

In a disaster response environment, relief flows in from assisting states, nongovernmental organizations and foreign militaries. To minimize duplication of efforts, civil-military coordination should take part prior to a disaster.



Staff Sgt. Melissa White/ U.S. Air Force



U.S. forces and civilians integrated with service members from Canada, Australia and the United Kingdom during the largest contract support exercise to date, Operational Contract Support Joint Exercise 2015, on Schofield Barracks, Hawaii.

ally, sometimes having too large of a responder footprint can actually inhibit the ability to provide for the local population. If the sustainment of outside helpers is taking scarce resources away from those in need, no one wins. If we don't clearly understand the relationship and communication struggles between civil and military organizations, we drive counter-productive behavior.

One example of a competition for resources being avoided was after the 2011 Great East Japan Earthquake. U.S. military bases in the area experienced damage as well as off-base infrastructure. Rather than seek out supplies and services immediately from the local contractors, the base leadership, through frequent communications with the off-base civil authorities, understood that generators would be a high-demand item for the population. Generators in the area were in low supply and difficult to acquire from outside sources. The military leadership took a strategic pause in their efforts to contract for generators and instead requested reach-back support from the U.S. mainland. This allowed for first responders, displaced persons, and other local authorities to obtain

generators first. This single action resulted in not only a quicker response to those in immediate need, but streamlined the civil authority's ability to stabilize the community, and drove positive relations between the U.S. military and Japanese civil authorities into the future.

Military professionals responding to a HA/DR event often think tactically; how do we solve the problem in front of us? OCS teaches us to think more operationally, even strategically. How do we best solve the problem in front of us, without causing unintended consequences for our partners and allies?

The goal behind OCS is to spur a transformational culture change within the DOD, getting everyone to think outside the box and consider all effects of OCS. Through increased communication and early planning, that change can take place. Broadening the concept beyond military operations brings with it new challenges, but still boils down to transparency, planning and open communication between the civil and military organizations charged with responding to contingencies.

The military is structured for rapid deployment and immediate impact

while working within a structured chain of command. Sometimes in a HA/DR response the civil authorities need military assistance in executing rapid deployment for relief supplies, without the military being in charge of operations. With civilian authorities in charge of leading direct response, this leadership brings with it the challenge of asking for the appropriate levels of indirect support. FEMA and USAID are the federal agencies charged with being the frontline in coordinating with civil authorities for U.S. support to HA/DR events. Bringing the organizations into the JCSB process will help build relationships early, provide for exchange of ideas, and posture both the civil and military authorities to best respond in the event of an emergency. In the U.S. Pacific Command JOA, there has been no shortage of HA/DR events, and every indication is that they will continue to be an unfortunate reality in our environment. Bringing civil and military stakeholders together early will serve to leverage our lessons observed from the past, turn them into lessons learned now and problems avoided in the future.

Building Resilience through Partnerships

By Taryn Ino, Program Assistant, R3ADY Asia-Pacific

In 2011, economic losses from natural disasters, such as the Great East Japan Earthquake and Tsunami and the Southeast Asian floods, totaled nearly \$400 billion; more than 75 percent of the damage occurred in the Asia-Pacific region.¹ That same year, at the Asia-Pacific Economic Cooperation (APEC) Summit in Honolulu, R3ADY Asia-Pacific was launched as the Asia-Pacific Disaster Risk Reduction and Resilience (APDR3) Network by U.S.-based organizations from academia, civil society, government, military, and philanthropy on the premise that there are steps we can take to mitigate the risks and impacts of natural disasters by working together across all sectors of society.

A lot has changed since 2011 – including the name, APDR3. The organization rebranded as R3ADY Asia-Pacific in September 2014, and remains committed to reducing the risks of natural disasters and building resilient communities and economies through innovative and strategic partnerships.

¹ "2011 peak year of disaster losses in the world," *UNmultimedia.org*, March 2, 2012. <http://www.unmultimedia.org/radio/english/2012/03/2011-peak-year-of-disaster-losses-in-the-world/>.



A landslide early warning system siren sits above a village in Central Java, Indonesia.

R3ADY fulfills its mission by aligning the resources and expertise of multiple sectors and industries, building knowledge for informed action, and designing effective solutions and strategies spurred by a shared responsibility. A great part of R3ADY's successes stems from its expansive network and relationships. The 12-member advisory board highlights the diversity of key partners, which include military organizations (U.S. Pacific Command), governmental organizations (FEMA and NOAA), philanthropies (Ford Foundation and Rockefeller Foundation), private companies (Chevron) and academic institutions (University of Hawaii), to name a few. The growing involvement of military organizations in natural disaster management provides ample opportunity for civil-military coordination through R3ADY. Engagement of military organizations in preparedness activities helps to cultivate relationships between multiple stakeholders and ease the challenges of coordination when the military is asked to assist and manage disaster response.

In 2013, Super Typhoon Haiyan tore through the Philippines, resulting in more than 6,000 fatalities and affecting nearly 13 million people.² The 2015 Nepal Earthquake resulted in over 8,600 fatalities and displaced an estimated 2.8 million people.³ These events serve as recent reminders of the importance of working to mitigate risk in the Asia-Pacific, one of the most disaster prone regions of the world.

"There are many existing organizations that focus on disaster response – a critically important phase of disaster management – but R3ADY was created to focus on R3, or risk reduction and resilience," says Jainey Bavishi, executive direc-

² "Quick facts: What you need to know about Super Typhoon Haiyan," *MercyCorps.org*, November 14, 2013. <http://www.mercycorps.org/articles/philippines/quick-facts-what-you-need-know-about-super-typhoon-haiyan>.

³ "Nepal-Earthquake: Fact Sheet #14," *USAID.gov*, May 18, 2015. <http://www.usaid.gov/sites/default/files/documents/1866/05.18.15-USAID-DCHANepalEarthquakeFactSheet14.pdf>

tor of R3ADY. "It's slightly harder to sustain attention on R3 because preparedness doesn't create a sense of urgency like disaster response."

R3ADY's work is aimed at mainstreaming disaster preparedness across all sectors, and creating lasting connections between stakeholders from different sectors before a disaster strikes.

Building Resilient Communities

R3ADY has had recent success garnering attention and action on preparedness from its collaboration with the University of Gadjah Mada (UGM), the University of Hawaii (UH) Social Science Research Institute, and Pacific Disaster Center (PDC) on community-based early warning systems in Indonesia. Landslides are one of the most frequent disasters in Indonesia, and in 2014, it was the most dangerous, causing 408 deaths and displacing nearly 80,000 residents.⁴ In December 2014, more than 70 people were killed in a major landslide in Banjarnegara.

Using UGM's community-based landslide risk assessment and early warning project as a case study, the team developed a framework bridging bottom-up (community-based) and top-down (regional or national) approaches to disaster risk reduction. The framework is an innovative and replicable approach to disaster risk reduction activities, and has been successful in actively engaging multiple sectors at all levels.

"Disaster mitigation is the responsibility of everyone, not only the government," said Dr. Wahyu Wilopo, the head of Central Laboratory, Geological Engineering Department, Gadjah Mada University. "R3ADY improves collaborations and networking between the government, private sector and community."

Begun in 2007, UGM has implemented a community-based landslide early warning project in Central Java.

⁴ "17 percent of Indonesians live in landslide-prone areas: Agency," *TheJakartaPost.com*, March 30, 2015. <http://www.thejakartapost.com/news/2015/03/30/17-percent-indonesians-live-landslide-prone-areas-agency.html>

The UGM team designed unique early warning equipment locally so that it is less expensive than existing devices and more appropriate for local conditions. UGM researchers make adjustments for each community, based on local cultural and economic considerations. Furthermore, they have discovered that a key component to the success of the system is active participation by the community in the process, so community residents understand the risks and feel a sense of ownership over the devices.

UGM's approach of engaging communities and installing early warning systems both raises awareness of disaster risks and saves lives. In November 2007, just months into the project, an early warning device in Pagentan rang four-hours ahead of a landslide, allowing 35 households to evacuate before the landslide buried 10 homes with no casualties. More recently, in Sijeruk Village, when an early warning instrument sounded its alarms, a majority of the people relocated to a safer area before the land moved 2-3 meters.

Collaborating with R3ADY has helped UGM connect with new partners to extend and expand their innovative practice. R3ADY has helped to bridge UGM's work with the efforts of various government and nongovernmental partners, opening new opportunities for collaboration.

"One example is the collaboration with Mercy Corps for the installation of landslide (early warning systems) in Bandung Barat District, West Java Province," added Dr. Wilopo. "The collaboration was initiated after the donor meeting in Jakarta."

Through formal exchanges and workshops, as well as informal introductions, R3ADY has succeeded in cultivating concrete commitments of equipment, expertise, and resources to extend the positive impacts of UGM's project.

Before the partnership between R3ADY and UGM, early warning



Two women carry loads up a steep hill in an Indonesian village. University of Gadjah Mada (UGM) develops and implements early warning instruments in communities based on social, economic and cultural conditions; The village leader stands with his mother in front of his home, where an early warning system server transmits data back to UGM via mobile phone network.

system devices were installed in seven locations, mainly on Java Island. In the last year, R3ADY facilitated UGM's connection and collaboration with new partners, which expanded its effective early warning practice to 27 locations. The R3ADY project also helped to raise the visibility of UGM's efforts at the national level. Following the deadly December 2014 landslide in Banjarnegara, the President of the Republic of Indonesia ordered the National Disaster Management Agency (BNPB) to install landslide early warning systems in all landslide-prone areas. BNPB appointed UGM to install 20 early warning systems on Java and other islands. Under the national Landslide Risk Reduction Masterplan (2015-2019), BNPB will install 1,000 early warning systems over five years, in collaboration with UGM.

