Bloomberg Businessweek

Small Business

http://www.businessweek.com/articles/2014-10-23/aid-groups-are-using-drones-to-save-lives

Using Drones to Make Peace, Not War

By Nick Leiber October 23, 2014

Amin Rigi says drones should be used to save lives, not spy or kill. The Iranian, who has a bachelor's degree in robotics engineering, is launching RTS London to manufacture flying robots that drop life preservers to drowning people. His selling point is speed: A video shot on the Caspian Sea shows his prototype reaching a swimmer in 22 seconds, four times faster than a lifeguard.

Preorders have poured in from 25 countries since Rigi, 27, posted the one-minute demonstration video on YouTube. He aims to ship his drones, which could cost up to \$10,000 each, by mid-2015. Rigi, who will soon relocate to London to take part in an accelerator program for tech startups, predicts his business, which is developing an array of rescue robots, "will lead a revolution," unleashing the power of drones to do good.

He may be on to something. Doctors Without Borders, the International Organization for Migration, Unicef, the World Health Organization, and the World Wildlife Fund have experimented with using unmanned aerial vehicles (UAVs) to prevent poaching, find survivors in disaster zones, and carry out other humanitarian tasks. "Time is everything in disasters," says Patrick Meier, founder of the Humanitarian UAV Network, which together with the United Nations Office for the Coordination of Humanitarian Affairs is organizing a meeting in New York in November to explore uses for drones in crises. The technology is "already making a huge impact," Meier says, in places such as the Philippines, where millions were displaced by Typhoon Haiyan last year, and in the Balkans, where this spring's record flooding exposed land mines from Bosnia's 1992-95 war.



Courtesy DanofficeSky-Watch's weatherized drone was used to assess Typhoon Haiyan's damage

Last year 270 companies produced drones, according to a June policy paper from the UN. The writer notes that while military contractors remain the primary manufacturers of drones, aid groups that would prefer not to do business with weapons makers have more choices, thanks to the emergence of "new civilian-focused companies and nonprofit initiatives to develop or modify UAVs."

Ankit Mehta, the 31-year-old chief executive officer and co-founder of IdeaForge in Mumbai, has sold about 70 drones that can transmit continuous real-time video and have a range of about 2.5 miles. Indian government agencies, including disaster management, police, and military forces, have deployed IdeaForge drones in counterterrorism surveillance and search-and-rescue operations, Mehta says. Seven-year-old IdeaForge plans next year to market its machines, which cost between \$70,000 and \$120,000, to international aid groups. Mehta says the company is "not planning on making anything that can kill."

Colin Guinn, senior vice president for sales and marketing at drone manufacturer 3D Robotics, expects commercial and humanitarian adoption of drones to "exponentially grow" once the U.S. Federal Aviation Administration issues rules on commercial UAVs sometime in the next few years. He says his Berkeley, Calif., company sells "tens of thousands" of drones annually—mainly to people shooting photos and videos—and won't ever make a military version.



Photograph by Peter Sachs/Air-VidAn example of aerial photography brokered by Air-Vid

Patrick Egan, a commercial real estate broker in Collingwood, Ont., in February launched Air-Vid, a website that matches more than 600 drone operators and pilots in 56 countries with clients seeking aerial photography. He says using drones for more humanitarian purposes is "inevitable" as equipment costs drop: "The airplane can't get the shot that a drone can. You have to fly 500 feet above ground level in an airplane. Basically everything below that is the bastion of the drone."

In the aftermath of Typhoon Haiyan in the Philippines, a rugged, weatherized drone was used to assess damaged buildings and blocked roads, find people washed out to sea, and determine where survivors were gathering. The unit, made by a Danish company called Sky-Watch, was dispatched to the country. Andrew Schroeder, director for research and analysis for Direct Relief, a California-based group that provides medical assistance internationally, had a chance to see it in action and pronounced himself "impressed." He says nearly every humanitarian group operating in a disaster zone is "going to feel like they have to have" a drone strategy in the next 12 to 18 months, even though the technology is still in "its shiny object phase." Without coordination and regulations, he says, "it's

going to get really messy."

The bottom line: A growing number of the 270 companies making drones pitch them to conservation and humanitarian groups.



<u>Leiber</u> is Small Business editor for Businessweek.com, Entrepreneurs editor for Bloomberg.com, and covers small business for *Bloomberg Businessweek*.

©2014 Bloomberg L.P. All Rights Reserved. Made in NYC