

THE **Calm** IN THE **Storm**

Critical Care Provider Midwest LifeTeam Puts Patients First

BY **PATRICK KIERNAN, NICE SYSTEMS**



In the evening hours of May 4, 2007, an EF5 tornado touched down in Kiowa County (KS), carving a 1.7-mile-wide path of destruction and reducing the town of Greensburg to ruins [see *9-1-1 Magazine*, July 2007 issue]. Carol Lee, communications director for Midwest LifeTeam, was at home when she first got wind of the devastating twister on the breaking news. Minutes later, she was in her car, making her way to the Midwest LifeTeam communications center.

At the same time, the first urgent requests for help from Greensburg were starting to flow into the center. "About 10 minutes before I arrived at the communications center, we got our first call from Tim Smith, the Kiowa County EMS director out of Greensburg," Lee says. "A tornado had hit Greensburg and they needed our assistance. At that point he said that the town had sustained some damage, but he didn't know how extensive it was. We immediately contacted our helicopter and fixed wing crews to check their availability and get them into the area to assist."

Within 30 minutes, Midwest LifeTeam's helicopter crew from Dodge City was over Greensburg surveying the damage. The initial reports radioed back to the Comm Center from the flyover were sobering - it appeared that over



One of Midwest LifeTeam's Beechcraft King Air C90s, used for emergency medevac throughout their response area. Headquartered in Wichita (KS), Midwest LifeTeam is a pre-hospital, inter-facility critical care air ambulance provider. Flight crews are on 'Ready Alert' in crew quarters located next to the aircraft and are ready to respond to any emergency 24/7.

60% of the town had been wiped out.

As soon as it was deemed safe to launch, LifeTeam's fixed wing and helicopter crews from other bases lifted off and converged on Greensburg and surrounding areas to transport critically injured patients.

"That night, all of our aircraft were early activated from every single one of our bases," says Midwest LifeTeam's Chief Operating Officer Melissa Knott. "Early activation is one of the hallmarks of our company. It means for EMS agencies and referring facilities that call us early in the process, we will launch early at their request to help save those minutes on the other end."

LifeTeam's ground units from Great

Bend were also dispatched to the area to bring in extra trauma equipment. "We had staff - some of whom weren't even on call that night - but when they saw the page go out, they got in their vehicles and headed that way to offer assistance," Lee says. "Our crews were actually the ones that set up the triage center that night. We even alerted other air services and other outlying EMS units to send in mutual aid."

Headquartered at Wichita's Colonel James Jabara Airport, Midwest LifeTeam is a pre-hospital, inter-facility critical care air ambulance provider. The company maintains two fixed wing bases in Liberal and Great Bend and helicopter bases in Emporia, Hutchinson, and



MIDWEST LIFE TEAM

Midwest LifeTeam's medically configured helicopters are staffed with experienced flight crews consisting of one nurse, one paramedic and one pilot. The company maintains three helicopter and two fixed-wing bases, and are dispatched out of their own communications center in Jabara (KS).

Dodge City - from which emergency flight crews are dispatched. LifeTeam's Comm Center, based at the Midwest Corporate Aviation facility at Jabara, is the organization's emergency communications centerpiece, essentially the nerve center for the LifeTeam operation.

The EMSsystem for Kansas provides real-time information on hospital and other emergency resources available for critical care; when disaster strikes, the LifeTeam center transforms into a nerve center of another sort - as the backup hub for the entire statewide EMSsystem. That transformation took place for the first time ever on May 4, when the EF5 tornado struck.

"Once our helicopter crew landed in Greensburg and had contact with the EMS people there, Tim Smith, the EMS director, asked us to activate the EMSsystem," Lee recounts. "We put out 'an event' to the surrounding hospitals to let them know what had happened. The hospitals then entered information into the EMSsystem to tell us how many units they had available - numbers of beds for critical patients, stable patients, pediatric patients, and so on. So we knew where to direct the injured for care." Throughout that night, the LifeTeam dispatch center received calls from MERGE (the emergency command in Greensburg) requesting information on where to send patients.

