

When Help Must Arrive In The 'Golden Hour'

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They fly. They dive. They save lives.

Miami-Dade Air Rescue is South Florida's equivalent of a mobile MASH unit, but the hostile territory its patients encounter is often the county's treacherous roadways and violent neighborhoods.

Just about everyone in the county has seen the green and white helicopters whiz by overhead, or sometimes even land in a nearby park or freeway.

The squad usually serves as a bridge between the ground units that face the emergency scene and the hospital's advanced medical care.

Each of the four-member units works on the premise of the "golden hour" research that indicates the first hour in a medical crisis is the most crucial, both for immediate survival and long-term recovery.

The goal is to get the patient to the hospital - usually Jackson Memorial - as quickly as possible to begin surgery and other lifesaving measures.

Since 1985, Miami-Dade County has enlisted flying rescue trucks that have saved patients deep in the Everglades and more than a mile out to sea.

"If you had \$8 million to buy your own helicopter, you couldn't do what we do," said Dan Wanschek, who has had more than 20 years as a firefighter and paramedic in South Florida. "We land in populated areas, we land in schoolyards, we land on highways."

Based out of stations at Opa-locka and Tamiami airports, the fleet's three primary choppers are based on the Huey used for medical transport in Vietnam.

The Bell-412 has two jet engines and four blades. They're made to take up to 13 passengers plus two pilots, but the Air Rescue version is configured with medical equipment rather than leg room.

In the front sit the two pilots, with the commander on the right. In the back the two medics, wearing harnesses rather than seat belts, tend to the often-unconscious passengers.

The vast majority of Air Rescue's emergencies are traffic accidents and a substantial number are violent crimes and construction accidents.

There's also the occasional snakebite and other subtropical hazard.

Overall, Wanschek says he doesn't see as many gunshots and stabbings as when he joined the team in 1989.

"Back then it was nothing to land on the pad at Jackson with blood streaming through the crack in the door," he recalls.

By assembling erector-set style stretchers, the helicopter can accommodate up to six patients.

The craft, however, can only take two individuals if both are in critical condition, so that one medic will be able to monitor each patient.

When they get the signal - electronic chimes followed by a P.A.-style announcement that rings throughout the complex - the crew members stop what they're doing, whether it's eating, sleeping or taking a shower.

"You just wring out your underwear when you get back, that's all," said flight medic Ron Mobley.

During the day, the crew members are in the helicopter and ready to go on two minutes notice. When they're roused from their sleep in the middle of the night, it takes a little longer - maybe four.

The calls are usually initiated by Fire Rescue ground crews. They call for an airlift if victims meet any ``trauma criteria" that require immediate lifesaving treatments such as neurosurgery.

``We will never second-guess anybody's decision in the field on a transport," said flight medic Armando Gonzalez.

One Sunday afternoon at the Tamiami station, the signal rang about a patient with a head injury in the Upper Keys. It had been storming outside, and to avoid lightning strikes the helicopter was inside the hangar, poised on a wooden dolly.

Within seconds, it had been towed outside and the crew members, already in fire retardant flight suits, were preparing for takeoff.

Before boarding, crew members grab equipment they'll need.

If the mission involves water - whether it be Biscayne Bay or a Hialeah canal - they'll take scuba gear; sometimes a cargo net or so-called ``fast rope" is in order.

Then it's off to the scene.

This day, the chopper sped over South Dade at 120 knots in an effort to save a man found lying unconscious on his doorstep in Marathon.

Meanwhile, emergency crews raced him to Mariners Hospital, where it was discovered he had a fractured skull and abrasions on his chest - possibly from an assault.

Smoother than an airplane ride, the chopper glided over the Everglades. As the lagoons spilled out into the sea, crew members listened to the ongoing crackle of emergencies throughout the county.

At the hospital, the helicopter circled a landing pad marked with a white cross and a red H.

More than 100 feet in the air, the medics opened the doors and leaned out to check for possible dangers, such as telephone poles or bystanders.

When the medics gave clearance, the pilots touched down at the LZ - the landing zone.

At the hospital emergency room personnel handed over preliminary scans as fire rescue crews brought out the patient.

What appeared to be an old man was strapped into a stretcher. But he was 29, and rescuers were doubtful he'd make it to 30.

``If you're gonna die, you want to go to Jackson," said flight commander Wanschek. ``There, you're going to have a fighting chance."

Back in the air, the patient was hooked up to a ventilator, and the medics did their best to control his unstable blood pressure.

The winds from beneath a landing helicopter are enough to knock over a person, and the medics at JMH stay inside until Air Rescue has touched down.

They then rush to the pad to transfer the stretcher to a gurney as the gusts sometimes blow off the patient's gauze wrappings.

After each mission, the chopper refuels and a crew member cleans it up, often reaching between the overhead lights to wipe off blood.

The busiest time of the year for Air Rescue is during the winter holidays, and the early summer between the end of school and the Fourth of July.

This 24-hour shift was fairly typical.

In addition to the Marathon patient, the helicopter took off two other times: A man driving an SUV had an encounter with a royal palm that knocked down the tree and left him with a fractured left ankle and possible chest contusions; one other call was canceled while the chopper was in mid-air.

But there's no way to predict - there are days the helicopter responds to one emergency after another, and other shifts pass without a single call.

When it's quiet, crew members catch up on their housework duties.

The crews are responsible for maintaining not only the hangar, but also the dormitory quarters, and have worked out a complex schedule for mopping the floors, scrubbing the toilets and other domestic obligations.

The station is also equipped with a small gym that includes weights and a treadmill.

Crew members at the Kendall-Tamiami Airport station pooled their money to invest in a DVD player and satellite dish - a special assessment for a new TV is on the horizon.

Over the years, visitors to the base have include officials from the Chinese and Kuwaiti governments, as well as crews from Miami Vice and the Discovery Channel.

Occasionally, army doctors ride along as part of their training.

The underpinning of the crews' efficiency is training, both to refine regularly used skills and stay up to speed on less frequent procedures.

For example, a recent exercise with Fire Rescue's Technical Rescue Team reviewed the hoist (which is needed about once a month) and rappelling (once a year, if that).

`` It's going to be real easy here on the rooftop, but think about what it's going to be like on the bay in the dark with one- to two-foot seas," paramedic training officer Joe Johnston told the TRT, a special operations battalion with expertise on Fire-Rescue's most advanced life-saving devices.

Armed with cutters, grinders and slice torches, they can handle extended extrications related to structural collapses or utility trench rescues.

But at this session, the TRT reviewed how to handle a more-delicate piece of equipment, the Stokes basket.

In a situation where the chopper can't land nearby, such as in a high-rise fire, the helicopter lowers the Stokes basket so that medics can ``package" a victim into the rigid frame.

A cable then hoists the patient, with the ``barrelman" harnessed to the side, into the craft overhead.

The procedure is supposed to take just minutes, and then it's straight to the hospital.

Despite the effort to save each patient, most of the time the medics never learn whether the individuals make it.

Often, their medical expertise gives them a pretty good hunch - but it can be wrong.

The man in Marathon was discharged from JMH nine days after he clung to life aboard the chopper.

And one other patient made sure the crew found out about the outcome in his case.

`` Thanks to all for your fast response," read a card propped on the mess table at the station. `` I am still alive."