

# **Aviation Investigation Final Report**

Location: Ancho, New Mexico Accident Number: CEN17FA355

Date & Time: September 16, 2017, 16:35 Local Registration: N213TV

Aircraft: Bell 206L 3 Aircraft Damage: Destroyed

**Defining Event:** Controlled flight into terr/obj (CFIT) **Injuries:** 1 Fatal

Flight Conducted Under: Part 91: General aviation

# **Analysis**

The pilot was conducting a return cross-country business flight in a helicopter. The reported winds at the time of the accident were light, and visibility was at least 10 miles.

GPS data showed that the helicopter departed about 1554 on a northwest heading toward the destination airport. The data revealed that, for the last 5 minutes of the flight, the helicopter's GPS altitude varied between 6,200 and 6,456 ft. The terrain in the area of the accident was between 6,000 and 6,400 ft, and the initial impact point was at 6,330 ft. The last recorded data at 1635 showed the helicopter about 1.5 nautical miles from the accident site at a GPS altitude of 6,456 ft.

A person located near the accident site reported that he saw smoke on nearby ranch property, drove in the direction of the smoke to investigate, and found the helicopter wreckage.

The helicopter impacted terrain in open ranch land. A postcrash fire consumed most of the wreckage. All of the airplane's major components were located at the wreckage site. Ground scars and signatures were consistent with a slight, nose-low impact with terrain, and the wreckage path was about 300 ft long on a 293° heading, which was indicative of controlled flight into terrain. Although the airframe and engine examinations were limited by impact and fire damage, they did not reveal evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation.

The pilot's cell phone was recovered, and a review of the phone records revealed that, at 1612, he called a car rental agency. An agency employee stated that she remembered the call well. She added that she could not tell that he was in a helicopter, but that he seemed "busy or distracted" and that, as they were talking about a future rental and she was "midsentence," the line was disconnected. Based on the available information, the pilot was likely using his cell phone during the low-altitude flight and became distracted, which resulted in controlled flight into terrain.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's distraction by a cell phone during a low-altitude flight, which resulted in controlled flight into terrain.

## **Findings**

Personnel issues	Attention - Pilot
Personnel issues	Task monitoring/vigilance - Pilot
Aircraft	Altitude - Not attained/maintained

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## **Factual Information**

## **History of Flight**

Enroute	Controlled flight into terr/obj (CFIT) (Defining event)
Enroute-cruise	Low altitude operation/event

On September 16, 2017, about 1635 mountain daylight time, a Bell 206L-3 helicopter, N213TV, impacted terrain near Ancho, New Mexico. The pilot, sole occupant, was fatally injured, and the helicopter was destroyed. The helicopter was registered to LIN Television Corporation, Providence, Rhode Island, and operated by WQRE, TV 13, Albuquerque, New Mexico, as a Title 14 Code of Federal Regulations Part 91 business fight. Day visual meteorological conditions prevailed for the flight, which originated about 1554 from Roswell International Air Center Airport (ROW), Roswell, New Mexico, destined for Albuquerque International Sunport (ABQ), Albuquerque, New Mexico.

The day before the accident the pilot had previously flown from ABQ to ROW to conduct a news story in the Carlsbad, New Mexico area, and then spent the night in Roswell before the return flight.

A person located near the accident site reported that he saw smoke and drove over to investigate. The person found the helicopter wreckage and notified local authorities of the crash. He did not know the time of the crash, but speculated that it happened between 1600 and 1700.

A Garmin Aera 796 GPS unit was found at the accident site. A review of the flight track from the GPS unit, revealed that the helicopter departure and northwest heading towards Albuquerque. The flight track was a straight line and started at a GPS altitude of 3,681 ft. For about the last 5 minutes of the flight track, the helicopter's GPS altitude varied between 6,200 and 6,456 ft, the last recorded altitude. The ground elevation and surrounding terrain near the accident site varied between 6,000 and 6,400 ft; the elevation at the initial impact point was 6,330 ft. The last recorded data showed the helicopter about 1.5 nm from the accident site.

#### **Pilot Information**

Certificate:	Commercial	Age:	64
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	April 6, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	8800 hours (Total, all aircraft)		

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The pilot held a commercial pilot certificate with airplane single and multiengine land and instrument airplane ratings, a commercial rotorcraft certificate with a helicopter rating, and a flight instructor certificate for rotorcraft helicopter. He also held a remote pilot certificate. His second-class Federal Aviation Administration (FAA) medical certificate was issued on April 6, 2017, with the limitation that he must wear corrective lenses and have glasses available for near vision. At the time of the medical examination, the pilot reported that he had a total of 8,800 flight hours, and 150 hours of which were in the previous 6 months.

## Aircraft and Owner/Operator Information

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Aircraft Make:	Bell	Registration:	N213TV
Model/Series:	206L 3 L3	Aircraft Category:	Helicopter
Year of Manufacture:	1989	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	51298
Landing Gear Type:	N/A; Skid	Seats:	
Date/Type of Last Inspection:	June 6, 2017 AAIP	Certified Max Gross Wt.:	4150 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	8798.7 Hrs as of last inspection	Engine Manufacturer:	ALLISON
ELT:		Engine Model/Series:	250-C30 SER
Registered Owner:	LIN TELEVISION CORP	Rated Power:	650 Horsepower
Operator:	WQRE News 13	Operating Certificate(s) Held:	None

The helicopter was a Bell 206L-3, which has a two-bladed main rotor system and was powered by a single Allison (Rolls-Royce) 250-C30P turboshaft engine. A review of the helicopter's maintenance records revealed that the helicopter was maintained under the manufacturer's maintenance inspection program and that its last inspection was completed on June 6, 2017. At the time of the inspection, the helicopter had 8,798.7 total flight hours, and the engine had 7,956.1 hours and 7,623 cycles.

