

# Can Thinking About Strategic Surprise and Climate Change Support Strategies and Tactics to Improve Response To Maritime Based Civilian-Military Humanitarian Assistance In The Future?

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Joseph DiRenzo III, Ph.D.  
U.S. Coast Guard Research and Development Center

The lessons learned are many just in the past two decades.

In July 1997 it was the explosion of the Soufriere Hills volcano in Montserrat, West Indies; in 2006 it was Hurricane Katrina along America's Gulf Coast; in 2010 it was the Haitian Earthquake; and in 2013 it was Typhoon Haiyan, also known as Super Typhoon Yolanda. What do all these events have in common? Maritime units, from the U.S Coast Guard, the U.S. Navy and other NATO nations were deeply involved in providing humanitarian assistance/disaster relief (HA/DR) in an urban setting. Each is unique in that response was modified for the event itself. However, they collectively offer a perfect set of examples to look for patterns, successful response protocols

The devastation incurred by each of these events is significant. Take Typhoon Haiyan for example, according to UNICEF, "Typhoon Haiyan, one of the most powerful tropical storms on record, caused tremendous damage when it made landfall in the Philippines in November 2013. More than 6,000 people were killed. Thousands of homes were destroyed. Over 14 million Filipinos, including nearly 6 million children, were affected".<sup>1</sup>

The predicted impact of future events will have on coastal urban areas will be exasperated by climate change, especially with the expected rise in sea levels. This rise is projected all over the world. Use the Norfolk Virginia area as an example, home to the Navy's largest homeport. According to the *Washington Post*, normal tides have risen 1 ½ feet over the past decade.<sup>2</sup> The same article re-enforced that by the end of the century the sea level would rise 5 ½ feet. The Post article also noted in a "worst case scenario" with rapid melting of the earth's glaciers and ice caps

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<sup>1</sup> UNICEF (2013) Hurricane Relief – Philippines Typhoon Haiyan, <https://www.unicefusa.org/mission/emergencies/hurricanes/2013-philippines-typhoon-haiyan>

<sup>2</sup> Lori Montgomery (2014, May 31), In Norfolk, evidence of climate change is in the streets at high tide The Washington Post, [https://www.washingtonpost.com/business/economy/in-norfolk-evidence-of-climate-change-is-in-the-streets-at-high-tide/2014/05/31/fe3ae860-e71f-11e3-8f90-73e071f3d637\\_story.html](https://www.washingtonpost.com/business/economy/in-norfolk-evidence-of-climate-change-is-in-the-streets-at-high-tide/2014/05/31/fe3ae860-e71f-11e3-8f90-73e071f3d637_story.html)

that the rise would be over 8 foot. Now, is this science exact – no. Are there major detractors in and out of academia – yes. But all the maritime forces within the United States and NATO would be foolish to simply avoid this issue.

In addition to the rise in sea levels populations have been flocking to the coastal zone to both live and work. This has added to the concern for one simple reason. As you increase a population along a seaboard, you increase the urbanization of that area. Look at the growth experienced along Long Island sound as just one example. According to the 2007 Intergovernmental Panel on Climate Change Working Group report, “Coastal population growth in many of the world’s deltas, barrier islands and estuaries has led to widespread conversion of natural coastal landscapes to agriculture, aquaculture, silviculture, as well as industrial and residential uses.”<sup>3</sup> It has been estimated that 23 percent of the world’s population lives both within 100 km distance of the coast and <100 m above sea level, and population densities in coastal regions are about three times higher than the global average”.<sup>4</sup> This shift will exacerbate a fundamental contingency planning consideration as maritime staffs consider threat vectors. More people will be concentrated in smaller areas. The challenge in a Humanitarian Assistance Disaster Response (HA/DR) response scenario just got even more difficult because as a rapid growth in the population occurs along the coast, coupled with a desire for more and more infrastructure and a rise in sea level you suddenly have “Perfect Storm Scenario” that when impacted by an significant event, such as an earthquake, requiring a maritime HA/DR response the result could be quite over-whelming. Due to the possibility of cascading events maritime forces should continue to refine their doctrine, strategy and Tactics, Techniques and Procedures (TTP) to account for these new realities. The response in an urban environment in 2050 will not be what it is today.

So what approach could be taken by contingency planners and tacticians alike to prepare for the “new reality”? What events or combination of events could trigger such a need for an HA/DR response? Can thinking about scenarios that comprise strategic surprise events be used to frame the planning process? Consider this scenario, which has been widely reported by the international media, the 2000 *BBC* story “Mega-tsunami: Wave of Destruction”.<sup>5</sup> The *BBC* story reported about growing concern of a “geological time-bombs” around the world which once “triggered” would generate a significant tsunami like event. The report centered around the island of La Palma in the Canary Island, off north Africa and a future eruption would unleash a massive landside on the western side of the island.

Based on the *BBC*’s reporting a major landslide event on La Palma would set up a tsunami which would “race across the Atlantic at the speed of an airliner”. The report goes on to note that the

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<sup>3</sup> Valiela, I., (2006): *Global Coastal Change*. Blackwell, Oxford, 368 pp.

<sup>4</sup> Small, C., and R.J. Nicholls, (2003) A global analysis of human settlement in coastal zones. *J. Coastal Res.*, 19, 584-599.

<sup>5</sup> BBC (2000) *Mega-tsunami: Wave of Destruction*.  
[http://www.bbc.co.uk/science/horizon/2000/mega\\_tsunami\\_transcript.shtml](http://www.bbc.co.uk/science/horizon/2000/mega_tsunami_transcript.shtml)

tsunami's impact on Boston would be significant along with other locations along the east coast. This would trigger a significant response by U.S. Northern Command and the DoD....think Super Storm Sandy x10. Now apply this scenario to other parts of the world, because if you believe the BBC report, and I do, the impact will be significant. There are possible "strategic surprise events" around the world.

