

Work Hard and Fly by the Rules

Several months ago, in a sparsely populated region of Nicaragua, Wings of Hope pilot Clint Hanley received a ham radio call requesting medical transport for a man in a remote village who had developed acute appendicitis. The man would almost certainly die if his appendix ruptured. Hanley and his wife, Marilyn, carefully preflighted their medical air transport (MAT) plane, a 1966 Cessna 172. They removed one of the passenger seats to accommodate a stretcher. Minutes later, Hanley was flying above a dense swathe of rainforest broken only by clouds and serpentine rivers.

Staying in constant radio contact with his wife during the flight, Hanley arrived in less than half an hour to pick up the patient, a 170-lb. father of three whose abdomen was now visibly inflamed and distended. As the man was being carried to the aircraft, the stretcher suddenly collapsed. "The poor guy fell head first, and someone managed to catch him just before his head hit the ground. Even so, the pain from the jolt knocked him out cold." The patient regained consciousness, and they proceeded to the hospital, where a surgeon performed a successful appendectomy.

Marilyn, a registered nurse, and Clint work in partnership with Wings of Hope to serve the Miskito Indians of northeastern Nicaragua. Wings is a nonsectarian, nonpolitical, not-for-profit charity with bases in the United States and more than 40 other countries. Out of an abundance of caution, its pilots observe FAA regulations whether they're evacuating a patient from Branson or Burma. FAA regs call for all non-ambulatory patients (that is, those who can't walk) to be transported on a litter (stretcher) that meets certain specifications. This rule is intended to ensure the safety of the patient as well as safe egress of seated passengers.

But aircraft stretchers, which are made to be lightweight and compact, consequently lack durability. Each time a hinge gives out, a new stretcher must be purchased, since the manufacturer does not sell replacement parts. Sometimes the air ambulance must be grounded until funding can be procured. As long as the plane remains tethered, stranded patients may die of injuries and treatable illnesses.

But Frank Sybert, one of about 500 Wings of Hope volunteers in St. Louis, Missouri, came up with a solution. Using nothing but his mechanical skills, a machining tool, a solid brick of aluminum, and a dash of ingenuity, he fashioned an identical replacement hinge. "The standard hinges are die cast," Sybert explains, "The new hinges are made of pure metal, so they're about four times stronger."

Sybert, a modest, unflappable man who speaks only when he has something downright important to say, is 76 years old—incidentally, that's the average age of a Wings of Hope volunteer. He had no AutoCAD program with which to model the new hinge, but he did have 50 years of toolmaking and machining experience for General Motors and the U.S. Air Force, including 4 years of Korean War service. Sybert scoffed at the idea of relying on fancy software. He simply sat down with the broken hinge and a pencil and paper, drew out a plan, and got busy fabricating a prototype.

One day a week, Sybert reports to work inside the 16,000-sq. ft. hangar and adjacent office building in suburban St. Louis that serve as the headquarters for Wings of Hope. With its metal halide lights gleaming on the spotless white linoleum, the hangar might be mistaken for a BMW showroom if it weren't for the Cessna 206s

and Piper Arrows housed there. The volunteer pilots, EMTs, and other staff at Wings of Hope operate the only free air ambulance in the Midwest. In addition, from 150 bases in Central and South America, the Caribbean, Africa, Southeast Asia, and elsewhere, the group provides humanitarian aid and medical care to people in isolated villages. Flying small fixed-wing aircraft or helicopters, they evacuate patients to in-country regional hospitals.

Sybert's new hinge, complete with a locking mechanism that engages when the stretcher is unfolded, worked brilliantly. But then there was the matter of ferrying it, along with a few spares, to the Hanleys' base in Tronquera, Nicaragua. Shipping the hinges was not an option. Nicaragua is second only to Haiti as the poorest country in the Western Hemisphere, and corruption is widespread. Supplies sent from the United States are almost certain to be "lost" and ransomed. Few travelers are foolhardy enough to check their luggage on commercial flights into Managua, the only international airport in the country.

Instead, Wings of Hope made arrangements for the hinges to hitch a ride in the carry-on baggage of a missionary who was returning to Nicaragua. He escorted the package to a regional airport and quietly handed it off to Hanley as if it were contraband. Hanley loaded the new set of hinges, along with medicine, radio equipment, and other supplies, into his plane and headed back to his 3,000-ft. grass and gravel airstrip on the outskirts of Tronquera.

Hanley, an IFR-rated pilot with 2,000 hours of flight time, evacuates about two patients a week from villages hemmed in by marshes and lagoons, rainforest, impassable roads, and swollen rivers. Injuries often occur in the continual struggle to subdue this unforgiving terrain. Last year, for example, a man fell while working on his land, impaling himself on his own machete. "Friends carried him back home, put him in a boat, and he traveled the rest of the day and all through the night to reach the nearest medical help," Hanley recalls. "But the doctor realized the man's injury was far beyond the limited capabilities of his small clinic." He summoned Hanley, who arrived in less than an hour to evacuate the patient, as well as a 14-year-old girl with a broken foot, speedily conveying them to a regional hospital.

About half of the patients Hanley transports are women with complications of pregnancy or childbirth. Recently, for instance, two women with high-risk pregnancies in the nearby village of Lapan went into labor at about the same time. One was thought to be pregnant with twins. "These ladies had been carried to the airstrip through a swamp that's often knee deep," Hanley explains. "It took four guys to carry the larger woman in a hammock suspended from a board."

Even in the best circumstances, he says, it's a 30-minute slog from the village to the runway. "Some people have enough money to buy boots to wear, but they fill with mud and water because they sink in to their knees. The roads are not passable for several months of the year, and this was one of those times. But a quick 25-minute flight from their airstrip, and I had them at the hospital in Puerto Cabezas [on the Atlantic Coast]. They both delivered healthy babies, thanks to the medical care they received there." Without transport, says Hanley, the mothers, their babies, or both would have died.

In developing countries, death is not flashy. No reporters rush to the scene, no code blue is called, and no hunky resident is there to straddle the patient on a gurney while thumping out chest compressions. Ordinary, humble people die stoically of

garden-variety illnesses like measles and asthma. But now and then, their lives are saved with the help of a few compassionate people, a dependable airplane, and one very sturdy stretcher.

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