In addition to bridging new partners to expand UGM's early warning system project, R3ADY has also helped identify and organize opportunities to share lessons from the project, such as at the Asian Ministerial Conference on Disaster Risk Reduction in Bangkok, Thailand in June 2014, and at the Third United Nations World Conference on Disaster Risk Reduction (WCDRR) in

Sendai, Japan in March 2015. At the world conference, R3ADY, UGM, UH and PDC highlighted the community-based early warning systems project, shared best practices, and discussed policy mechanisms and resources needed to expand and scale the project nation- or region-wide.

R3ADY organized several other events at the WCDRR to emphasize the importance of multi-stakeholder partnerships for disaster risk reduction and resilience. One of R3ADY's events focused on a multi-stakeholder approach to building resilience in a tourism destination, and featured input from experts in government, private sector and academia.

Strengthening Community and Economic Resilience of Tourism Destinations

Tourism is an important industry to many communities and economies in the Asia-Pacific region, contributing to a significant portion of national income and employment. In 2013, Asia and the Pacific welcomed 248 million international tourists, with tourism earnings of \$359 billion.⁵ However, the region is highly vulnerable to natural disasters. Natural

⁵ "UNWTO Tourism Highlights, 2014 Edition," *UNWTO.org*, http://dx.doi.org/10.18090/unwto-tourism-highlights14_en_hr_0.pdf, pp 7



disasters can disrupt tourism-dependent hotspots through a sudden drop in tourist arrivals and damage to the infrastructure critical to the sector. Making an entire tourism destination safer and more resilient ultimately benefits local communities and livelihoods by safeguarding employment and protecting assets.

Based in Hawaii and surrounded by a bustling tourism industry, R3ADY invited the United Nations Office of Disaster Reduction (UNISDR) to speak with stakeholders about an emerging program focused on hotel resilience in October 2014. R3ADY, the Pacific Risk Management 'Ohana (PRiMO), and the Hawaii Tourism Authority organized a meeting with hotels to learn about and provide feedback on UNISDR's plans.

"It became clear that hotels, especially larger chains, had existing disaster management plans in place," said Bavishi. "What were missing were partnerships with critical stakeholders."

Despite hotels being built tsunami-resistant, having installed hurricane-rated windows, and training staff and personnel on evacuation plans, they could only recover and resume operations if the airports, roads, and



Cheryl Anderson

Sani Tanaka from University of Gadjah Mada demonstrates landslide monitoring equipment for community members of Tegkluk villages, who have been trained to use the equipment to prevent disaster.

other critical infrastructure were up and running, and workers were able to return to work.

Taking the hotels' feedback into account, R3ADY decided to pursue a destination-approach to resilience planning, bringing together multiple stakeholders to coordinate and collectively plan for disasters and quicker recovery. R3ADY partnered with the Earth Observatory of Singapore to pilot the Enhancing Disaster and Climate Resilience in Asia's Key Tourism Destinations Project in Phuket, Thailand.

Following the 2004 Boxing Day Tsunami, occupancy rates in Phuket dropped significantly. The Tourism Authority of Thailand reported that following the Boxing Day Tsunami, 20 percent of the 100,000 tourism-oriented workers were immediately fired.⁶ Those who remained employed struggled to support themselves and their families without tips and commissions from tourists.⁷

⁶ Jumpei Ichinosawa, "Reputational disaster in Phuket: the secondary impact of the tsunami on inbound tourism," *Disaster Prevention and Management: An International Journal*, Vol. 15, Iss 1 pp. 115
⁷ Rosemary Behan, "The people need us..." Rosemary Behan "The Daily Telegraph (London), February 05, 2005, LexisNexis Academic. www.lexisnexis.com/hotttopics/Inacademic

"The Boxing Day Tsunami was a learning experience for Phuket," she added. "Similar to Hawaii's hotels, there has been extensive disaster management planning done by Phuket businesses. Often these plans are developed independently, and the challenge was whether they will work in conjunction with the other sectors' efforts if another disaster occurs."

By building on the existing work that has been done and shifting the focus from individual assets and organizations to working with a network of stakeholders, the project will make the destination as a whole more resilient. Other critical stakeholders must be integrated into the process, including local government officials; key companies in the tourism sector, such as hotels; representatives of local infrastructure assets, such as airports, ports, hospitals, and utilities; relevant community organizations; and others.

An initial workshop in Phuket brought together representatives of local hotels and hotel associations, the telecommunication industry, hospitals, and the Governor's Office to gauge interest in a multi-stakeholder destination resilience program, and received positive feedback. Future steps will be collectively mapping and assessing vulnerabilities, examining existing plans for gaps, identifying infrastructure vulnerabilities, and developing tangible plans. The methodology, lessons, and best practices from Phuket will be documented in order to eventually serve as a guide to be scaled and replicated in other tourism destinations.

Connecting Diverse Partners

Critical to the tourism resilience project, or any project aimed at building resilience, is bringing together key stakeholders from multiple sectors. It can be challenging for

diverse partners from different sectors to connect, communicate, and collaboratively plan for resilience. Often, organizations have different missions and goals, and see the world through distinctly different lenses. R3ADY, itself founded as a multi-sectoral partnership, is able to successfully bring together organizations to see the world beyond individual missions to address on-the-ground problems in collective and sustainable ways.

Besides making connections through its network, another way R3ADY is helping connect diverse partners for resilience is through its innovative guide, known as R3SOURCE. Currently under development, R3SOURCE will provide tools and guidance for anyone interested in building successful cross-sector partnerships by drawing from the experiences, pitfalls, and lessons of existing partnerships. R3SOURCE will be an online interactive guide, scheduled for launch in July 2015. Updates will be available at www.r3ady.org.

R3ADY has been engaged in a range of activities in over the past several years and has experienced several early successes bringing together diverse organizations at different levels, and helping to sustain these relationships long-term. By creating a culture of collaboration around disaster risk reduction, R3ADY hopes to continue to make strides toward mainstreaming partnerships for a more resilient future.



Re-examining the Past: Cooperative U.S.-Japan Disaster Preparedness and Response: A Progress Report

By Pete Novick

In 1997, the commander of U.S. Naval Forces Japan (CNFJ) established a position – emergency management (EM) officer – and I had the good fortune to be the first incumbent. Our tiny office of one prepared a presentation, and by way of introduction, went around to other U.S. military headquarters in Japan to brief staff personnel primarily in operations, plans, logistics, medical and civil engineering. The audiences were attentive and polite; their most frequent question: “what is emergency management?”

Fast forward eighteen years, and we can see that the increasing sophistication of bilateral and multilateral civil-military and military-military planning, coordination, training and most importantly, actual disaster response operations, has elevated EM in importance not only for what it does – helping people displaced by disaster and protecting property – but also for the complementary support it provides to other missions. In comparison to other military missions, that often require large capital investment, EM initially asks you only to bring an open mind and a sharp pencil to the table to learn about responding to the world's supply of come-as-you-are events.¹

In 2000, we discussed our initial efforts toward host nation civil and military coordination in an article published in *Liaison* (Vol. 2, No. 1), the highlights:

- Kanagawa Prefecture Government (KPG) Manual for Mutual Help (1998): U.S. Army Japan (USARJ), CNFJ and KPG coordinated development of a manual to promote more effective coordination to support disaster response operations. KPG, USARJ and CNFJ subsequently used this manual in support of Japan's annual national disaster exercises and demonstrations. From the onset, these exercises involved the exchange of information in response to scripted exercise events.
- TRANSPORTEX (1999): In this two-day exercise, USS Fort McHenry (LSD-43) and Japan Maritime Self Defense Force (JMSDF) ship JDS Ōsumi (LST-4001) conducted demonstrations of disaster response capabilities (at sea phase) and participated in a humanitarian assistance/disaster relief (HA/DR) operations seminar (in port phase). This exercise was one of the first USN-JMSDF efforts to demonstrate disaster response capabilities, and provided a valuable precedent for follow-on disaster response coordination and exercises, and real-world responses to natural disasters.

¹ In this article, Emergency Management (EM) refers to planning, preparedness and response operations for natural and man-made disasters, including terrorist use of weapons of mass destruction, and involves response to complex humanitarian emergencies involving displacement of people and destruction of property. EM planning, preparedness and response operations, also referred to as Humanitarian Assistance and Disaster Relief (HA/DR), are focused on meeting the immediate needs of displaced populations and include providing water, food, shelter, sanitation, transportation, medical care and other critical needs delivered by trained, certified and logistically supported first responders.



Mass Communication Specialist 3rd Class Dylan McCord/ U.S. Navy

The U.S. and Japan have a long history of military-military and civil-military cooperation in disaster preparedness and response, including after the Great East Japan Earthquake in 2011. Here, Rear Adm. Robert Girrier, left, commander of Carrier Strike Group (CSG) 7, explains operations supporting earthquake and tsunami relief efforts to Japan Self-Defense Forces Lt. Gen. Eiji Kimizuka, commanding general of Joint Task Force Touhoku, March 31, 2011.

