

RELIEF FROM ABOVE

By Elizabeth Malloy

On Nov. 8, 2013, Typhoon Haiyan cut a swath of devastation almost 100 miles wide through the heart of the Philippines.

Entire towns were leveled and more than a million survivors were left homeless in flooded and debris-strewn streets. Relief efforts quickly sprang into action, but the destruction of communications systems, harbors and roads stymied the delivery of aid.

Finally, help arrived from 60,000 feet above.

The RQ-4 Global Hawk unmanned aircraft system (UAS) team at Andersen Air Force Base in Guam had been on alert since before the storm made landfall. After the relief effort remained frustrated

for several days, a Global Hawk was called into action and quickly demonstrated what sets its technology apart.

Global Hawk's highly detailed imagery identified an airport right outside the damage zone that was relatively unscathed and suitable to use as base operations. Imagery also aided in logistical assessments of roads and fields to help relief teams swiftly reach displaced survivors who had written things like HELP, FOOD and NEED H2O on the streets.

Humanitarian assistance has become an integral part of Global Hawk's overall mission. In 2007, the UAS was an eye in the sky for firefighters battling wildfires in Southern California. Global Hawk supported international requests for surveillance following the 2010 Haiti earthquake, and in 2011 collected data and imagery

over the Fukushima power plant in Japan after it sustained massive damage in an earthquake and subsequent tsunami.

"Mission planning in a crisis is hard, but having the ability to task and retask Global Hawk gives commanders the flexibility to conduct productive ISR missions that feed near real-time information to the response teams who need it most," said Jim Culmo, vice president, High-Altitude Long Endurance Enterprise.

Global Hawk flew three missions in support of Philippine relief. The first on Nov. 14 resulted in the transmission of 282 wide-area images. Heavy cloud cover in the wake of the storm necessitated two more sorties on Nov. 15 and 20. The mission collected approximately 1,000 planned images in total, as well as ad hoc collections.



In addition to humanitarian missions, Global Hawk has logged more than 108,000 flight hours and has been used over battlefields in Iraq, Afghanistan and Libya.



Global Hawk's long endurance, persistence and range made it the only high altitude asset able to support the Philippine relief effort.

The U.S. Air Force and the Global Hawk team in Guam worked quickly to create useable products for the Philippine government.

"This mission proves once again the multi-faceted role the Global Hawk brings to the table," said

Steve Henderson, Northrop Grumman site manager for Global Hawk Forward Operating Location, Andersen Air Force Base. "Contributing to life-saving operations reinforces our Global Hawk team's commitment to mission accomplishment." ▲



A LASTING IMPRESSION

The NASA Global Hawk team at Andersen Air Force Base in Guam stoked the scientific curiosity of a 12-year-old girl earlier this year when they gave her and her family a tour of the aircraft and its operating station. The tour was a thank you to her Technical Sergeant dad.