

Amazon's talking delivery drone would ask for help if it fell out of the sky

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What's nice about Amazon's new drone patent is the prospect of having a little chat with your aerial-delivery vehicle when it's dropping off your new camera. What's not so nice is Amazon's recognition that drones carrying consumer goods are going to be falling out of the sky.

The Seattle e-commerce giant received a patent Aug. 29 for drones, aka [unmanned aerial vehicles](#) (UAVs) that could "conduct a speech dialog with a nearby person in order to request information and/or answer questions."

In these days of artificially intelligent virtual assistants such as Amazon's Alexa, it's not surprising to see the company working toward a drone that could, as the patent envisions, ask a person to "please stay away" from a delivery-drop zone, or to "ask a person to identify themselves prior to releasing the product at the delivery destination" or even to allow the customer to "ask the UAV to postpone delivery."

And really, it should not be surprising that Amazon is developing technology for worst-case scenarios, since no tech product is immune from potential failure - but this is a topic not often publicly addressed by firms planning to deliver goods to homes and businesses by drone.

Amazon declined to comment on the potential safety hazard of falling drones.

While a lively imagination could come up with an almost infinite list of events that could subject a drone to the immutable laws of gravity - bird strike! - Amazon in its patent document presents a few possible scenarios.

"The UAV may have become disabled by losing power, by colliding with something, by becoming tangled in or by something," according to the document.

The possibility that the ailing drone could land, propellers whirling, in a baby carriage or on somebody's head is not addressed in the patent document. Instead, the document noted that a problem with an airborne UAV could result in a grounded drone that "may be in a potentially hazardous state, such as in a state where one or more propellers are powered and turning." In that situation, the drone could emit a spoken-word warning to anyone around that they shouldn't approach it.

If the drone is not in a hazardous state, it could plead for help, according to the patented system.

"The speech may comprise a request the person to perform an action such as reporting the location of the UAV, moving the UAV to a safe location, retrieving the UAV and delivering it to a control center or operations base, taking the UAV to a charging location, etc.," the document said.

Amazon patents a lot of drone technology - including birdhouse-like recharging stations on light poles and blimps as drone bases - and there's no guarantee the company will send talking drones into the skies. But the patent highlights an obstacle to widespread deployment of delivery drones: the certainty that accidents will occur.

However, Amazon, in online promotional material for its "Amazon Prime Air" [drone](#)-delivery program, said safety is the firm's "top priority" and that its delivery drones would be equipped with systems for preventing collisions.

"Our vehicles will be built with multiple redundancies, as well as sophisticated 'sense-and-avoid' technology," Amazon said.

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