- Memorandum of Understanding (MOU) on Coordination for Disaster Preparedness and Disaster Relief Operations (1999): In the first bilateral, service-to-service MOU of its type, JMSDF Maritime Staff Office and CNFJ agreed to protocols for disaster response notification, information exchange and coordination. Having a formal bilateral coordination mechanism in place is important in Japan, as it provides operational guidance for coordination, where the absence of such guidance may make it more difficult to engage in both preparedness planning and actual response operations. Japan Self Defense Forces are integrated into national and prefecture disaster planning and response, and this MOU opened the window to expand the range of coordination between the U.S. Navy and JMSDF, and made subsequent coordination easier.

In the two years following the original article, the terrorist bombing of USS Cole (DDG-67) and the 9/11 terrorist attacks struck at the heart of EM preparedness. While the CNFJ - JMSDF bilateral coordination for natural disaster planning continued at a steady pace,

U.S. military disaster response planning, which included both natural and man-made disasters, moved quickly to counter another emerging threat: terrorist use of weapons of mass destruction (WMD).

In response to challenges posed by this new type of disaster scenario, and as part of the fiscal year 2001 and 2002 Supplemental Appropriations Acts (P.L. 107-38, P.L. 107-117 and P.L. 107-206), Congress appropriated billions of dollars to the Department of Defense. A portion of the funds (\$3.5 billion in FY01; \$11.9 billion in FY02) went to the Defense Emergency Response Fund (DERF) and other DOD operations and maintenance accounts. The funding was immediately available to source off-the-shelf equipment and systems acquisition, supplies, and service contracts for personnel and training.

In 2002-2003, with DERF funding support and guidance from Commander, U.S. Pacific Fleet (COMPACFLT), CNFJ and Commander, Fleet Activities Yokosuka (the associated shore installation) developed and fielded one of the Navy's first organic WMD incident response capabilities, providing detection, warning, protection, decontamination and medical response support. Japan civil

and military personnel were invited to observe these exercises, which provided the basis for continuing dialogue and response coordination efforts. It should be noted that U.S. Navy and Japanese civil fire departments, under their mutual aid agreements, enjoyed close working relationships and some integrated response capabilities.

DOD established Joint Project Manager Guardian (JPMG) as the acquisition authority for systems and equipment to support WMD response operations at U.S. military installations worldwide, including mass notification, equipment to support first responders, hot zone operations and personnel decontamination. Navy lessons learned from those initial efforts informed the JPMG acquisition process.

JPMG fielded the WMD installation response capability package to Commander, Fleet Activities Yokosuka (CFAY) and U.S. Navy Hospital Yokosuka in 2006. In subsequent U.S. demonstrations and exercises, Japanese military and civil personnel had the opportunity to observe the drills and participate in post-event discussions. Over time, coordination for response to natural disasters was seen on both sides as the priority.

Meanwhile, local U.S. Navy efforts to strengthen bilateral coordination for natural disasters continued at the city level. In 2007, CFAY and Yokosuka City, where the main part of the U.S. Navy installation is located, signed a memorandum of understanding for disaster preparedness and disaster response operations. The MOU serves as the basis for coordinating response to natural disasters as well as opportunities for coordination, training and exercises. In furtherance of this MOU, CFAY and Yokosuka City held an exercise that summer to demonstrate mutual support to a displaced population following a simulated earthquake.

In April 2008, CFAY signed a similar MOU with Zushi City, which also hosts part of the CFAY installation complex. The MOU formally acknowledged that the CFAY and Zushi City would work together in the event of a natural disaster, such as a tsunami or earthquake.

Following the Great East Japan Earthquake on March 11, 2011, the U.S. military conducted response operations under Operation Tomodachi (Japanese word for friend(s)). The operation lasted from March 12 to May 4, and involved substantial U.S. Army, Navy, Marine Corps and Air Force support, and highlighted the close partnership between the United States and Japan in response to a civil emergency.

Since then, the U.S. Navy and Japan civil and military organizations have continued building on this foundation and the Navy continues to support Japan's annual disaster exercises, which take place around the nation on September 1st. For example, in 2012, Naval Supply Systems Command Fleet Logistics Center Yokosuka personnel provided assistance to the Tokyo Metropolitan

Government with relief supply operations as part of the annual Japan-wide disaster drills.

Although not part of the above civil-military cooperation discussion, it should be noted that JMSDF and the U.S. Navy also participate in Pacific Partnership, the largest humanitarian and disaster response preparation mission in the Indo-Asia-Pacific. From its origins as a response operation following the 2004 Indian Ocean earthquake and tsunami, which killed nearly a quarter of a million people, Pacific Partnership has grown in size and scope.

Marking its ninth mission in 2014, Pacific Partnership provided direct assistance to Vietnam, Cambodia, and the Republic of the Philippines. A JMSDF ship, JDS Kuni-saki (LST 4003), served as the primary mission platform - the first time Pacific Partnership was led from a partner nation's vessel.

Clearly, both U.S. Navy and Japanese civil and military leaders recognize the value of increased bilateral civil-military and military-military emergency management coordination. The detail and thoroughness of Japan's preparedness planning and funding, mitigation efforts, public awareness campaigns, emergency alert and notification systems, and coordination demonstrate a keen commitment to the welfare of all citizens and residents.

Tsunami, a term now used all over the world, is a Japanese word which means 'wave in the harbor' (津波). It was named long before the event was understood. In the many years of bilateral coordination for disaster preparedness and response, the foundation of friendship and partnership between the U.S. and Japan has hopefully moved us away from merely naming an event to understanding it in a profound and useful way. Together the U.S. Navy and Japan have made civil-military and military-military cooperative planning, preparedness and response to disasters a key element of bilateral cooperation, and have used and built upon agreements for nearly two decades to the benefit of both nations.

The views expressed in this article are the authors own.

On January 28 and 29, 2015, Banyan Analytics conducted U.S. Military Assistance to International Health Emergency Response: Examining Frameworks for an Ebola-like Disaster in the Asia-Pacific, a two-day tabletop exercise and high-level discussion involving domestic and international participants. The exercise consisted of four events followed by moderated discussion that focused on the following topics: (1) international health response resources and the process to request U.S. support, (2) appropriate use of Department of Defense assets for health disaster response, (3) force protection issues and adapting response operations, and (4) risk communication challenges and effective risk communication approaches. This tabletop exercise provided an opportunity to discuss approaches for effective, coordinated international response to a health emergency in the Asia-Pacific.

Discussions highlighted three main themes for improvement: public health preparedness, coordination and communication, and challenges related to the use of U.S. military assets for response to international health emergencies. This article represents a cross-section of the discussions from the event; further discussion on these topics with additional research and analysis, along with additional discussion topics, may be found in the final After Action Report.¹

Focusing on Public Health Preparedness

Shifting focus to the preparedness phase can help ensure the local capacity to rapidly recognize and respond to an outbreak, containing the health threat before it reaches crisis levels.

Many nations have made investments of some level into public health initiatives, driven by concerns about pandemic influenza and other endemic

¹ Elizabeth Nathaniel, David Hamon, Frances Veasey, Elin Gursky, Eric Weiner, Seongjin "James" Ahn, Thao "Liz" Nguyen. "U.S. Military Assistance to International Health Emergency Response: Examining Frameworks for an Ebola-like Disaster in the Asia-Pacific," after-action report by Banyan Analytics, an ANSER Institute, Falls Church, VA; workshop held in Honolulu, HI, January 2015. http://www.anser.org/docs/banyan_analytics/US_MilitaryHealthAssistance.pdf.

Improving Response to International Health Emergencies

By Elizabeth Nathaniel, Analyst at ANSER, & Frances Veasey, Principal Analyst at ANSER and Deputy Director of Banyan Analytics



A USAID official describes challenges encountered during the U.S. military response to Ebola in West Africa at the Banyan Analytics tabletop exercise.

disease threats. A number of these investments focused on building surveillance and laboratory capacity, which may be adapted to address other health issues such as hemorrhagic fevers. Some nations in the Asia-Pacific, however, have faced challenges building the capacity needed to respond to health threats and maintaining existing investments using limited resources. Applying capabilities-based analysis methods can help planners identify local and regional gaps in capabilities, providing leaders with a more informed decision-making process for initiating, implementing, and maintaining public health investments.

Understanding the response capacity of the impacted nation can also help define criteria for what constitutes an emergency by identifying clearer thresholds for when the impacted nation would be overwhelmed. Since exponential growth of cases during an outbreak can quickly overwhelm local capacity and the existing international response system is too slow to keep pace with such a

crisis, knowing the limits of impacted nations in advance could allow international response organizations lead time for possible movement of resources and support prior to the point that the disaster overwhelms the country.

Given the importance of public health preparedness activities, discussions focused on the need to further expand outreach programs in the Asia-Pacific to build partner capacities for monitoring, detecting, and responding to disease outbreaks.

The United States engages with partner nations in the Asia-Pacific for capability building through a number of programs. The

U.S. Agency for International Development provides direct investment and program development, the Centers for Disease Control provides epidemiological and rapid

response training, and U.S. Pacific Command conducts outreach, military-to-military training, and joint medical diplomacy missions within its area of responsibility. The National Guard also hosts a successful engagement program for capacity building, the State Partnership Program. Administered by the National Guard Bureau, the program aims to meet U.S. foreign policy objectives through support of U.S. security cooperation missions. As a domestic force, the National Guard maintains defense support of civil authorities as a primary mission, and this focus allows for not only military-to-military engagement but also civilian-military and whole-of-community engagement.² The U.S. Government should continue to invest in and leverage these programs to aid partner nations with building response capabilities.

