

## Global Hawk Aids in Philippine Relief Efforts

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SAN DIEGO, Jan. 6, 2014 /PRNewswire/ -- The inherent intelligence, surveillance and reconnaissance (ISR) capabilities of Northrop Grumman Corporation's (NYSE: NOC) Global Hawk Block 30 Unmanned Aerial System were used to support massive international humanitarian assistance and relief efforts following Typhoon Haiyan in the Philippines.

(Logo: http://photos.prnewswire.com/prnh/20121024/LA98563LOGO)

Due to Global Hawk's long endurance, persistence and range, the Block 30 was the only high altitude asset able to support relief efforts in this critical region of the world on a moment's notice. Global Hawk is also the only high altitude unmanned system able to carry radar, electro-optical (EO) and infrared sensors simultaneously.

On Nov. 14, Global Hawk flew its first of three critical sorties from Guam to the Philippines. It collected 282 wide-area images of the typhoon- ravaged area before returning to Andersen Air Force Base. Rapidly collected EO imagery was quickly relayed to U.S. and Philippine authorities to assist with infrastructure and damage assessments. Imagery also aided in logistical assessments of roads, airports and fields to help relief teams swiftly reach displaced survivors. On Nov. 16 and 20, the U.S. Air Force added the second and third sorties to support relief efforts.

In total, Global Hawk collected approximately 1,000 planned images and a number of ad hoc collections on each sortie. Global Hawk's system flexibility allows for ad hoc retasking to obtain specific pertinent imagery and data.

"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 the most," said Jim Culmo, Northrop Grumman's vice president, High Altitude Long Endurance Enterprise, Northrop Grumman.

When disaster strikes, understanding the magnitude of destruction left in the wake of the event is critical. Global Hawk's EO imagery covers large regions with high-resolution detail in support of vital life-saving operations.

Global Hawk's first humanitarian mission took place in 2007, as Southern California fought devastating fires. In 2010, Global Hawk supported international requests for surveillance following the Haiti earthquake. Similarly, the Global Hawk collected data and imagery within the dangerous radiation zones over the Fukushima power plant following Japan's 2011 earthquake and tsunami disaster.

In addition to humanitarian assistance and disaster relief efforts, Global Hawk has logged more than 100,000 flight hours and has been used over battlefields in Iraq, Afghanistan and Libya.

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