

Two-armed drones developed to help with hands-on tasks

September 21 2016, by Nancy Owano



(Tech Xplore)—Drones are good for things other than delivering pizzas and sneakers for sure. We are reading more and more about applications intended for public services, for farming, engineering and security

operations too.

Technology has given drones the capabilities needed to support prospecting in mining operations, for mapping soil conditions, for gathering data on crops, for search and rescue and for security surveillance.

Now a Japanese company is making news with its new [drone](#) with arms that can grab. Tech watchers are comparing the design as resembling a drone with claws.

Prodrone Company announced a two-armed large format drone. These are robotic arms that allow the drone to do varied tasks.

The Prodrone site says "We create professional drones for you."

These are 5-axis robotic arms, said the company release.

The name of this drone is the PD6B-AW-ARM. There was a video posted on YouTube on September 7 showing the product in action, including picking up lawn chairs. The team said on the posting that they planned to showcase the new model at their booth at InterDrone. This is a drone conference and exposition event; it went on from September 7 to 9 in Las Vegas.

[After the event they commented: "We participated as an only Japanese manufacturer in the InterDrone 2016." They said, "We held a technical exhibition [unveiling](#) our latest cutting edge commercial drones like PD6B-AW-ARM (the world's first dual robot arm large-format drone), PD6-CI-L (self-propelling surface-clinging drone able to inspect both ceilings and vertical walls), and PD4-AW (all-weatherproof drone)."]

By adding a pair of 5-axis robotic arms to the payload platform, said the

video presenter, the drone can go to work collecting dangerous materials, and shipping cargo to remote areas.

Examples of other operations include cutting cables; flicking switches and dropping lifesaving buoys.

The [company](#) lists the specs on its site. The drone can fly for up to 30 minutes. A sophisticated algorithm maintains the drone's stability.

Why did they turn to the design of a drone with arms?

"Up to now the industrial and commercial drone market has focused on using drones for [photography](#) and filming, mapping, surveying, spraying pesticides, etc., but there is increasingly strong demand for drones to be able to directly perform specific 'hands-on' operations."

The company is headquartered in Nagoya, Japan. The news release described the company as a B2B industrial drone system manufacturer.

The Guardian report and some other sites reporting on the robot had funny things to say. Seeing the drone swoop up chairs with its arms made some of the writers think smile-inducing thoughts.

The Guardian headline: "The scariest drone yet? Clawed robot takes to the sky – and takes off with a [chair](#)."

The crosshead read, "Japanese firm unveils claw-footed drone that can lift garden furniture – but is it any match for an eagle?"

Luke Westaway in CNET said, "Perhaps most striking is the drone's ability to perch, crow-like, on a railing—using its claw arms to balance [itself](#)." Westaway added, "excuse us while we install anti-claw metal sheeting on our windows and rucksacks."

Nonetheless, said UK-based tech writer Luke Dormehl at *Digital Trends*, "despite kidding around, it looks pretty [handy](#)."

Cara McGoogan in *The Telegraph* said the startup, founded in 2015, specializes in drones that require superior technical [precision](#).

More information: www.prodrone.jp/en/archives/1420/

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Citation: Two-armed drones developed to help with hands-on tasks (2016, September 21)
retrieved 26 April 2024 from
<https://techxplore.com/news/2016-09-two-armed-drones-hands-on-tasks.html>

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