Coordination and Communication in International Health Emergencies

The current response system for health emergencies is too slow to address the rapidly evolving needs of a growing epidemic, and it may be further delayed by time-distance factors in the Asia-Pacific.

Discussions highlighted the time taken to identify, request, and receive international support as a key challenge to effective response to health emergencies. A lack of bilateral and multilateral frameworks and agreements for international disaster response can slow access to resources and hamper coordination among international partners. Developing preexisting relationships and established frameworks with all partners, including regional forums such as ASEAN, NGOs, and private-sector partners, using a "whole community" approach,³ will improve coordination of international disaster response operations.

Response requires effective communications to share situational awareness information and avoid duplication of effort.

Use of common language becomes an issue for international response, since responding organizations might face foreign language barriers as well as differing terminology. U.S. frameworks for coordination and communication such as the National Incident Management System and the Incident Command System provide standardization and scalability that can help guide operations involving a variety of actors. Some nations in the Asia-Pacific have begun to develop organizational structures and frameworks based on U.S. models, with U.S. outreach programs supporting such efforts. Beyond this bilateral work, the U.S. could work with international partners to develop regional response agreements and an international coordination framework to allow more rapid delivery of resources. While the systems do not

² The National Guard State Partnership Program, Annual Report, Fiscal Year 2013.
³ "Whole community" refers to expanding incident management principles beyond government-centric emergency management systems to involve engagement with individuals, communities, NGOs, and the private sector.

Civil-Military Coordination and Information Sharing in a Digital Humanitarian Age



UAVs were used extensively to document damage after an earthquake devastated Nepal.

Jessica Lea/DFID

necessarily need to follow the Incident Command System model, an established framework for decision-making and coordination would improve the effectiveness of an international response.

Public messaging impacts response and requires establishing proactive and flexible risk communication strategies.

Conducting effective risk communication with different audiences is a difficult process that requires understanding the language, culture, and informational needs of each group, particularly in a health emergency when organizations must also consider the health literacy and beliefs of the audience. Risk communication strategies must also identify appropriate spokespersons and methods of disseminating information that work for each audience. Governments and response organizations need to coordinate messaging to ensure that public messages are accurate and appropriate, especially during health emergencies, when public fears of health risks are often high. Existing risk communication resources can guide the development of risk communication strategies that ensure effective messaging to differing audiences during a health emergency, but participating response organizations must coordinate messaging with the host nation to provide a single, unified message.

U.S. Military Support to Health Emergency Response

The U.S. military has capabilities that could support response to a health emergency, including some that fall outside the traditional response role that the military takes.

The U.S. military may support humanitarian response activities when there is no civilian agency that can do so. To meet response requirements for a health emergency, the U.S. military may not be limited to the typical types of support that it provides in other types of natural disasters. Discussion of the types of support the U.S. military would provide in a health emergency focused on traditional missions including infrastructure support, transportation, and logistics. While many individuals argued that the U.S. military would not be involved in either direct patient care or training of medical personnel, the U.S. military has conducted these activities in real-world response operations. Given the history of engagement in medical assistance for training purposes and in humanitarian assistance and disaster relief operations, there is precedent for involvement of U.S. military medical professionals in providing treatment during a health emergency. The requirement of U.S. military assistance in this role would depend on the capacity of civilian organizations, but, if they are overwhelmed, the U.S. military has the proven capability to provide medical services in austere and crisis conditions.

Force protection issues will impact the scope of U.S. military support in a country with an infectious disease outbreak.

Social unrest and civil disturbance, driven by local instabilities and fears due to a disease outbreak, can create security concerns for responding personnel. Arming U.S. military personnel during humanitarian operations, however, creates additional issues such as impacts to continued coordination with nongovernmental organizations. NGOs are key to health emergency response since they represent a majority of the personnel involved in public health and medical response operations, but coordination and cooperation of NGOs with the military has been a topic of debate. In a 2006 article, the Executive Director of Médecins Sans Frontières–USA, Nicolas de Torrenté, stated that there is a fundamental incompatibility between using the military and conducting humanitarian operations, and he urged NGOs to avoid working in close cooperation with militaries.⁴ On the other hand, some advocate better civil-military integration for both civilian authorities and NGOs in light of increased military involvement in humanitarian affairs. In large-scale disasters involving multiple response organizations conducting varied response and relief operations, coordination needs to occur across all fronts to avoid duplication of efforts and ensure that gaps in capabilities are met in a timely manner. U.S. decision-makers must have a better understanding of the impacts of such decisions on coordination of response operations with civilian organizations when planning to alter arming orders or standing rules of engagement.

Conclusion

Both long-term, chronic health crises and emerging infectious disease threaten the health security of populations in the Asia-Pacific and internationally. Working prior to an outbreak to improve access to health care, build capabilities for detecting and addressing infectious disease outbreaks, and strengthen coordination and communication methods will enhance population health in the near and long terms. The U.S. Government has a role to play in improving health security internationally and has committed to do so not just with the U.S. military's role in the recent Ebola epidemic in West Africa, but also through preparatory activities in line with the Global Health Security Agenda. Continued reexamining of past event responses and scenario-based exercises can help organizations develop a clear picture of gaps that need to be addressed and the best ways to do so in order to promote greater global health.

⁴ Nicolas de Torrenté, Executive Director, Médecins Sans Frontières–USA, "Humanitarian NGOs Must Not Ally with Military," *European Affairs*, 1 May 2006, <http://www.doctorswithoutborders.org/news-stories/op-ed/humanitarian-ngos-must-not-ally-military>.

By Julia Brooks, Legal Research Associate, Advanced Training Program on Humanitarian Action, Harvard Humanitarian Initiative & David Polatty, Associate Professor, U.S. Naval War College

The recent international humanitarian response to the 7.8-magnitude earthquake in Nepal highlights the critical importance of effective civil-military coordination to help those in harm's way; however, it also highlights the challenges of harnessing the digital humanitarian revolution to improve responses to natural disasters and complex emergencies.

With over 8,600 people killed and 8.1 million people affected (over one quarter of Nepal's population), the international humanitarian community responded to the earthquake, but still required significant logistical and transportation support from regional and international militaries. The "digital humanitarian community" also sprung into action, using information communication technologies (ICTs), including crowdsourcing, social media, and numerous platforms to facilitate information

collection, fusion, and sharing. These included systems, applications, and software that helped enable the verification of individuals' safety, identification and reconnection of missing persons, the provision of aerial imagery from satellites or UAVs, and the mapping of terrain, infrastructure damage, internally displaced persons camps and other humanitarian needs. This proliferation of digital action, with the aim of supporting the humanitarian response on the ground, highlights dramatic changes in the information environment for humanitarian responses since the 2010 Haiti earthquake. What remains to be seen, however, is how humanitarian and military responders - each with their own systems and methodologies for information sharing and technological coordination - can leverage this digital revolution towards more effective civil-military coordination in emergency responses.

Information Sharing and Technological Coordination in Civil-Military Engagement

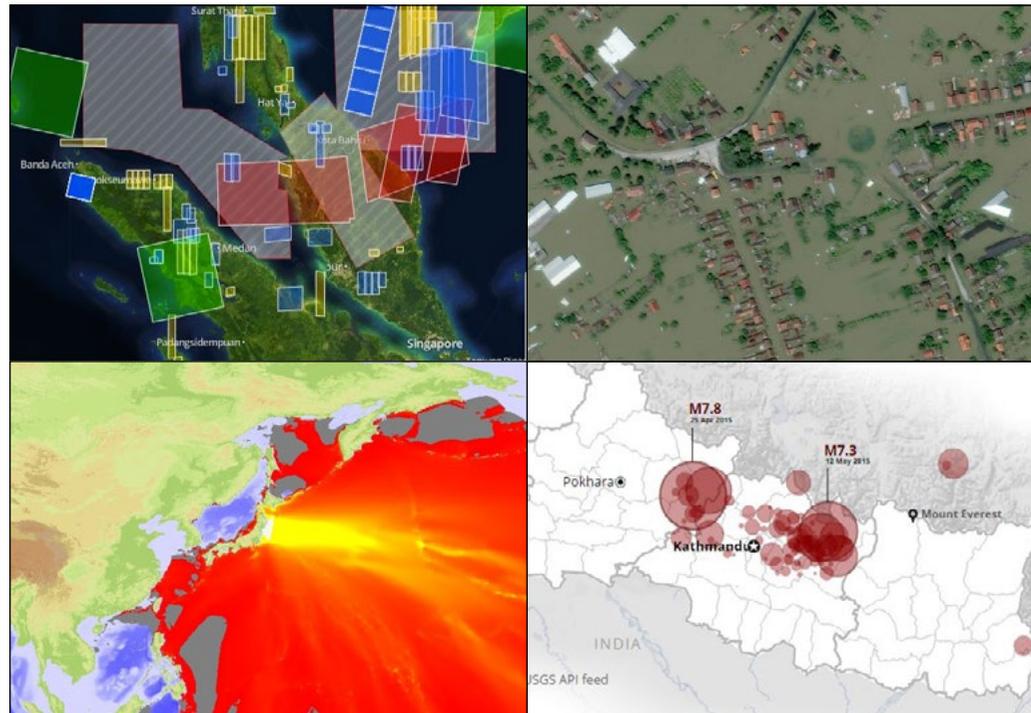
Civil-military coordination during sudden onset and manmade disasters is an increasingly relevant and routinely debated topic throughout humanitarian, academic,

and military circles. This coordination becomes even more difficult during complex humanitarian emergencies and conflict settings due to the magnitude of the problems encountered and the requirements that often exist for combatants to protect non-combatants from armed attack. Despite significant advances over the past decade in improving these civil-military interactions, information sharing and technological coordination remains particularly difficult between militaries and humanitarian organizations. Namely, international militaries normally depend on highly-specialized (and often classified) military communications systems, whereas the humanitarian response community, in stark contrast, uses unclassified systems, making collaboration difficult across the civil-military divide. With the exception of formal alliances such as NATO, most militaries operate their own independent communications systems that do not easily integrate with other nations' systems. Furthermore, the aforementioned revolution in ICTs in the humanitarian community over the past few years is quickly altering the way responses are coordinated and managed. Most, if not all militaries that routinely respond to humanitarian crises have struggled to keep up with the remarkable pace of change across the ICT environment.

