



Aviation Investigation Final Report

Location:	IDABEL, Oklahoma	Accident Number:	FTW97LA339
Date & Time:	September 9, 1997, 13:30 Local	Registration:	N42JR
Aircraft:	Roddie MINI-500	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A witness, who was a close friend of the pilot and assisted building the helicopter, observed the aircraft operating approximately 2,000 feet above ground level and about 500 feet from the approach end of runway 35. He then heard the engine slow down and go into 'negative pitch mode.' The witness observed the helicopter in a nose low attitude and then heard a loud boom. He said that the helicopter came to a stop and then he saw pieces falling off the helicopter. The 25,000 hour career airline captain had about 6 hours of total flight time in helicopters.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of control in flight for undetermined reasons. A factor was the pilot's lack of total experience in helicopters.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. (F) LACK OF TOTAL EXPERIENCE IN KIND OF AIRCRAFT - PILOT IN COMMAND

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

Factual Information

On September 9, 1997, at 1330 central daylight time, a Roddie Mini-500, homebuilt helicopter, N42JR, registered to, and operated by the pilot/builder, was destroyed while maneuvering near Idabel Airport, Idabel, Oklahoma. The airline transport rated pilot, the sole occupant, was fatally injured. Visual meteorological conditions prevailed and no flight plan was filed for the Title 14 CFR Part 91 personal flight. The flight originated from Idabel Airport at 1300.

A witness, who was located at the airport, and helped build the helicopter reported that the pilot performed a run-up on the ground before departing. The witness stated that the aircraft was operating approximately 2,000 feet above ground level and about 500 feet from the approach end of runway 35. He then heard the engine slow down and the rotors go into the negative pitch mode. The witness observed the aircraft in a nose low attitude and then heard a loud boom. He said that the helicopter came to a stop and then he saw pieces falling off the helicopter. The main fuselage came to rest on its right side, 1,300 feet from the approach end runway 35. The instrument panel was found 157 feet south of the main fuselage. The tail rotor, including the vertical and horizontal stabilizers, came to rest about 400 feet south of the main fuselage.

A close friend of the pilot, who also assisted in manufacturing the kit helicopter, reported that new rotor blades were installed on the day prior to the accident. He also stated that Mr. Roddie had test flown the aircraft after the installation and Mr. Roddie reported that the helicopter was "flying excellently."

Another airline pilot, who built and flew his own Mini-500, served as the test pilot for Mr. Roddie's helicopter. The test pilot had 75 hours in the Mini-500. He previously performed one autorotation in Mr. Roddie's Mini-500 and reported it did "just fine."

The 62 year old pilot, who was 25,000 hour career airline captain, had about 6 hours of total helicopter flight time.

At the request of the family, an autopsy and toxicology tests were not performed. Family members reported that the pilot was in excellent health.

Pilot Information

Certificate:	Airline transport; Flight engineer; Flight instructor; Military	Age:	62, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane multi-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	August 30, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	25000 hours (Total, all aircraft), 6 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Roddie	Registration:	N42JR
Model/Series:	MINI-500 MINI-500	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	0259
Landing Gear Type:	Skid	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	10 Hrs	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	582
Registered Owner:	JACKSON RODDIE	Rated Power:	67 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	N/A	Operator Designator Code:	N/A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTX ,389 ft msl	Distance from Accident Site:	49 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	110°
Lowest Cloud Condition:	Unknown	Visibility	9 miles
Lowest Ceiling:	Broken / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	34°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Airport advisory area;Class E

Airport Information

Airport:	IDABEL AIRPORT F62	Runway Surface Type:	
Airport Elevation:	510 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	33.90002,-94.809722(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	MANNY PEREZ; OKLAHOMA CITY , OK
Original Publish Date:	April 15, 1999
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=20338

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