



National Transportation Safety Board Aviation Accident Data Summary

Location:	NEW PHILADELPHI, OH	Accident Number:	CHI82DA198
Date & Time:	06/01/1982, 1215 EDT	Registration:	N2988W
Aircraft:	BELL 47G-5A	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Aerial Observation		

Analysis

WHILE PATROLLING A POWERLINE, THE PILOT HEARD A LOUD NOISE, SIMILAR TO A GUNSHOT, WHICH SEEMED TO COME FROM DIRECTLY BEHIND THE FIREWALL. IMMEDIATELY AFTER THAT, THE HELICOPTER STARTED TO PITCH UP AND ROLL TO THE RIGHT. HE REPORTED THAT THE HELICOPTER REACHED AN ATTITUDE OF ABOUT 60 DEGREES NOSE UP AND 15 DEGREES TO THE RIGHT. HE CLOSED THE THROTTLE AND LOWERED THE COLLECTIVE, THEN ENTERED AN AUTOROTATIVE DESCENT. WITH THE LATERAL CYCLIC CONTROL APPARENTLY NOT AFFECTED, HE WAS ABLE TO STEER CLEAR OF THE POWERLINES, BUT CRASH LANDED IN THE TREES. THE PILOT REPORTED A FAILURE OF A BOLT, PN 20-057-4-15D, IN THE FORE/AFT CYCLIC SYSTEM.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE

Findings

1. (C) ROTORCRAFT FLIGHT CONTROL,CYCLIC CONTROL - FAILURE,TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)
4. MANEUVER - PERFORMED - PILOT IN COMMAND
5. (F) OBJECT - TREE(S)

Pilot Information

Certificate:	Commercial	Age:	36
Airplane Rating(s):		Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	4322 hours (Total, all aircraft), 2129 hours (Total, this make and model), 3707 hours (Pilot In Command, all aircraft), 233 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N2988W
Model/Series:	47G-5A 47G-5A	Engines:	1 Reciprocating
Operator:	AERO PATROLS, INC.	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:		Engine Model/Series:	VO-435-B1A
Flight Conducted Under:	Part 91: General Aviation - Aerial Observation		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Weather Information Source:	Unknown
Lowest Ceiling:	Overcast / 2300 ft agl	Wind Speed/Gusts, Direction:	12 knots / , 210°
Temperature:	72° C	Visibility	7 Miles
Precipitation and Obscuration:			
Departure Point:	CANTON, OH	Destination:	CANTON, OH

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	Adopted Date: 06/01/1983
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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