A Digital Revolution in Humanitarian Information Sharing and Coordination

Patrick Meier's recently released book, "Digital Humanitarians," exceptionally describes the rapidly changing landscape and dynamic nature of information gathering and sharing within the humanitarian community. The proliferation of "big data" across fixed and mobile platforms worldwide provides an

overwhelming flow of information from a variety of sources, including social media (e.g. Facebook, Twitter, and YouTube), SMS texts (with photos and videos), unmanned aerial vehicles (UAVs), and commercial high-resolution satellite imagery provided by companies like Skybox Imaging and DigitalGlobe. The ability to collect, process, analyze, and ultimately disseminate this information to decision-makers for use in humanitarian responses is no easy task.



(Clockwise from top left) Skybox Imaging aids the search for Malaysia Airlines flight MH370; DigitalGlobe helps first responders direct search and rescue operations after devastating flooding in Croatia; UNHCR shares an infographic on Nepal's earthquakes and aftershocks on humanitarianresponse.info; UNOCHA's Global Disaster Alert and Coordination System predicts tsunami behavior in real-time.

Patrick and a few other thought (and action) leaders are moving quickly from human-intensive crowdsourcing of information to much faster and possibly more reliable computer solutions that rely upon artificial intelligence to perform the same analytical processes, and rapidly get information into the hands and minds of decisions-makers in the humanitarian sector.

In the midst of this incredible digital humanitarian revolution, it remains to be seen whether the U.N.

Office for the Coordination of Humanitarian Affairs (UNOCHA) will modify its existing disaster coordination platform, the Global Disaster Alert and Coordination System (GDACS), and its resident Virtual On-Site Operations Coordination Centre (VOSOCC). There are a number of highly interactive internet-based coordination and mapping tools available today, including the OCHA-sponsored HumanitarianResponse.info and ReliefWeb.int, along

with Crisis Mappers and OpenStreet-Map, and other widely used platforms like Ushahidi. The UN-SPI-DER Knowledge Portal also provides open source space-based information to humanitarian organizations, and has been heavily leveraged for critical information during the Nepal earthquake response. Additionally, innovative data collection tools such as Kobo Toolbox are leading the way in providing post-disaster assessments that more accurately record and reflect conditions on the ground.

Kobo Toolbox is now the preferred data collection tool of UNOCHA, and has helped provide humanitarian responders in Nepal with near real-time information on community needs.

In the wake of the Nepal earthquake, a small local NGO, Kathmandu Living Labs, had a profound impact on relief activities by mobilizing volunteers to crowdsource information into their existing map database using the OpenStreetMap platform. Prior to the quake, Kathmandu Living Labs mapped over 70 percent of the areas that were most impacted by the earthquake, which later enabled over 2,400 volunteers to conduct post-quake analysis by comparing before and after satellite imagery to determine the size and scope of destruction - and ultimately helping the Nepalese military and humanitarian responders to prioritize their rescue and relief efforts in a much more efficient and effective manner.

Many of these coordination mechanisms are already helping to incorporate the Digital Humanitarians' vision of information sharing and coordination in the future, and finding ways to apply them now. However, the proliferation of so many ICTs has caused further coordination challenges - leaving organizations responding to the Nepal earthquake overwhelmed by an ever-increasing flow of disparate digital data and information. The task now is to develop a means of integrating this data and information into commonly accessible, legible and actionable formats, and triaging and prioritizing efforts to better align the energies of digital humanitarian volunteers with the operational needs of humanitarian agencies and militaries on the ground.

Attempts to Provide Military Solutions for Information Sharing and Coordination

During massive disasters such as

the Nepal earthquake, the introduction of military capabilities into the relief effort further complicates the information sharing and coordination arena. As one example, the U.S. military relies heavily upon the All Partner Access Network (APAN) to communicate and help coordinate with other military organizations and non-U.S. partners during crises. APAN is an extremely capable system that has been used for over 15 years by the U.S. Department of Defense (DOD) during humanitarian assistance/disaster relief (HA/DR) operations, as well as exercises and simulations that allow militaries to rehearse for crisis response.

As effective as APAN has been during HA/DR operations in the past, it is advertised as providing "collaborative solutions for the DOD" with the goal of fostering information sharing between DOD and non-DOD entities. Once the U.S. begins a military HA/DR operation, APAN is typically activated to support the response effort. Other militaries and NGOs are invited to join this collaborative website, which adds yet another layer of technology to what is already a very complex and rapidly evolving ICT environment. While the intent is to offer one platform for other organizations to coordinate closely with the DOD, often times civil-military actors continue to rely on separate information systems - with DOD personnel becoming heavily reliant on APAN for their information gathering and coordination, and the humanitarian response community at large using some (or all) of the previously mentioned tools. In some instances, information contained on a plethora of other systems may simply be "copied and pasted" into APAN so it is easily accessible to DOD planners and responders - a rather inefficient means of information sharing.

Recommendations to Better Enable Civil-Military Information Sharing and Coordination

As well intentioned as DOD's employment of APAN has been, it may be perceived as counter to the overarching goal of militaries acting in a supporting, rather than leading, role during humanitarian relief activities. In accordance with UNOCHA's Oslo Guidelines on the Use of Foreign Military and Civil Defence Assets (MCDA) in Disaster Relief - as well as enduring humanitarian principles of neutrality and independence - MCDA should only be used as a last resort, with humanitarian organizations leading the relief activities and MCDA supporting these organizations' efforts to address specific gaps in relief requirements. Since it is neither feasible nor advisable for humanitarian organizations to adopt military communications systems, the U.S. and other militaries that answer the call to provide support during complex disasters must become more knowledgeable and proficient in the use of existing and emerging humanitarian ICTs in order to improve the overall effectiveness and efficiency of civil-military coordination. Furthermore, both militaries and humanitarian organizations must figure out how to harness and integrate the myriad new ICTs to facilitate more effective humanitarian responses. The move towards more common and streamlined use of ICTs for informational sharing and coordination will not only enhance the organization and efficiency of civil-military responses, but could also result in faster and better targeted humanitarian responses where and when they are needed most.

The following four recommendations may help to improve civil-military information sharing and coordination in future emergencies:

Training and Education Provide militaries with education

and training on existing and emerging humanitarian ICTs, and humanitarian organizations with a better understanding of military capabilities. While this may sound like a daunting task, efforts are already underway at places like the U.S. Naval War College (NWC), where a partnership with the Harvard Humanitarian Initiative (HHI) allows an exchange of faculty and ideas, influencing curriculum taught to both U.S. and international military officers, as well as humanitarian leaders and re-

dem institutions around the world should create additional opportunities to further train potential crisis responders, emphasizing the impact of ICTs and social media in changing the nature of information sharing in humanitarian responses.

Research

Dedicate members of humanitarian response teams to data collection, analysis and sharing during and after disasters in order to evaluate the effectiveness of civil-military coordination, as well as other aspects of

conferences. For example, the May 2015 Humanitarian Technology conference held in Cambridge, Massachusetts, and through online fora, to explore current and future trends in humanitarian response and discuss more innovative and efficacious ways of working together. Informed by research, this routine exchange of ideas amongst humanitarian responders from all sectors – including NGOs, governments, academia, and militaries – can further build trust and confidence and help ensure that

when we meet to address the next complex disaster, we will respond in a more collaborative, synchronized, and effective manner, using ICTs to their fullest potential.

Common Understanding of the Current Situation

Explore the possibility of developing one integrated system across humanitarian and military actors for information sharing and communication during emergency response.

