



National Transportation Safety Board Aviation Accident Final Report

Location:	Seagoville, TX	Accident Number:	FTW02FA028
Date & Time:	11/03/2001, 1230 CST	Registration:	N127RB
Aircraft:	Robinson R22	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal, 1 Serious

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The pilot-rated student receiving instruction stated that the objective of the flight lesson was to work on confined area and pinnacle landings. The student stated that he had practiced a number of confined area landings in the local area and along a river. The student added that following his last landing/takeoff, the flight instructor took over flying to give him a break. The flight instructor flew the helicopter north of the last few landing areas to review their lesson. The flight instructor turned the helicopter south and flew along the river instructing the student and commenting on the various landing areas. The student stated that he was looking over his right shoulder at one of the previous landing areas, and looked forward to see wires in front of the helicopter. The student exclaimed, "wires!" and saw the instructor pull up on the collective and left on the cyclic. The helicopter pitched up and rolled to the left; subsequently impacting trees and terrain along the left side of the river. Examination of the accident site revealed that there was a set of three unmarked wires; one which remained hanging across the river, and two others that were laying on the west bank of the river. The helicopter came to rest on its left side among trees approximately 100 yards from the wires. The wire that remained hanging across the river was approximately 40 feet above the river, and was below the tops of the trees along the banks. Examination of the helicopter revealed that the mast cowling displayed two marks and tears perpendicular to the mast.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the flight instructor's failure to maintain clearance with wires while maneuvering along a river.

Findings

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

Findings

1. OBJECT - WIRE, TRANSMISSION
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND(CFI)

Factual Information

On November 3, 2001, approximately 1230 central standard time, a Robinson R22 helicopter, N127RB, was substantially damaged when it impacted wires, trees, and terrain while maneuvering near Seagoville, Texas. The helicopter was registered to and operated by Sky Helicopters Inc., of Garland, Texas. The flight instructor sustained fatal injuries, and the pilot-rated student sustained serious injuries. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 instructional flight. The local flight departed Garland, Texas, approximately 1130.

According to the student, the objective of the flight lesson was to work on confined area and pinnacle landings. The student stated that he had practiced a number of confined area landings in the local area and along the Trinity River. The student added that following his last landing/takeoff, the flight instructor took over flying to give him a break. The flight instructor flew the helicopter north of the last few landing areas to review their lesson. The flight instructor turned the helicopter south and flew along the river instructing the student and commenting on the various landing areas. The student stated that he was looking over his right shoulder at one of the previous landing areas, and looked forward to see wires in front of the helicopter. The student exclaimed, "wires!" and saw the instructor pull up on the collective and left on the cyclic. The helicopter pitched up and rolled to the left; subsequently impacting trees and terrain along the left side of the river. The student reported that the visibility at the time of the accident was approximately 10 miles.

Examination of the accident site, by the NTSB investigator-in-charge and an FAA inspector, revealed a set of three unmarked wires, one which remained hanging across the river, and two others that were laying on the west bank of the river. The helicopter came to rest on its left side among trees approximately 100 yards from the wires. The wire that remained hanging across the river was approximately 40 feet above the river, and was below the tops of the trees along the banks. One of the tail rotor blades was found separated from the tail rotor hub, and the vertical and horizontal stabilizers were separated from the tail boom. The aforementioned items came to rest on the ground and in a tree, respectively, approximately 40 yards prior to the main wreckage. Examination of the helicopter revealed that the mast cowling displayed two marks and tears perpendicular to the mast.

The flight instructor had accumulated a total of 7,171 flight hours, of which 6,976 hours were in rotorcraft and 3,800 hours were in the same make and model as the accident helicopter.

The flight instructor was transported to the hospital, where he died at 1405. An autopsy conducted by the Southwestern Institute of Forensic Sciences, Dallas, Texas, determined the cause of death was "multiple blunt force injuries." A toxicological test performed by the Civil Aeromedical Institute, Oklahoma City, Oklahoma, detected atropine in the instructor's blood and liver. Atropine is typically administered as part of resuscitative efforts.

Flight Instructor Information

Certificate:	Airline Transport; Flight Instructor	Age:	54, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter; Instrument Helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	05/14/2001
Occupational Pilot:		Last Flight Review or Equivalent:	08/06/2001
Flight Time:	7171 hours (Total, all aircraft), 3800 hours (Total, this make and model), 7000 hours (Pilot In Command, all aircraft), 185 hours (Last 90 days, all aircraft), 69 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Student Pilot Information

Certificate:	Airline Transport	Age:	40, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	11/01/2001
Occupational Pilot:		Last Flight Review or Equivalent:	09/22/2001
Flight Time:	13500 hours (Total, all aircraft), 32 hours (Total, this make and model), 12000 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N127RB
Model/Series:	R22	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2085
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	10/05/2001, 100 Hour	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:	84.6 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1708.5 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-B2C
Registered Owner:	Sky Helicopters, Inc.	Rated Power:	160 hp
Operator:	Sky Helicopters, Inc.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	S4HA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	RBD, 660 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1253 CST	Direction from Accident Site:	290°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.26 inches Hg	Temperature/Dew Point:	26° C / 17° C
Precipitation and Obscuration:			
Departure Point:	Garland, TX (T57)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1130 CST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal, 1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Nicole L Charnon **Report Date:** 02/20/2002

Additional Participating Persons: Oscar F Thomas; FAA FSDO; Dallas, TX

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 pubinq@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](#).