



# **Aviation Investigation Final Report**

Location: SHELL KNOB, Missouri Accident Number: MKC90LA124

Date & Time: June 11, 1990, 16:30 Local Registration: N7089J

Aircraft: BELL B47G-5 Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation

## **Analysis**

WHILE TAKING AERIAL PHOTOS OF A BOAT ON A LAKE, THE COMMERCIAL PILOT SAID THAT HE WAS BLINDED BY THE SUN AND INADVERTENTLY COLLIDED WITH UNMARKED POWER LINES. THE PILOT WAS ABLE TO FLY THE DAMAGED HELICOPTER TO NEARBY LEVEL TERRAIN AND LAND. ADDITIONAL DAMAGE OCCURRED TO THE AIRFRAME DURING THE SHUT DOWN, DUE TO IMBALANCE OF THE MAIN ROTOR.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: VISUAL OUTLOOK NOT MAINTAINED BY THE PILOT IN COMMAND.

#### **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

#### **Findings**

1. (F) LIGHT CONDITION - SUNGLARE

2. (F) OBJECT - WIRE, STATIC

3. (C) VISUAL LOOKOUT - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: MISCELLANEOUS/OTHER

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

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Occurrence #3: MISCELLANEOUS/OTHER Phase of Operation: LANDING

Findings
4. (F) ROTOR SYSTEM, MAIN ROTOR BLADE - VIBRATION

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## **Factual Information**

### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	54,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 1, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4372 hours (Total, all aircraft), 685 hours (Total, this make and model), 4158 hours (Pilot In Command, all aircraft), 229 hours (Last 90 days, all aircraft), 57 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	BELL	Registration:	N7089J
Model/Series:	B47G-5 B47G-5	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	25032
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-B1A
Registered Owner:	UNKNOWN	Rated Power:	260 Horsepower
Operator:	NEODESHA HELICOPTERS FLYING	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	SHELL KNOB , MO (NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	

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# **Airport Information**

Airport:	NONE	Runway Surface Type:	
Airport Elevation:	900 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	36.630462,-93.629791(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Hruban, John

Additional Participating Persons:

Original Publish Date: September 15, 1992

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=34995

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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