QUARTZ

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AIRLIFT

Why helicopters haven't evacuated everyone from Mount Everest yet



A rescue helicopter loading up at Everest base camp on April 26. (Roberto Schmidt/AFP/Getty Images)

A group of people estimated in the hundreds remains stranded on the slopes of Mount Everest following the earthquake that struck Nepal on Saturday. Their way back down from higher camps to base camp has been blocked by damage to the route. The mountaineers are huddled together and dug in amid aftershocks posing further risk, and have limited supplies, according to firsthand reports.

But what about sending helicopters for them?

At least six helicopters landed Sunday morning at Everest base camp—about 18,000 feet above sea level—where they evacuated some of the injured. Choppers reportedly also flew ropes and other equipment to climbers stranded above the Khumbu icefall, which also sits nearly 18,000 feet above sea level.

And helicopters have actually made it even to the peak of Everest before, the first time in 2005. Didier Delsalle, who piloted that helicopter, said landing was the hardest part: "I didn't know if I was touching down on snow above rock or snow above nothing." Here's a video of his record trip to the summit—which is at 29,035 feet above sea level.

Flying at such altitude is tricky because helicopters don't operate as safely as fixed-wing airplanes in the lower-density air found higher up in the atmosphere. Pilots who fly helicopters at mountain elevations have to learn to constantly calculate the difference between how much power they need for maneuvers such as taking off, hovering, and landing, and how much power they actually have, with air pressure and temperature critical factors.

The damage wreaked by the earthquake and avalanches this weekend, along with poor weather, has complicated the current rescue mission further.

"If the weather is decent and you have someone's GPS coordinates, you generally can fly in and rescue them without a problem," says Dan Richards, chief executive of Global Rescue, a Boston-based travel risk and crisis-management firm that is engaged in rescue operations underway in Nepal. "That's under good circumstances—but the last 36 hours have been anything but good."

"The last thing you want to do is to land a chopper in a place where there's a possibility there can be an avalanche or a landslide," Richards tells Quartz.

Rescuers had halted their efforts on Sunday following an aftershock that registered 6.7 on the Richter scale and triggered additional land-slides and avalanches.



According to Richards, the earthquake destroyed the facilities of at least one major service that provides pilots and aircraft for rescue operations. The sheer number of people to be rescued and the missions needed to reach them where they happen to be also is straining the infrastructure of Nepal, a country that ranks among the poorest in the world.

Climbers remain stranded at camp 1, which sits roughly 19,600 feet above sea level, and at camp 2, located at 21,500 feet. Though camp 2 is within the altitude range where helicopters can fly safely, both the weather and the extent of devastation throughout the country are slowing efforts to reach them.

"I believe everyone who is fairly well supplied and uninjured at this point is going to be rescued," says Richards. "There's some period of time where evacuees have to shelter in place and that's what's happening right now on Everest and in other parts of the country."