Government's failure to tighten rules cited in copter crashes

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Through a cloud-choked and starless night in February, the crew of an emergency medical helicopter flew east on a 30-mile journey from Harlingen to South Padre Island, where a sick patient waited to be airlifted to a mainland hospital.

As the crew neared its destination, weather conditions forced a steep turn. The pilot, according to records, circled briefly in strong winds and at 8:54 p.m., the helicopter and its crew crashed into the shallow waters of the Laguna Madre bay.

All aboard died — the pilot and both paramedics — three people among 28 killed in medical helicopter tragedies in 2008, the deadliest year ever for such crashes.

According to a Chronicle review of fatal crashes, most of those 28 died in conditions known to be dangerous, conditions that repeatedly have been the subject of unfulfilled government promises for more stringent standards.

Two of the crashes, in which seven people died, took place in Texas.

Both happened at night. Both pilots faced reduced visibility.

And safety officials have cited both Texas crashes, along with others in recent months, as they question how many lives would have been saved if regulators had moved faster to require stricter flight rules and advanced sensor equipment to forewarn pilots of potential hazards.

The Chronicle reviewed 65 fatal medical helicopter crashes investigated by the National Transportation Safety Board since 1989 and found that the same problems — flights at night and in bad weather — long have been common contributors to air ambulance deaths.

Air ambulances have been credited with saving countless lives. Yet, each time the decision to dispatch one is made, operators face the critical task of balancing the welfare of the patient with the the safety of the pilot and medical personnel.

Those pressures have been ratcheted up by the explosion of operators available to fly for any given call. The air ambulance ranks have swelled from some 100 nationally in the 1980s to more than 900, operated by hospitals and independent companies, industry groups say.

"There is a pressure for things to happen quickly when people are dying," said Gary Sizemore, a Florida-based pilot and spokesman for the National EMS Pilots Association. "But there also is a competitive pressure with the

greater number of (helicopters) out there."
Two-thirds of the 65 fatal flights began at night, half in adverse weather or reduced visibility, the Chronicle found. Seven of those crashes took place in Texas.
The most common non-mechanical causes for air ambulance crashes, according to NTSB investigators, are collisions with obstacles such as mountains and power lines, again mostly caused by weather conditions. In 21 crashes, safety board investigators found pilots flew too low or directly into terrain. In 10 others, pilots became disoriented because of fog, snow or rain.
The majority of fatal flights carried only crew members, usually on their way to pick up a patient. Under current regulations, helicopters carrying only crew members are allowed to fly under less stringent flight rules than those with patients on board.
Just one in three of the deadly crashes since 1989 carried a patient.

South Padre crash

The pilot and two medics on the doomed February flight to South Padre Island boarded the helicopter at Valley Baptist Medical Center with a plan to put down in the parking lot of the South Padre Island Convention Centre. There, they would pick up a woman having respiratory problems and return to Harlingen.

But before the crew could reach the island, it encountered strong winds and, according to local officials, decided to abort the mission. The helicopter turned after the pilot's last contact with air traffic controllers. Witnesses watched its lights falling from the sky and into the brackish waters of the bay. A ground ambulance carried the woman to the hospital.
NTSB officials for years have called for better risk evaluation procedures, stricter rules for flights carrying only medical personnel and the requirement of terrain-sensoring equipment that warns pilots of approaching mountains, the ground or, sometimes, buildings.
The Federal Aviation Administration, which has regulatory power over the industry, supports these measures. But, it has yet to require them.
"Rulemaking is often, literally, a years-long process," said Les Dorr, an FAA spokesman. "We have a long history of working with the industry to help them voluntarily improve safety and remain committed to getting these things into the cockpit as quickly as possible."
As the bureaucratic process churns on, the unprecedented number of deaths in recent months has brought increased urgency. Since the end of November 2007, 35 people have died in air ambulance crashes. Among them:

•A 1-year-old girl in Illinois, killed after a helicopter, flying at night, hit a radio tower wire.
•Seven people, including two patients, who died when two air ambulances collided in midair in Arizona.
•A doctor, pilot and nurse, killed when their helicopter crashed into a wooded hillside on a dark and rainy night in Wisconsin.
In June, Memorial Hermann Hospital's Life Flight set out for Huntsville about 12:45 a.m. to ferry David Disman, who had suffered a ruptured aortic aneurysm, to Houston.
The crew was just minutes away from Disman when it aborted the mission and turned back, deterred by low clouds.
Less than two hours later, another air ambulance operator agreed to transport Disman. They lifted off from Huntsville Memorial Hospital at 2:46 a.m. Minutes later, the helicopter crashed into the pines at Sam Houston National Forest, killing Disman and the three-member crew.
"It really disturbs me that we don't even know what caused the helicopter that Pops was on to go down yet and here we have more families facing the same loss," Disman's stepdaughter Shannon Curry said of the five fatal flights that followed the June crash.
"These helicopters are going up to save somebody's life, not to take out others," she added.
Numerous NTSB reports cite the pressure to accept missions as contributing to crashes over the years.

Taking the missions

In October 2004, a Florida crew received a request to pick up a patient in Pensacola. The pilot checked the weather and accepted, taking off with a paramedic and flight nurse.

At 12:41 a.m. the paramedic radioed dispatch. They were airborne, he said, and would reach the hospital in 10 minutes. Two minutes later, he radioed again. They were turning back. The pilot, now facing lightning, thunder and rain, became disoriented and lost control, according to NTSB investigators. The helicopter crashed into Choctawatchee Bay.
Later, other pilots working for the company told investigators of the pressure to accept more missions. They said their judgment was questioned by the program coordinator, particularly when they were hesitant to fly because of bad weather.
"The flight program coordinator has a history of inappropriately involving himself in the weather-related decision making of pilots," they told the NTSB according to a report, "and encouraging them to accept and complete more flights."

That same year, a pilot transporting an 11-day-old infant in Nevada took off without a weather briefing. To shave 10 minutes off the 90-minute flight, he opted to fly over a shorter, mountainous route.
After takeoff, the pilot contacted dispatch. Shortly after, the helicopter flew into the mountainside. All five aboard, including the baby and its mother, died.
NTSB investigators found the pilot rushed into flight.
"If the pilot had obtained a weather briefing, he would likely have learned of the cloud cover and light precipitation ... the urgent nature of the EMS mission can result in inaccurate/incomplete preflight planning, as well as poor pilot judgment," the NTSB found.
Studies have found that often air ambulances are not the best method for transporting patients, or, in some cases, even necessary. Often the patients' injuries are minor, academics found. In some cases, ground transportation would have been even faster than flying.
After a helicopter crashed in 1998, killing the pilot and two technicians who were on their way to transport an injured truck driver near the Rio Grande Valley town of La Gloria, an ambulance ferried the driver to a hospital. He fully recovered.

'Unacceptable' progress

The NTSB next year plans to gather data on ambulance crashes and fatality rates in comparison to EMS helicopters.

For now, the safety board is focusing on the series of recommendations it has been pushing for nearly three years, since the release of a January 2006 NTSB report that found dozens of lives could have been saved under these tighter restrictions.
In October, the board called FAA progress on the recommendations in the last three years "unacceptable" and placed air ambulance safety on its priority list.
"People are dying," board member Debbie Hersman said during the meeting. "Some of these recommendations, if implemented, could have prevented these fatalities. So, there needs to be a sense of urgency and I just don't see it here."
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