



Aviation Investigation Final Report

Location: ERIN, Tennessee Accident Number: ATL85LA121

Date & Time: March 16, 1985, 14:45 Local Registration: N73DB

Aircraft: Bell 47G Aircraft Damage: Substantial

Defining Event: 1 Minor, 2 None

Flight Conducted Under: Part 91: General aviation

Analysis

AFTER A POWER LOSS AT LOW ALT. DURING APPROACH TO TOUCHDOWN,THE PILOT BLED OFF ROTOR RPM ATTEMPTING TO CLEAR POWER LINES ACROSS HIS APPROACH PATH. THIS RESULTED IN A LACK OF ROTOR ENERGY NECESSARY FOR AN AUTOROTAITON LANDING. A HARD LANDING RESULTED. CARBURETOR HEAT WAS NOT USED EXCEPT DURING INITIAL RUNUP AND WEATHER CONDITIONS WERE FAVORABLE FOR CARBURETOR ICE FORMATION.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: APPROACH

Findings

1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

- 2. (C) ANTI-ICE/DEICE SYSTEM NOT USED PILOT IN COMMAND
- 3. (F) LACK OF TOTAL EXPERIENCE IN KIND OF AIRCRAFT PILOT IN COMMAND

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

Page 2 of 5 ATL85LA121

Factual Information

Pilot Information

Certificate:	Commercial	Age:	24,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	July 24, 1984
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1154 hours (Total, all aircraft), 75 hours (Total, this make and model), 889 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N73DB
Model/Series:	47G 47G	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1277 DBA
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	February 22, 1985 100 hour	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	345 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	58689 Hrs	Engine Manufacturer:	FRANKLIN
ELT:	Not installed	Engine Model/Series:	6V-335-A
Registered Owner:	THOMAS. LUIPERSBECK	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Page 3 of 5 ATL85LA121

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:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:40 Local	Type of Airspace:	Class G

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 2 None	Latitude, Longitude:	36.310314,-87.699302(est)

Page 4 of 5 ATL85LA121

Administrative Information

Investigator In Charge (IIC): Stiner, Walter

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=6763

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.

Page 5 of 5 ATL85LA121