Additionally, armed with this information you need to ask yourself --- How well prepared are the maritime services to respond, especially in an urban environment? What lessons specifically from Typhoon Haiyan and the Haitian earthquake apply here? Has any agency, including NORTHCOM or other geographic combatant commanders considered this type of scenario as a strategic surprise? What role do the maritime forces play in a whole of government response?

What do I mean by a strategic Surprise?

In their essay "Ahead of The Curve: Anticipating Strategic Surprise," researchers Peter Schwartz and Doug Randall noted that a *strategic surprise* differ from a "run of the mill surprise" in that it produces significant organization and societal impacts, challenges conventional wisdom, and is hard to imagine.<sup>6</sup>

In the case of La Palma, using the variables above could thinking about this kind of HA/DR response in the context of a Strategic Surprise be valuable? First, would this type of event produce "significant organization and societal impacts" – the short answer is yes based on the literature. Second, does this scenario challenge conventional wisdom? Again...looking at the literature there is a great deal of skepticism that this would occur. Ok, debate within scientific research areas is expected. Yet, major news networks from National Public Radio to the BBC have discussed it. Additionally, peer reviewed articles have explored it.

The final strategic surprise component to consider is simply....is this scenario hard to imagine? Hmmm, lets look at history and a similar type event – Hurricane Katrina. Even armed with the information/results, nearly one year to the date, from a Table Top entitled "Hurricane Pam" key planners still did not believe that a Hurricane Katrina like event could occur especially with the associated HA/DR response. Isolated case? You be the judge if a La Palma type event is possible....and how the maritime forces of the United States would approach their response.

To begin to craft a response I want to go old school and consider joint doctrine. JP 3-29 (Foreign Humanitarian Assistance) published on 3 January 2014. Joint Pub 3-29 does a perfect job of describing the role played, "Because Department of Defense (DOD) will normally be in a supporting role during FHA contingency operations, the joint force commander (JFC) may not be responsible for determining the mission or specifying the participating agencies. Appropriate

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<sup>6</sup> Peter Schwartz and Doug Randall, (2007) "Ahead of the Curve: Anticipating Strategic Surprise," in Francis Fukuyama, ed., *Blindside: How To Anticipate Forcing Events and Wild Cards In Global Politics* (Baltimore: Brookings Institute Press, 93–108.

organization, command and control (C2), and, most important, an understanding of the objectives of the organizations involved are all means to build consensus and achieve unity of effort.”

The unity of effort piece is key....but this has to extend well beyond the tactical level response. The real value is to look at the lessons learned from multiple events (such as Haiti from an urban perspective) and re-craft doctrine, campaign plans and standing “quick response cards” in the tenants of strategic surprise and then using modeling and simulation to “game out” scenarios to refine the products you have, developed.

As part of the development process, as products such as doctrine are revised leadership needs to ensure every effort is undertaken to reduce the group-think. How do you do that....by ensuring an “Arch Protagonist” is appointed to inject “disruptive think”. This approach is invaluable in strategic doctrine development where the norm is established.

The final area that needs to be re-enforced is leverage every opportunity before an HA/DR event to get to know your partners – especially the agencies like USAID that coordinate aid and the Non-Government agencies. Notes JP 3-29:

*Increasingly, the resources of the international business community are being utilized to mitigate human suffering associated with disasters. Businesses donate talent or in-kind goods and services to disaster relief and recovery operations in developing countries and wish to ensure that their help is delivered in a coordinated and effective manner. The same is true for foreign disaster response. Many large private-sector companies maintain disaster/crisis response teams that can respond and add value to USG operations by providing infrastructure and other supporting services. DOD mechanisms that plan for, train, and implement emergency responses to disasters should consider the private sector. This should be done through USAID OFDA, which maintains communication with UN agencies and other international organizations and private sector donors to ensure the USG complements rather than duplicates existing assistance programs. In addition to large transnational corporations, the private sector also includes the local, national, and other companies and organizations which should be considered and engaged through the country team, USAID, or other existing USG channels.<sup>7</sup>*

In conclusion, the world is changing. Our climate is indeed changing....its’ “vital signs” highlight projected changes in sea level height and storm significance. Couple this with the destructive power of the La Palma volcano and the need for a well developed and trained HA/DR effort that can scale up and down, and work across both interagency but also internationally – with governments and NGOs alike. How can the Maritime Forces of the United States be ready for this type of issue...simply...look at what science is saying what the art of the possible --- what scenarios would create a possible HA/DR event..especially in an urban event...then use a strategic surprise framework to prepare for it. Understand who your partners are, what the hurdles are, what the authorities are upfront will make the response much easier to coordinate. This isn’t

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<sup>7</sup> Joint Publication (JP 3-29) (2014, January 3) Foreign Humanitarian Assistance.  
[http://www.dtic.mil/doctrine/new\\_pubs/jp3\\_29.pdf](http://www.dtic.mil/doctrine/new_pubs/jp3_29.pdf)

anything new in HA/DR....but what is new is the partners involved...what if China or Russia rush a response to scene...are your plans flexible enough to work with them?

One final recommendation....after your strategy, doctrine and plans are revised to considered the unexpected....set up a group to critically review them....using disruptive thinking...look for the gaps by asking the *what if* questions. By doing so your overall response will be more resilient, and better prepared to handle a La Palma event. Strategic Surprise is coming and HA/DR planners looking at an urban environment need to embrace it – know your partners and think disruptively.