



Lab volunteer takes to the skies to help fight COVID-19

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Boxes of hand sanitizer vibrate in the back of the single-piston Mooney M20C airplane as it makes its final approach to Tuba City, Arizona. Josh Payne, flying solo, steadies the yoke and gently pulls his face mask up over his mouth and nose, keeping a tight eye on the horizon.

There's not much risk of a COVID-19 infection at this altitude, but Payne needs to be prepared before he hits tarmac on the Navajo Nation where the virus has swept through households, infecting more than 7,000 and killing 336 to date.

Help from above

On a typical day, Payne, a scientist in the Laboratory's Applied Computer Science Group, is writing high performance computer codes or taking his plane out for fun in the skies over Santa Fe. But on this day, Payne is on one of several self-directed missions to make critical supply drops in Arizona and New Mexico to communities hit hard by COVID-19 and lacking resources to fight its spread.

Joining forces

When COVID-19 broke out, Payne began looking for ways to help. Using his Lab-honed computer skills, he initially 3D printed masks and face shields at home, before logistical issues derailed his work.

Not to be deterred, he connected with Zane Fischer at [MAKE Santa Fe](#) — a nonprofit community workspace where people can access tools, resources and workshops to make, repair, invent or create anything they want. During the pandemic, MAKE has turned its tools and member skills toward manufacturing personal protective equipment (PPE).

Fischer connected Payne with Johnnye Lewis, director of the Community Environmental Health Program at the University of New Mexico, which was building clinical supply chains through their Navajo and Tribal Clinical Relief Support [fundraising appeal](#) and in-kind donations (in conjunction with the Southwest Research and Information Center) but needed a way to get supplies to hospitals in the tribal communities.

Well stocked with virus-fighting implements, the group was facing a major problem: How to make deliveries quickly and efficiently over long distances to mostly rural, often isolated tribal airstrips?

Payne, together with fellow pilot and aircraft owner Rob Heineman, had the solution.

“I offered up my time and use of my personal aircraft to help transport,” he said. “Getting things to hospitals in a timely manner was proving difficult. The folks at UNM were incredibly excited and ended up sourcing more supplies than I could transport by myself!”

The team, including Carolyn Roman, a science research manager at UNM, has been organizing the collection of supplies and donations, and then meeting to load supplies onto the aircraft.

All in a day's work

Josh Payne unloads boxes of face masks and shields, along with jugs of sanitizer.

The plane thumps onto the runway in Tuba City and slows to a stop just shy of a small group of people eagerly awaiting its contents. Payne hops out and begins unloading cargo, staying socially distant from the others, but close enough to hear their words of thanks and praise over his idling engine.

“The people on the ground in Tuba City were super excited to see the airplanes come in and drop off supplies,” Payne said. “We heard it was a huge morale boost to the people on the ground and in the hospitals.”

Back in the cockpit again, Payne ascends, making a big turn eastward, back toward New Mexico, where another shipment sits waiting for transport.

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