



# *Inadvertent*

All five people in the LongRanger died when the helicopter crashed in IMC.

Low clouds and low visibility permeated an area in the Gulf of Mexico when a Bell 206L-4 LongRanger crashed en route to an offshore drilling platform, killing the pilot and all four passengers.

The U.S. National Transportation Safety Board (NTSB) said in its final report on the accident that the probable cause was the pilot's "failure to maintain clearance from the water," and that a contributing factor was the inadvertent encounter with instrument meteorological conditions (IMC).

The report also noted that there was no indication that the pilot "had obtained a formal weather briefing from a recorded source."

The pilot met his four passengers in Sabine Pass, Texas, U.S., the morning of the accident. Witnesses saw him perform a preflight inspection and prepare for the flight to the offshore drilling platform — West Cameron 157 — where he planned to drop off the passengers, all employees of Island Operating Co.

At 0722 local time, the helicopter departed from Sabine Pass on the 20-minute flight, and at 0725, the pilot contacted the Rotorcraft Leasing Co. (RLC) communications center to file a flight plan. He estimated the helicopter would arrive at the platform at 0742.

The pilot was required by company policies to contact the communications center with a position report every 15 minutes. When he failed to make the anticipated report, the dispatcher tried unsuccessfully, by radio and telephone, to contact him at the destination platform and the departure platform, and then, about eight to 13 minutes after the position report had been due, notified the dispatch supervisor.

Company helicopters began searching for the missing helicopter, and between 0912 and 0917, company representatives notified the Coast Guard, which then joined the search. The accident helicopter was found around 1100, about 2 nm (4 km) offshore — or about 6 nm

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# Encounter

Photo composite: Susan Reed  
Helicopter: © Chris Sorensen Photography  
Seascape: © Izak/Dreamstime.com

(11 km) south of Sabine Pass — in 13 to 15 ft of water. The wreckage was moved to Broussard, Louisiana, for examination.

Investigators discovered no pre-impact anomalies that would have interfered with the helicopter's performance, the report said.

The accident pilot had a commercial pilot certificate, with helicopter and instrument ratings last issued in May 2007, and a second class medical certificate issued in May 2008.

The pilot's logbook could not be located, but according to the résumé he submitted to RLC in October 2008, when he was hired, he had at least 3,450 flight hours, including 3,390 hours in single-engine helicopters and 73 hours in simulated or actual IMC. Company records indicated that he had 220 hours of offshore flight time.

Company records also indicated that the pilot received initial training, consisting of 15.8 hours in Bell 206B and 206L-3 models in October 2008 and received satisfactory ratings in all tested areas, the report said. The same month, he completed water survival/helicopter underwater egress training.

During his two months with RLC, the pilot flew at least 77 hours in Bell 206s. The report said that the company's director of operations, chief pilot and safety officer told accident investigators that "the pilot had good flight skills and demonstrated good situational control during flight. The pilot had not been involved in any previous events or activities that would have raised question as to his judgment or ability."

Although the pilot had an instrument rating, he was not instrument-current and he was not approved for instrument flight under the air taxi requirements of U.S. Federal Aviation Regulations Part 135, the report said.

### 'No Track Record'

The pilot typically flew a different helicopter that had a flight tracking system that was engaged when the master switch was on. In the accident helicopter, however, a separate switch activated the flight tracking system.

"This variation was not in the checklist," the report said. "According to company records, the pilot had been flying the accident helicopter for two or three days prior to the accident. During this time, there was no track record for the helicopter, which is consistent with the pilot not activating the helicopter's flight tracking system."

After the accident, RLC issued a safety alert to inform pilots of the variation, the report said.

The accident helicopter was manufactured in 1994. It was registered to and operated by RLC, which maintained it according to an approved inspection program. Maintenance records showed that its last inspection was completed Nov. 30, 2008, at an airframe total time of 6,331 hours. After the inspection, the helicopter was flown an additional 29 hours before the accident occurred.

The helicopter was equipped with a skid flotation system, parts of which separated from the fuselage as a result of the crash. Investigators could not determine whether the floats had been deployed by the pilot, but the report noted that the float arm toggle switch was "found in the secured position."

The toggle switch was located on the pilot's collective control, and could be moved from the secured position to the armed position only after the pilot lifted a red gate, designed to prevent inadvertent arming of the floats during cruise flight. "To deploy the floats, after arming the floats, the pilot has to push a button next to the float arm switch," the report said. "When the red gate is pushed

down, the float arm switch is automatically moved to the off position."

