



THIS SURVEILLANCE DRONE NEVER NEEDS TO LAND

News / Manufacturer



Drones could become useful for surveillance and remote monitoring in many industries, and perhaps one day will even ferry the latest Amazon order to your front door. But there's one big limiting factor: drones can stay in the air for only so long on a charge.

The Parc drone developed by CyPhy Works.

Not the latest model developed by the Boston-based drone maker CyPhy Works, though. Called Parc, the drone can perform aerial surveillance indefinitely, using a "microfilament" that transmits power and data. Of course the fact that it's tethered means the drone can't travel very far. CyPhy Works expects it to be used for reconnaissance or as a communications relay.

Parc was launched as a commercial product this week, after CyPhy Works received an exemption allowing customers to fly the drone for commercial purposes. "It's basically a robot with unlimited time-of-flight," said Helen Greiner, the founder of CyPhy Works, speaking this week at the EmTech 2015 conference in Cambridge, Massachusetts. "You send it up and it stays there."

The six-rotor Parc carries a high-resolution camera capable of producing infrared footage for night vision. The microfilament tether is thinner than a headphone cable but strong enough to reel the drone in if necessary. The drone can be set to fly completely automatically at a specific altitude.

CyPhy Works is also developing a small untethered drone for hobbyists and a unique kind of delivery drone. The delivery drone has rotors that can swivel, allowing the aircraft to fly more like a plane, making its flight more energy-efficient. Greiner said this drone would be able to carry a five-pound payload for five miles.

Earlier this month the company received \$22 million in funding from several venture capital firms as well as UPS, which has said it is interested in exploring drone delivery.

Google committed this week to delivering products by drone by 2017, but Greiner believes that the U.S. Federal Aviation Administration would probably delay that.

“By 2020 you will be seeing drone delivery,” Greiner said. “Technically we could do it earlier, but if you’ve been involved in the struggle with the FAA since the ’90s you would not place a bet that they would allow larger, non-line-of-sight vehicles to fly over populated cities.”

Currently, the FAA allows people to fly drones for recreational purposes as long as they maintain a light of sight with the drone, and as long as the vehicle stays below 400 feet, stays at least five miles from an airport, and is flown only in daytime. But the FAA is preparing to require amateur drone users to register their aircraft, and it hopes to have the rules for that in place by next month.

In order to fly a drone for commercial purposes, an exemption is required. The same restrictions on where and when drones can be flown also apply.

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