



National Transportation Safety Board Aviation Accident Final Report

Location:	BLOOMFIELD, NM	Accident Number:	DEN00FA082
Date & Time:	05/01/2000, 1810 MDT	Registration:	N1606K
Aircraft:	McDonnell Douglas 369E	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Other Work Use

Analysis

The helicopter had been used for fiber optic cable installation support operations earlier that day. The helicopter landed next to a company fuel truck at a job site approximately 20 miles south-southeast of Farmington, New Mexico, and approximately 12 miles west-southwest of the accident site. There the helicopter was refueled. The pilot told the driver he and his passenger were returning to Four Corners Regional Airport in Farmington. Shortly after it departed, an oilfield worker, investigating the source of a smoke plume, found the burning wreckage of the helicopter and notified authorities. A severed static line was found nearby. The utility company estimated the height of the static line, at the point where it was severed, to be 39 feet. The power lines were estimated to be 35 feet above the ground. A toxicological screen revealed the presence of tetrahydrocannabinol (marijuana) and tetrahydrocannabinol carboxylic acid (primary inactive metabolite of marijuana) in blood, lung, and bile.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's intentional buzzing (low level flying), and his failure to maintain clearance with the static wire. A factor was his physical impairment by a contraindicated drug controlled substance.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING

Findings

1. (C) BUZZING - INTENTIONAL - PILOT IN COMMAND
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) IMPAIRMENT(DRUGS) - PILOT IN COMMAND
4. OBJECT - WIRE,STATIC

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

HISTORY OF FLIGHT

On May 1, 2000, approximately 1810 mountain daylight time, a McDonnell Douglas 369E, N1606K, registered to and operated by Winco, Inc., of Molalla, Oregon, struck a static line and impacted terrain 6 miles southeast of Bloomfield, New Mexico. The commercial pilot and passenger were fatally injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the flight being conducted under Title 14 CFR Part 91. The flight originated at a nearby staging area approximately 1800.

According to company personnel and other sources, the helicopter had been used for fiber optic cable installation support operations along the U.S. Highway 550 corridor earlier that day. The helicopter landed next to a company fuel truck at a job site approximately 20 miles south-southeast of Farmington, New Mexico, and approximately 12 miles west-southwest of the accident site. There the helicopter was refueled. The pilot told the driver he and his passenger were returning to Four Corners Regional Airport in Farmington. Shortly after it departed, an oilfield worker, investigating the source of a smoke plume, found the burning wreckage of the helicopter and notified authorities. A severed power line was found nearby.

The accident occurred during the hours of daylight at a location of 36 degrees, 60.46 minutes north latitude, and 107 degrees 93.66 minutes west longitude, at an elevation of 5,500 feet msl (above mean sea level).

PERSONNEL (CREW) INFORMATION

The pilot, age 48, held a commercial pilot certificate, dated May 16, 1990, with airplane single engine land and sea, and rotorcraft-helicopter ratings. He was also type rated in the Sikorsky SK-58 (VFR only). He held a second class airman medical certificate, dated April 4, 2000, with no restrictions or limitations. His biennial flight review was dated October 2, 1998.

According to the helicopter operator, Winco, Inc., the pilot had logged the following flight time: Total time, 20,478 hours; pilot-in-command, 20,128 hours; rotorcraft, 12,377 hours; time in make/model, 2,146 hours. He was not military trained. Company records, updated on February 15, 2000, showed the following: Total time, 20, 478 hours; pilot-in-command, 20,128 hours; MD-500, 1,596 hours; Bell UH-1, 5,477 hours; Bell 206, 647 hours; Bell 47, 402 hours; Sikorsky S-55, 2,063 hours; Sikorsky S-58, 1,642 hours

According to the pilot's last application for medical certification, he estimated his total flight time to be 21,500 hours, 475 hours of which were accrued in the previous 6 months.