RLC began conducting offshore air taxi operations in 1998, with corporate headquarters in Broussard and numerous bases, both onshore and offshore, in several states.

At the time of the accident, the company had about 90 helicopters and employed about 200 pilots. The company required each pilot to have a minimum of 1,500 flight hours before being hired, including 500 hours as pilot-in-command.

Company policy called for pilots to check weather, perform a preflight check of their helicopter and make a go or no-go decision for the flight. At the time of the accident, RLC did not have a formal risk-assessment program. Instead, its pilots were trained on the use of the "I'm safe" checklist, designed to encourage pilots to evaluate their health and well being before a flight.<sup>1</sup>

After the accident, RLC began a formal risk-assessment program that required pilots to consult with a lead pilot or supervisor and/or use a detailed matrix in making a decision on whether to launch a flight. The new process has been included in the company's operations manual.

### IMC Warnings

A strong cold front had moved across the area the previous night, bringing with it restricted visibility in light rain. Mixed freezing precipitation had fallen in the early morning, followed by snow. Winds at the time of the accident were from the northwest at 30 kt.

A special weather report issued at 0736 at the Southeast Texas Regional Airport in Beaumont/Port Arthur, 21 nm (39 km) north of the accident site, reported visibility of 10 mi (16 km), broken ceilings at 1,200 ft and 4,600



ft, an overcast at 12,000 ft and wind from 300 degrees at 12 kt.

Offshore, however, ceilings were lower and winds were stronger.

The offshore forecast issued at 0500 called for scattered to broken clouds at 1,000 ft, broken clouds at 2,500 ft and cloud tops at 5,000 ft, with occasional broken clouds at 700 ft and visibility in those areas of 3 to 5 mi (2 to 8 km) in rain and mist.

Airmen's meteorological information (AIRMET) reports warned of moderate icing conditions, moderate turbulence and instrument flight rules conditions with ceilings of less than 1,000 ft and/or visibility of less than 3 mi in precipitation and mist.

Satellite images at 0732 and 0745 showed "low-level, stratus-type clouds over the Gulf of Mexico in the vicinity of the accident location," and RLC said that the weather had caused other flights in the area to be canceled or delayed.

One of the search-and-rescue pilots said that weather at the accident site during the search included an overcast at 700 ft, visibility of more than 10 mi and northwest winds at 30 kt with gusts to 35 kt. The air temperature was 40 degrees F (4 degrees C). Other meteorological reports placed the water temperature at 64 degrees F (18 degrees C).

Witnesses saw the accident pilot using a computer to obtain weather information before the flight, but he did not obtain a briefing from a U.S. Federal Aviation Administration (FAA) flight service station or through the Direct User Access Terminal System (DUATS), an Internet-based FAA-contracted weather information service.

## Flotation Devices Required

Autopsies concluded that the cause of death for each of the four passengers was "asphyxia due to drowning," probably complicated by cold water shock — which can cause involuntary inhalation of water, an increase in blood pressure and cardiac arrest — and hypothermia — an abnormally low body temperature. The pilot's autopsy found that he died of a "crushed chest,

complicated by asphyxia due to drowning," the report said.

RLC said that all charter passengers were required to watch a safety video before boarding for the first time; among the topics covered were how to wear and activate personal flotation devices and how to use safety belts. Similar information was printed on a safety card found in each helicopter.

RLC policy also called for the pilot to conduct a safety briefing — including a discussion of the use of safety belts and flotation equipment and a mention of the location of survival equipment.

"Both the pilot and passengers were required to wear personal flotation devices during all phases of overwater flight," the report said. "Most companies who employ RLC for charter purposes provide water survival and helicopter underwater egress training to their employees before they participate in overwater operations. The swimming ability of the pilot and passengers was not determined."

The pilot and two passengers were found wearing personal flotation devices; however, the passengers' devices had not been inflated. The two other passengers were not wearing flotation devices, but the report said that two devices were found at the accident site that "showed signatures consistent with use. One had been partially inflated and the second had been entirely inflated."

All of the personal flotation devices had been inspected less than three weeks before the accident, on Nov. 24, 2008.

Investigators could not determine whether the delay in contacting the Coast Guard "contributed to the severity of injuries" of the crash victims, the report said. ➔

*This article is based on NTSB accident report No. CEN09FA086 and accompanying public docket material.*

## Note

1. The "I'm safe" checklist asks pilots to evaluate themselves for symptoms of illness, stress and fatigue and for the presence of medication or alcohol in their systems, and to determine whether they have eaten enough healthy food to be adequately nourished for a flight.