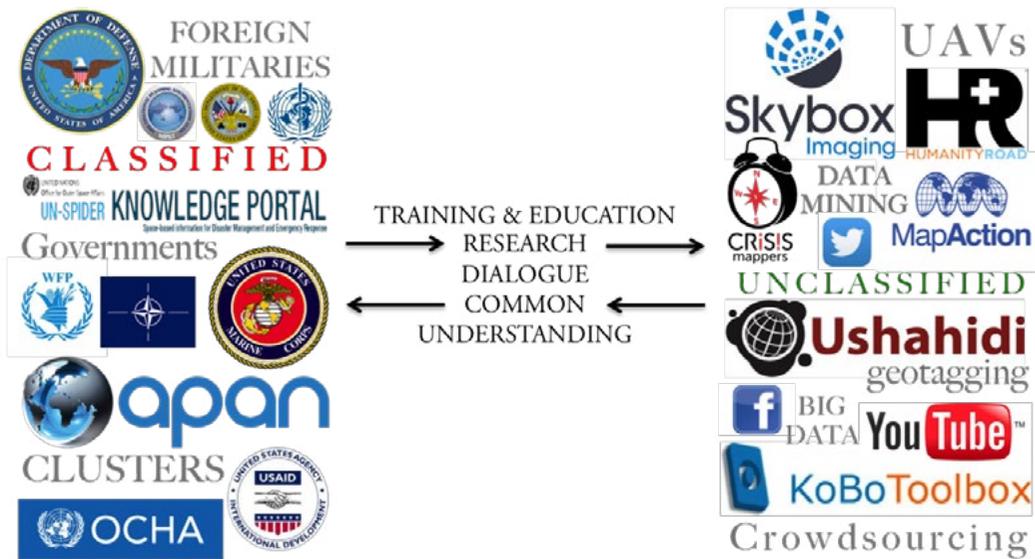
The rapid proliferation of digital humanitarian efforts and technologies necessitates the

creation of a joint clearinghouse to coordinate and connect the specific needs of emergency responders – both humanitarian and military – with the efforts of digital humanitarians. While numerous new ICTs will undoubtedly be developed and utilized across the humanitarian space in the future, there is a critical need for leadership in coordinating civil, military and “digital” humanitarian efforts. Challenges notwithstanding, if key actors can agree to direct the majority of their situational awareness building activities to a central, UNOCHA-endorsed platform, all responders may have a more accurate and timely understanding of the current environment on the ground during complex emergencies.

humanitarian response. Such research efforts can quickly yield valuable results, and become integrated into existing and future academic offerings to provide students with a better understanding of the lessons learned, including challenges and opportunities to facilitate more effective civil-military coordination. Similar research is needed with respect to the impact of new ICTs (e.g. social media, crowd-sourced mapping, UAV imagery, commercial satellite imagery) in order to harness the true power of these rapidly changing technologies for humanitarian response.

Dialogue

Continue the tremendous dialogue already taking place across the globe, both in person at workshops and



The collage shows three pages from a report titled "A Survey of Programs: Civil-Military Education".

- Page 1 (top):** Discusses the importance of education in disaster management and the role of civil-military cooperation. It mentions the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA).
- Page 2 (middle):** Features a lightbulb illustration and discusses the need for a common understanding of the current situation. It mentions the importance of developing an integrated system across humanitarian and military actors.
- Page 3 (bottom):** Features a lantern illustration and discusses the need for dialogue. It mentions the importance of continuing the dialogue already taking place across the globe.

Re-examining the Past: Civil – Military Cooperation Training and Education Programs

Liaison Staff

The question of military involvement in humanitarian assistance/disaster relief (HA/DR) operations has been a contentious issue in disaster management and response. On one hand, some non-military relief organizations such as the United Nations or nongovernmental organizations (NGOs) may feel uncomfortable working together with military entities, fearing this cooperation could damage their neutrality, thus endangering personnel in the field. On the other hand, civilian organizations realize that the military can quickly bring unique capabilities to the table without which the delivery of aid to disaster victims might not be possible.

Today, we can draw from numerous examples, good and bad, to highlight the importance of functioning civil-military cooperation. The 2004 Indian Ocean Tsunami, as well as Typhoon Haiyan in 2013,¹ are just two examples of how civil-military cooperation can greatly improve the effectiveness of disaster response, while the response to Hurricane Katrina in 2004 clearly showed how a lack of civil-military cooperation could make a bad situation worse.² However, experiences like Hurricane Katrina or the Haiti Earthquake³ in 2010, and their aftermaths, led to the realization that much still needs to be done to improve civil-military cooperation in HA/DR scenarios.

Since the early 2000s, the number and diversity of education and training programs and opportunities in disaster management has grown substantially. Not only are numerous domestic and international universities offering undergraduate, graduate, and post-graduate degree programs, U.S. military service academies and staff colleges teach classes in civil-military cooperation and disaster management in addition to courses, symposia and conferences hosted by various NGOs.

Academic institutions worldwide offer degree and certificate programs in Emergency and Disaster Management. In 2000, universities offered 25 graduate programs, 16 bachelor degree and 14 associate degree programs to potential students. By 2015, the number of programs increased dramatically, showing the increasing demand for profes-

1 Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DMHA), "An inside look into USPA-COM response to Super Typhoon Haiyan," February 2015 (via <http://reliefweb.int/report/philippines/inside-look-uspacom-response-super-typhoon-haiyan-february-2015>)
 2 United States House of Representatives. A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina. 109th Cong., 2nd Sess. H. Rept. 109-377, Washington, DC: U.S. Government Printing Office, 2006. Print. (<https://www.uscg.mil/history/Katrina/docs/USHouseOfRepKatrina-2006MainReport.pdf>)
 3 Margesson, Rhoda and Maureen Taft-Morales, "Haiti Earthquake: Crisis and Response," Congressional Research Service; 02 February 2010 (via <https://www.fas.org/spp/crs/row/R41023.pdf>)

Organization	Course	Audience	Course Goals	Length
Civil-Military Cooperation Centre of Excellence	Civil-Military Cooperation (CIMIC) Staff Worker Course	International Military	Enables participants, officers and NCOs, who are or will be appointed as CIMIC Staff Workers, to conduct CIMIC activities across the full spectrum of military engagement in a modern operational environment, up to and including corps/component command level	10 days
Civil-Military Cooperation Centre of Excellence	Civil-Military Cooperation (CIMIC) Field Worker Course	Humanitarians	Enables participants, officers and NCOs, assigned as CIMIC Field Workers, to conduct CIMIC activities across the full spectrum of military engagement in a modern operational environment, up to and including corps/component command level	10 days
United States Agency for International Development Office of U.S. Foreign Disaster Affairs (USAID/OFDA)	Joint Humanitarian Operations Course (JHOC)	Any U.S. military, DOD civilian or contractor	Highlights the role of USAID/OFDA as the lead federal agency for U.S. disaster response, and explains the process of requesting of US DOD assets in support of foreign disaster operations.	2 days
Australian Civil-Military Centre	Civil-Military Leaders' Workshop	Senior government and nongovernment officials from the Asia-Pacific region	Facilitates high-level collaboration in multinational responses to conflicts and disasters	2 days
U.N. Office for the Coordination of Humanitarian Affairs (UNOCHA)	U.N. Civil-Military Coordination (UN CMCoord) Course	International "action-officer" level humanitarians and military planners	Improves responsiveness, effectiveness, efficiency of humanitarian relief operations and advocates for the use of and adherence to guidelines for the use of MCDA in disasters	4 days
U.N. Office for the Coordination of Humanitarian Affairs (UNOCHA)	Supporting Humanitarian Action in Responding to Emergencies and Disasters (SHARED) Course	International Military	Improves effectiveness of humanitarian action in natural disasters and complex emergencies where military forces are present, by providing knowledge and understanding that enable them to provide the right support at right time to right people in appropriate manner	3 days
Center for Excellence in Disaster Management and Humanitarian Assistance	Health Emergencies in Large Populations (H.E.L.P.)	U.S. and international military personnel and civilians with backgrounds in public health, medicine, humanitarian assistance and disaster management	Provides participants with an understanding of the major public health issues to be addressed among populations affected by natural and man-made disasters and conflicts	10 days
Center for Excellence in Disaster Management and Humanitarian Assistance	Humanitarian Assistance Response Training (HART)	U.S. and international military, DOD civilians and contractors; priority to deploying U.S. personnel or those supporting deploying personnel	Enhances the ability of the military to plan and execute disaster response operations in a multinational environment	2-4 days

sionals with backgrounds in disaster management in nongovernment and government organizations.⁴ The last 15 years saw the establishment of 10 doctorate programs, while the number of graduate programs has more than doubled (52 programs), and the bachelor's programs available quadrupled (59 programs). The number of associate's degrees offered went from 14 to 48. Graduates from these programs can be found in a wide variety of emergency and disaster management related positions. Many of those can be found with government agencies, such as Federal Emergency Management Agency or U.S. Agency for International Development; international organizations such as the U.N. Office for the Coordination of Humanitarian Affairs (OCHA); and national and international NGOs. FEMA has a comprehensive list of U.S. schools offering these programs, which is frequently updated. It can be found here: <https://www.training.fema.gov/hiedu/llellist/#pubHealthPrograms>

Disaster management courses with a distinct focus on civil-military cooperation are fewer, but their number is also increasing. Military training institutes, such as the Marine Corps Civil-Military Operations School, several U.N. departments, to include the U.N. Department of Peacekeeping Operations and the U.N. System Staff College, as well as multinational organizations (e.g. NATO's Civil-Military Cooperation Centre of Excellence), provide courses to improve civil-military cooperation. The target audience of these institutions is mainly military personnel, but most are also open to civilians. Some courses focusing on civil-military coordination are:

- The Civil-Military Cooperation Centre of Excellence instructs a Civil-Military Cooperation (CIMIC) Staff

⁴ Ankensen, Christopher, "Civil-Military Cooperation in Post-Conflict Operations: Emerging Theory and Practice," Routledge, 28 September 2007

Worker Course, open to international military, and a Field Worker Course open to humanitarians. The institution is an NATO-accredited training institution and hosts other course on civil-military coordination. Other institutions like the Australian Civil-Military Centre also teach a selection of these courses.

