



U.S. Army North in the Hurricane Maria Response

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U.S. Army North led Department of Defense support to civilian disaster-response operations in the wake of hurricanes Irma and Maria in 2017. RAND was asked to answer a series of questions about that support, including about relationships among responding organizations and possible improvements in such things as speed of response and situational awareness.



RESEARCH QUESTIONS

- How did the DoD response in Puerto Rico and USVI match or deviate from the NRF, doctrine, authorities, and organizational templates?
- How could DoD improve the speed of response, including early SA and understanding of the problem in a catastrophic incident?
- How could DoD better prepare to respond to incidents where the state or territory has limited capability and capacity?
- What changes to doctrine do the lessons learned from Hurricane Maria suggest are required?
- What DoD capabilities might be required for future catastrophic disasters in Puerto Rico and the USVI, or other distant, insular settings?



KEY FINDINGS

The sort of DSCA provided in 2017 will likely be needed again

- DoD support included collaboration with FEMA and the commonwealth on functions normally conducted by state and local actors, the aggressive use of authorities, and adaptation of doctrinal machinery not normally observed in DSCA responses.
- DoD can improve the speed of future responses by helping improve and harden Puerto Rico National

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Guard and USAR disaster-response capabilities in Puerto Rico, mobilizing key capabilities immediately prior to hurricane landfall, and improving procedures for establishing earlier SA and a common operational picture (COP).

- U.S. Northern Command should work with FEMA to develop an operational concept for how FEMA would, at the request of state and local authorities, temporarily stand in and fulfill the functions of state and local emergency management organizations that have been shattered in a future disaster.
- Doctrine for DSCA command and control (C2), early SA and development of a COP, and more robust employment of the dual-status commander and U.S. Army Reserve (USAR) in disaster responses should be reviewed and updated based on the lessons of Hurricane Maria.
- Although the burden of developing more-robust, more-resilient emergency preparedness and disaster-response capabilities will fall mainly on local and federal civilian efforts—and DoD does not normally invest in capabilities whose sole purpose is support for DSCA requirements—DoD might consider making selective, judicious, and high-leverage investments to harden and enhance Army National Guard (ARNG) and USAR capabilities for future disaster responses in distant, insular settings.



RECOMMENDATIONS

- Develop an operational concept and related planning for possible future cases of shattered state and local emergency preparedness and disaster-response capabilities are shattered.
- Enhance procedures and capabilities for early establishment of SA and a COP.
- Promote selective investments in Puerto Rican and USVI ARNG and USAR capabilities and training to enhance their resilience in future responses to catastrophic disasters.
- Review the adequacy of doctrine for DSCA C2, SA and development of a COP, and more robust employment of the ARNG and USAR in disaster responses.
- Review planning for potential catastrophic disasters in the State of Hawaii and U.S. Pacific territories and possessions, which are also insular and distant from the continental United States and may also be vulnerable to more-frequent and violent tropical cyclones.
- Review planning for other catastrophic incidents, events, and complex catastrophes, including major earthquakes along the San Andreas or New Madrid faults, an earthquake and tsunami in the Cascadia subduction zone, or even a nuclear attack from a nation-state actor, any of which could create governance vacuums at the local level and require a significant tailored response.
- Begin a larger conversation regarding a U.S. government-wide strategic capability-sizing construct for DSCA responses. Such a construct should clearly identify the number, types, and sizes of overlapping incidents that will be used as pacing functions for determining future response capabilities and would appear to be an essential starting point for the necessary policy and operational analyses to guide the development of whole-of-nation response capabilities.