AIRCRAFT INFORMATION

N1606K (s/n 0331E), a model 369E, was manufactured by McDonnell Douglas Helicopters (formerly Hughes, now Boeing) in 1989. It was equipped with an Allison (now Rolls Royce) 250-C20R/2 turboshaft engine (s/n CAE 295241), rated at 485 shaft horsepower (shp), derated to 450 shp.

According to the maintenance records, both the airframe and engine had accrued 2,320 hours, and 45 hours since the last annual and 100-hour inspections (at 2,275 hours).

METEOROLOGICAL INFORMATION

Weather recorded at Farmington (FMN), located about 23 miles northwest of the accident site,

was as follows:

2353Z (1753 MDT); WIND 240 DEGREES AT 7 KNOTS; VISIBILITY 10 MILES OR GREATER; SKY CONDITION CLEAR; TEMPERATURE 21 DEGREES C. (69.8 DEGREES F.); DEW POINT 27 DEGREES C. (-3 DEGREES C.); ALTIMETER 30.07 INCHES OF MERCURY.

WRECKAGE AND IMPACT INFORMATION

A severed static line, spanning a dry river bed in Kutz Canyon, was found 508 feet from the helicopter. According to the Farmington Electric Utility System, two poles (one on a 75-foot hill on the west side) were 1,800 feet apart and supported the static line and two other EHS (extra high strength) power lines (3/8-inch thick). Each power line, which remained intact, provided 8,000-volt service to oil and gas fields in the area. No residential consumers were affected. The utility company estimated the height of the static line, at the point where it was severed, to be 39 feet. At that point, the power lines were estimated to be 35 feet above the ground.

The main body of wreckage lay 508 feet from the severed static line. The direction was 335 degrees magnetic. There was a postimpact fire that consumed the cabin area. Between the severed static line and main body of wreckage lay the rotor hub and four of the five (red, yellow, green, blue) main rotor blades. One (white) main rotor blade separated from the mast and was located 600 feet northwest of the impact point. Drive train continuity was established between the engine and rotor mast. All main rotor blades exhibited midspan rotational damage and "chatter" marks.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy (#2608-00) was performed by the New Mexico State Medical Examiner's Office in Albuquerque, New Mexico, on May 2, 2000.

In addition, toxicological screens were performed by the Medical Examiner's Office (#2608-500-11SJ) and FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma. According to CAMI's report (#200000094001), no carbon monoxide, cyanide, or ethanol was detected in the pilot's blood, but tetrahydrocannabinol (marijuana) and tetrahydrocannabinol carboxylic acid (primary inactive metabolite) were detected in the blood, lung, and bile (see docket exhibits).

ADDITIONAL DATA/INFORMATION

In addition to the Federal Aviation Administration, parties to the investigation included Boeing (formerly McDonnell Douglas and Hughes) Helicopters, Rolls-Royce (formerly Allied-Signal and Allison) Engines, and Winco, Inc.

The wreckage was released to the insurance company's representative on May 2, 2000.

Pilot Information

Certificate:	Commercial	Age:	48, Male
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	04/04/2000
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	20478 hours (Total, all aircraft), 2146 hours (Total, this make and model), 20128 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 12 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	McDonnell Douglas	Registration:	N1606K
Model/Series:	369E 369E	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0331E
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	04/15/2000, AAIP	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	45 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	2320 Hours	Engine Manufacturer:	Allison
ELT:	Installed	Engine Model/Series:	250-C20R
Registered Owner:	WINCO, INC.	Rated Power:	485 hp
Operator:	WINCO, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	IZWA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FMN, 5503 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	1753 MDT	Direction from Accident Site:	294°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21° C / -3° C
Precipitation and Obscuration:			
Departure Point:	, NM (NONE)	Type of Flight Plan Filed:	None
Destination:	FARMINGTON, NM (FMN)	Type of Clearance:	None
Departure Time:	1815 MDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	08/21/2001
Additional Participating Persons:	JOHN C SANDERS; ALBUQUERQUE, NM		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).