- Civil-Military Leaders' Workshop at the Australian Civil-Military Centre. This workshop targets senior government and nongovernment officials from the Asia-Pacific region and has been offered since February 2014. The workshop facilitates high-level collaboration in multinational responses to conflicts and disasters.

- The Joint Humanitarian Operations Course (JHOC) is a two-day live course, developed by USAID/OFDA. The course is given to military personnel. Any military organization, to include civilian and contractor personnel, can attend, as well as specific, requesting units. The key point of JHOC is to highlight the role of USAID/OFDA as the lead federal agency for U.S. disaster response.

- The U.N. Civil-Military Coordination (UN CMCoord) Course is aimed at an international military and civilian audience. The U.N. Office for the Coordination of Humanitarian Affairs (UNOCHA) will conduct this four-day live course, if requested, for a specific country if it has ongoing emergency operations. Several national

and international institutions [e.g. RedR Australia and the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA)], also host the course. The course is aimed at improving the efficiency of humanitarian operations and concentrates on civil-military coordination in disasters and complex emergencies. The audience is half civilian (humanitarian community / government disaster management organizations) and half military. OCHA also sets a 20 percent minimum female participation in the course. The CMCoord audience is the most diverse of all the courses.

- Supporting Humanitarian Action in Responding to Emergencies and Disasters (SHARED) Course is also an UNOCHA program. It is designed for international military personnel who may be tasked to respond to emergencies (natural disasters and complex emergencies), and also for key personnel of military training institutions and peacekeeping training centers. OCHA conducts this course as requested by a specific country.

- The Health Emergencies in Large Populations (H.E.L.P.) Course, offered by CFE-DMHA is a two-week course, providing participants with an understanding of the major public health issues to be addressed among populations affected by natural and man-made disasters and conflicts. The course is open to national and international military personnel as well as civilians with

backgrounds in public health, medicine, humanitarian assistance and disaster management.

- The Humanitarian Assistance Response Training (HART) Course, also offered by CFE-DMHA, is geared toward U.S. and international military, DOD civilians and contractors. Priority is given to deploying U.S. personnel or those supporting deploying personnel. The aim of the course is to enhance the ability of the military to plan and execute disaster response operations in a multinational, multiagency environment.

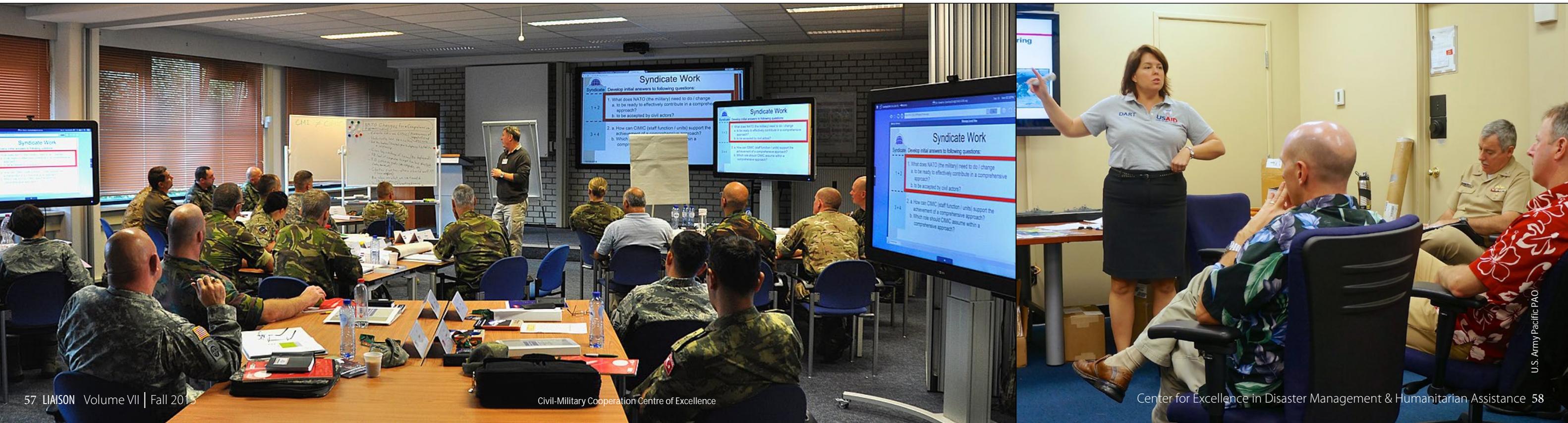
Creating an effective civil-military cooperation education system still remains a difficult task. However, the quality of educational courses is improving steadily, since lessons learned from disaster relief operations are incorporated into course curricula.⁵ Considering the different doctrines and goals of humanitarian and military forces, the wide variety of training and education opportunities available is providing both civilian and military actors with a sound basic training and education to effectively respond to natural disasters.

Over the last 15 years, the landscape of disaster management and humanitarian assistance has changed substantially. Improvements in education for both NGOs

and military personnel, better coordination of relief efforts in disaster responses, and changes in military doctrine have reduced the military footprint in disaster management and humanitarian assistance operations. The military's unique capabilities (logistics, including strategic air lift and rotary wing lift, infrastructure repair, imagery, command and control, and communications) can be brought to bear very rapidly and in austere environments – more so than civilian counterparts – still play an important role in those operations, but the ways in which those capabilities are being incorporated has become more consistent. As education and training opportunities increase in the future, the quality of those programs will improve as lessons learned from previous HA/DR operations are incorporated in the curriculums. The participants will be able to better define the role they want to play in disaster situations, the need for specific skills will be better described, and the moving pieces will be better coordinated; all in all, improved civil-military coordination education has the power to increase disaster response capabilities of all disaster response stakeholders.

⁵ Wheeler, Victoria and Adele Harmer, eds., "Resetting the rules of engagement: Trends and issues in military-humanitarian relations," the Humanitarian Policy Group, HPG Research Report 21, March 2006 (via <http://www.odg.org/sites/odg.org.uk/files/odi-assets/publications-opinion-files/273.pdf>)

International military personnel take the Civil-Military Cooperation (CIMIC) Staff Worker Course at the Civil-Military Cooperation Centre of Excellence; U.S. military and Department of Defense personnel attend the Joint Humanitarian Operations Course.



300,000 people and left two million homeless in Port-au-Prince. The context within which the quake struck was one of poverty and political instability. The upshot was that the earthquake response included not only emergency humanitarian relief but also assistance in restoring political institutions and development planning.

The immediate challenges to the relief effort were shortages in transportation and limited communications systems, both of which became priorities of various responding militaries;⁸ the Prével administration also listed priority needs as: search and rescue assistance, an off-shore medical ship, electricity generation capacity, and communications equipment.⁹ The U.N. Office for the Coordination of Humanitarian Affairs (UNOCHA) team became the lead coordinating agency, but a succession of UNOCHA-led entities made up of differing partners soon evolved. The Joint Operations Tasking Center (JOTC) stood up in late January, and then an UNOCHA Civil-Military Coordination (CMCoord) team convened.¹⁰ However, the U.N. Stabilization Mission in Haiti (MINUSTAH), U.S. Southern Command and the Canadian armed forces were already operating in partnership with civilian counterparts without going through UNOCHA bodies.

Global and local actors were able to overcome immediate transportation and communication challenges through coordination, but the ad-hoc solutions employed were not documented into lessons learned that led to a longer-term coordinated effort. In part, the problem lay in the national government's lack of political legitimacy and overall lack of authority or capacity, but after-action assessments also found fault in the weak leadership of the

multinational response, to include: lagging establishment of a cluster system; wasting time on debating leadership structures; and, potentially the most damning, excluding local involvement due to language barriers and locations chosen by responding agencies/militaries for meetings and activities.¹¹

Those failures were explicitly linked to global partners' inability or unwillingness to communicate, and the national Haitian leadership's decision not to support InterAction's contention that pre-disaster exposure and education can overcome in-emergency challenges and in-conflict disputes. Indeed, the 2010 Haiti shortfalls stand in stark contrast to after-action reviews of the multinational response to Typhoon Haiyan where many of the actors have long-standing relationships or had trained together in the conduct of disaster response operations.

As with failures in Haiti, successes in the Philippines must be contextualized. First, early storm warnings by Philippines authorities alerted locals, led to pre-storm evacuations and prompted preparatory planning and information sharing by Manila's key regional partners.¹² Second, there was a clear role for military responders early in the operation due to their heavy lift capabilities to clear and establish temporary infrastructure that allowed other actors to perform their tasks.¹³ Third, coordination at the local level was robust rather than leaving all coordination to national, strategic-level officials.¹⁴ Fourth, cluster management ensured activation and deactivation of clusters, informing partners of when to contribute and when to stop. For example, the U.S. armed forces' major operations

ended two weeks into the response when the need for emergency, heavy lift and remote access ended. Finally, the Philippines government was prepared to handle the early emergency requirements and had formed on-going relationships with U.N. agencies and NGOs. Within 3-5 days of Haiyan passing over central Philippines, aid was moving onto affected areas¹⁵ via coordination among the Philippines national government, the armed forces of the Philippines (AFP), and 57 countries, 29 foreign militaries, U.N. agencies and international NGOs.

The global military response to Haiyan was not without controversy, but its effectiveness was not disputed. Lessons learned set various military actors' involvement in contrast with each other to examine what worked best and what could be improved. The U.S. military response garnered several very specific criticisms, the most important being that communication lapses occurred for two reasons: 1) the U.S. lodged information in the classified realm; and 2) the U.S. and U.N. agencies did not exchange liaisons in the field.