Lee estimates that she and the two LifeTeam dispatchers on duty that night handled more than 700 calls during the 12-hour period after the twister touched down, about four times the normal vol-

ume for a typical day.

But, tornados aside, even on typical day, there's nothing typical about the way this critical care transport provider does business. "Our flight service is a very different model from most of the flight services across the country," explains Knott. "We're a physician-driven company. The owners of our company are physicians and huge patient advocates. We see ourselves first and foremost as a medical service, secondly as an aviation service. We do whatever we can to help the patient, to put the patient first."

Knott says, the company's founders, who are both coincidentally licensed pilots and physicians, have staffed rural ERs. "They're very empathetic. They know the day-to-day challenges that physicians in these communities face, and they're very focused on coming up with solutions."

One innovative LifeTeam solution for rural ERs is the Critical Access Network. "It's a network that we've developed that links referring facilities directly to our dispatch center," explains Knott. "So, for instance, in a small-town ER, they'll have a hotline phone. They just pick it up, and they're instantly connected to our communications center."

Knott says it's a multipurpose hotline. They can use it to request emergency transport, to consult with a LifeTeam medical director, or to locate the best hospital to match a specific patient's critical care needs.

"Most small-town ERs have limited resources and may not know where to

send a patient," Knott explains. "Our dispatch center can help them sort through the options and find the best hospital or specialist to suit the patient's needs. For example, in the United States, there are only a few people who specialize in hand surgery as far as reattachment. Of course, our dispatch center has access to all of that critical information. We do the legwork in terms of locating an accepting hospital, which frees up the local ER doctor to continue to care for the patient."

With highly trained flight crews on "ready alert" 24 hours a day, 7 days a week, LifeTeam is readily equipped to provide rapid transport services to get a rural patient from point A to point Z, if it's the best option for the patient. "We service a five-state area - but we may not always be the closest transport option," Knott says. "Many times we'll have calls come in that are not in our service area. So to help these rural facilities expedite the entire process, we'll contact another flight service. We'll do whatever's best for the patient."

Another way that the LifeTeam Comm Center maintains its patient-first focus is through quality assurance and training. Calls can come in to LifeTeam dispatchers from all directions - for instance, from a nurse or doctor at a referring hospital looking to transport a patient to a higher-care facility. Other calls come in from 9-1-1 operators or EMS units at accident scenes. Dispatchers also need to juggle radio communications with flight crews advising of landings and takeoffs. Lee routinely

pulls recordings of captured interactions from LifeTeam's NICE recording solution for training. "I pull calls on each of my dispatchers so they can listen to themselves, see what things they're missing, understand how they're coming across and where they can improve."

"We rely on our NICE system a lot - especially for instant playback." For centers in the business of providing critical care services, the ability to instantly replay a captured phone or radio communication is an essential feature. Lee agrees: "If we were to ever have an aircraft that had a Mayday or an urgent call, they only have just a few seconds to give you the information you need. Being able to pull that call right away, if you missed something, really helps."

Lee also says she uses the recordings, sometimes in concert with other data, to

get insight into LifeTeam's response. Using the system, she's able to reconstruct accurate timelines. "When you're in a hectic situation and you've got phones and radios keeping you busy, it's easy to write down a wrong time. With our recording system, we can go back and listen to the actual call and confirm the time."

Lee says, if necessary, she can review the captured voice interactions along with other information for a complete picture of an event. This might include pager data that shows the time the crew was paged, and satellite tracking logs that detail the times that aircraft took off and landed.

The recordings were even used after the recent devastating tornado. Lee used the system to pull reports detailing call volumes and to review calls to, in her

words, "see how things went."

"Without our recording system, we'd feel handicapped," says Lee. "It's great for us for QA in every aspect of what we do. I couldn't imagine being without it." ■■

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