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## **Meteorological Information and Flight Plan**

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KABQ	Distance from Accident Site:	
Observation Time:	22:52 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Scattered / 12000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	27°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Roswell, NM (KROW)	Type of Flight Plan Filed:	None
Destination:	Albuquerque, NM (KABQ)	Type of Clearance:	None
Departure Time:	15:53 Local	Type of Airspace:	

There were no weather reporting stations in the vicinity of the accident site.

The closest automated weather observation station to the accident site located at ROW, 69 nm east-southeast, at 1551, reported wind from the northeast at 3 mph, 10 miles visibility, a partly cloudy sky, temperature 71° F, dew point 544° F, and an altimeter setting of 26.30 inches of mercury (Hg).

The automated weather observation station located at ABQ, 80 nm northwest of the accident site, at 1552 reported wind from the east-southeast at 9 mph, 10 miles visibility, a partly cloudy sky, temperature 66° F, dew point 49° F, and an altimeter setting of 24.70 inches of mercury.

#### **Wreckage and Impact Information**

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	33.911945,-105.526947

The on-scene examination of the wreckage found the helicopter impacted flat terrain in open ranch land. Ground scars and signatures were consistent with a slight, nose-low impact with terrain; television equipment, mounted on the bottom of the helicopter, was found near the initial impact point. The wreckage path from the initial impact point to the main wreckage was about 300 ft long on a 293° heading. All the of the helicopter's major components were located at the wreckage site. The distance from ROW to KAB is about 147 miles on a 315° heading.

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Various helicopter pieces were found along, and on either side of the wreckage path, including fractured sections of the landing gear skids, left door, anti-torque pedals, and pieces of the bottom fuselage. The forward cross skid tube was found just beyond the initial impact point. The aft cross skid tube was found slightly right of, and about 200 ft beyond, the main wreckage. The main wreckage consisted of most of the main cabin, which was mostly consumed by fire, and the rotor system, including the engine, that exhibited heavy fire damage. The vertical fin was found about 40 ft left of the main wreckage.

Both of the main rotor blades remained attached to the main rotor hub and exhibited fractured spars outboard of the outboard doubler, consistent with overload forces. One blade exhibited a spanwise bend opposite the direction of rotation. The other blade's outboard section remained connected to its inboard section by a bent trailing edge strip. The blade spar was also bent about 3 ft from the tip, and the tip was damaged. The main hydraulic servos located on the cabin roof were relatively intact and exhibited fire sooting and impact damage. Control connections from the input lever arms to the servo valve inputs were intact for all three main rotor servos. The flight controls between the cockpit and the servos were consumed by fire; therefore, control continuity to the main rotor or tail rotor controls could not be confirmed. Pieces of fractured control tubes, consistent with overload forces, along with melted remnants of control tubes were found. The cyclic control stick, was found fractured with two large pieces and located in the wreckage path.

The tail rotor controls exhibited extensive impact and fire damage. Both sets of rotor pedals had separated from the airframe and were found near the beginning of the wreckage path. Most of the fuel system was consumed by fire. The boost pump plate and boost pumps had separated from the airframe belly structure due to impact forces and were found in the wreckage path, prior to the main wreckage.

The turboshaft engine exhibited heavy impact and fire damage. The engine had separated from its engine mounts and remained attached to the airframe by two oil lines. Several blades on the 1st-stage compressor exhibited impact damage to the leading edge and was bent in the opposite the direction of rotation. N1 and N2 drive continuity was established.

The examinations of the airframe and engine revealed no evidence of any preimpact mechanical malfunctions or failures.

#### **Medical and Pathological Information**

The Office of the Medical Investigator, Albuquerque, New Mexico, conducted an autopsy on the pilot. The cause of death was determined to be blunt trauma.

The FAA Forensic Sciences Laboratory, Oklahoma City, Oklahoma, conducted toxicological testing. The testing was negative for ethanol and tested drugs. The specimens were not tested for cyanide and carbon monoxide.

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#### **Additional Information**

The pilot's cell phone was recovered at the accident site.

Phone records for the date of the accident were obtained. A review of the records revealed that the pilot placed a call at 1607; the call lasted only 3 seconds. About 1612, the pilot repeated the telephone call, which was to a car rental agency, this time the call lasted for 1 minute and 47 seconds. The agency employee was interviewed by an FAA inspector several days after the accident. The clerk reported that she remembered the call well, and that she knew the pilot, because he often rented a car from the agency. She added that she could not tell that he was in a helicopter but that he seemed "busy or distracted." She added that, as they were talking about a future rental and was in "mid-sentence," when the call was disconnected.

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#### **Administrative Information**

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Dennis Beattie; FAA FSDO; Albuquerque, NM Dave Riser; Rolls-Royce Corporation; Indianapolis, IN Mark Stuntzner; Bell Helicopters; Hurst, TX
Original Publish Date:	July 8, 2019
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=96024

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.

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