Meanwhile, the Canadian armed forces' experience providing relief in Capiz Province was held up as exemplary. Canada was a stakeholder with U.N., local entities and NGOs in direct, unclassified communication in the "Command Center" in the Roxas Provincial Capitol building. Canada's armed forces were able to be effective because Canada moved control of its response out of its Embassy in Manila and placed it directly under commanders at the local level. In addition, all of the Canadian players and many of the NGO and U.N. personnel in Roxas had personal relationships with each other and previous experience and training in multinational HA/DR exercises and operations. The role of military-civilian participation in HA/DR preparedness exercises and educa-

tion – in addition to Canadian forces' extensive peacekeeping experience that includes providing humanitarian assistance – proved to be of critical import.

Recent disaster relief scenarios provide successes for examination, but given the reality that military forces will also participate in HA during conflict, can disaster relief experiences teach us lessons for coordination in all realms?

Humanitarian actors accept – some grudgingly – that military involvement in HA/DR will continue. Thus, humanitarian workers must recognize that this involvement means civilians are linked – rightly or wrongly – to military actors, potentially putting humanitarian actors at risk.¹⁶ It is clear that some individuals on both sides harbor doubts and resentment. Humanitarian actors fear they may be made complicit in inappropriate or ineffective assistance, and military actors fear that their own forces may face intensified host public resistance if intervening military forces do not pick up the "humanitarian slack."

Disputes over the legitimacy of some military interventions and publicized civilian organizations' rejection of political goals for humanitarian relief severely complicate civil-military coordination during conflicts. These disagreements, then, bleed over into relationships during training and disaster relief missions. Examples of extremely effective military participation in disaster relief have reduced some resistance on the parts of both military and humanitarian communities, but these successes often depended on the personalities of those deployed as part of NGO, government or military missions.

Although many of the issues of humanitarian relief during both natural disasters and conflict are related to the abilities of host countries' political and civilian structures,

the international community's civil-military coordination mechanisms can alleviate some of the challenges. Many hope that personal experiences of education and training across the civil-military divide can become ubiquitous. Although there has not been an integrated international

developing formal changes to its civilian-military coordinated training program. If so, it reflects recognition that the personal relationships and knowledge that have proven critical in disaster relief missions cannot be developed once an emergency has begun. And without these relationships



effort to revamp and revive shared training and educational experiences in a systematic way, the U.N., the U.S. and several Asia-Pacific nations have initiated training programs and other efforts to educate and train military leaders and government officials in the challenges, best practices and lessons learned from civil-military disaster response and humanitarian relief operations.

Even the primary U.S. proponent of civil-military coordinated training and education, InterAction, does not feature this issue in its recent annual reports, suggesting the organization may be working quietly behind the scenes to overcome strains by disputes over the U.S. military role in Iraq and Afghanistan before

and exposure, misunderstandings, duplication of effort and physical risks become more likely.

8 Margesson, Rhoda and Maureen Taft-Morales, "Haiti Earthquake: Crisis and Response," Congressional Research Service; 02 February 2010 (via <https://www.fas.org/sgp/crs/row/R41023.pdf>), p. 2
9 Margesson and Taft-Morales, p. 3
10 Margesson and Taft-Morales, p. 8

11 Humanitarian Practice Network (HPN), "Looking back, moving forward: Applying the lessons learnt from the Haiti Earthquake response," <http://www.odihpn.org/hpn-resources/hpn-event-reports/looking-back-moving-forward-applying-the-lessons-learnt-from-the-haiti-earthquake-response>
12 Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DMHA), "An inside look into USPACOM response to Super Typhoon Haiyan" February 2015 (via <http://reliefweb.int/report/philippines/inside-look-uspacom-response-super-typhoon-haiyan-february-2015>), p. 11
13 CFE-DMHA, p. 12
14 CFE-DMHA, p. 14

16 Metcalfe et al, p. 10

CALENDAR OF EVENTS

1 **Association of Southeast Asian Nations**
ASEAN Defence Ministers Meeting-Plus
Experts' Working Group on Humanitarian
Assistance and Disaster Relief Table-top
Exercise
 August 5 – 7
 Vientiane, Lao PDR



2 **Association of Southeast Asian Nations**
22nd ASEAN Regional Forum (ARF)
 August 6
 Kuala Lumpur, Malaysia



3 **International Federation of the Red Cross**
and Red Crescent Societies & CFE-DMHA
Health Emergencies in Large Populations
(H.E.L.P.) Course
 August 17 – 28
 Pearl Harbor, Hawaii, USA



4 **Multinational Communications**
Interoperability Program
Pacific Endeavor Exercise
 August 31 – September 11
 Manila, Philippines



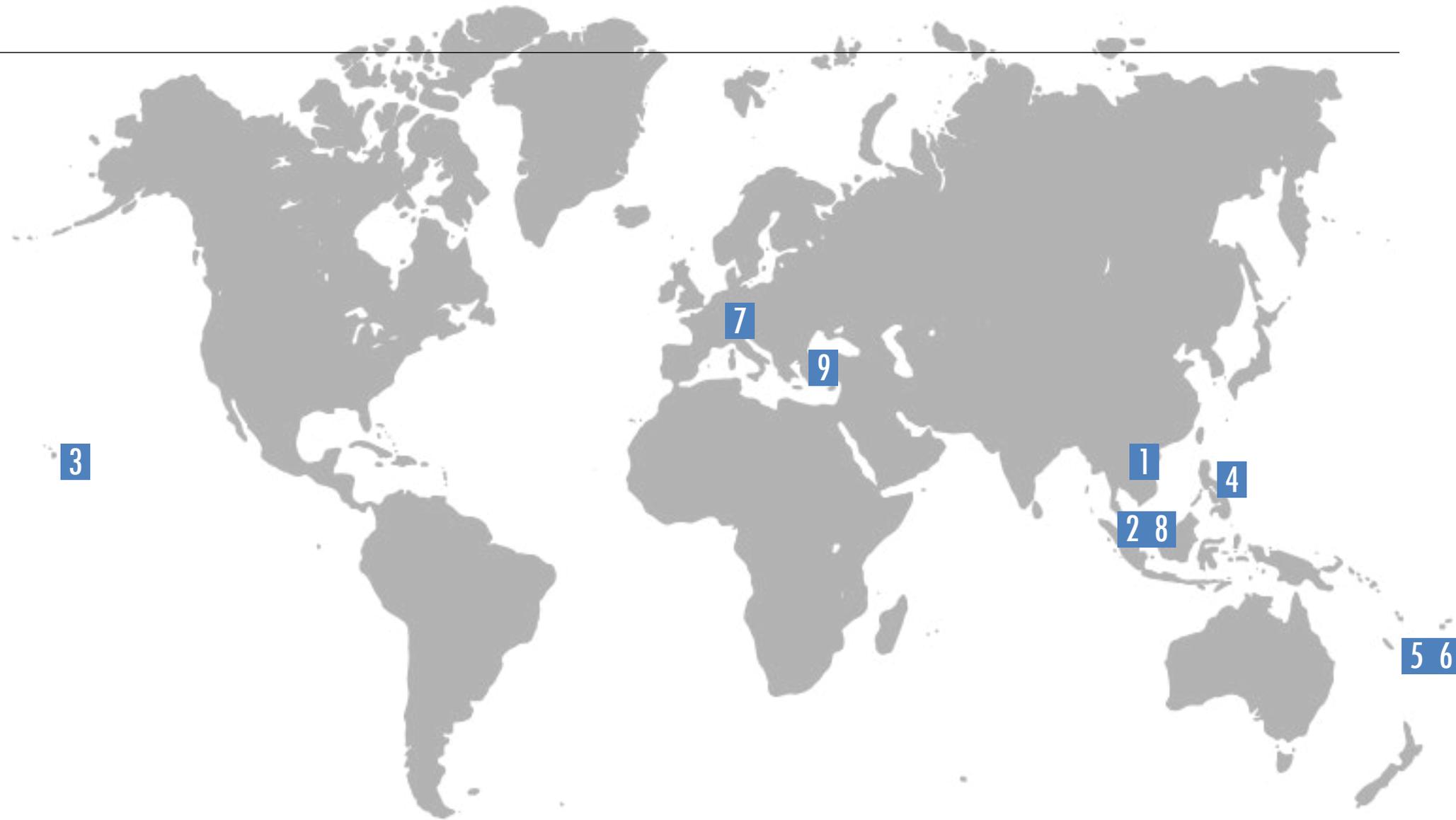
5 **U.N. Office for the Coordination of**
Humanitarian Affairs
Civil-Military Coordination (CMCoord) Course
 September 6 – 11
 Suva, Fiji



6 **Pacific Islands Forum Secretariat**
46th Pacific Islands Forum Leaders Meeting
 September 7 – 11
 Suva, Fiji



7 **United Nations Secretary General**
World Humanitarian Summit Global
Consultation
 October 14 – 16
 Geneva, Switzerland



8 **Association of Southeast Asian Nations**
3rd ASEAN Defence Ministers' Meeting Plus
(3rd ADMM-Plus)
 November 4 – 5
 Kuala Lumpur, Malaysia



9 **United Nations Secretary General**
World Humanitarian Summit
 May 26 - 27, 2016
 Istanbul, Turkey





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