



Aviation Investigation Final Report

Location:	WEST DELTA 105,	Accident Number:	FTW84LA414
Date & Time:	September 26, 1984, 11:57 Local	Registration:	N5013F
Aircraft:	BELL 206L-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

WHILE IN CRUISE FLT, TOTAL PWR LOSS WAS EXPERIENCED. PLT SETUP AUTOROTATIVE WATER LANDING, DEPLOYED EMERGENCY FLOATS. RIGHT FLOAT WAS NOT FULLY INFLATED BY WATER TOUCHDOWN, ACFT ROLLED RIGHT TO INVERTED POSITION. ENG TEARDOWN REVEALED CARBON BUILDUP BETWEEN TURBINE-TO-COMPRESSOR COUPLING AND TURBINE INNER SHAFT, CAUSING FRICTIONAL OVERHEAT LEADING TO SHAFT FAILURE.

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) - MECH FAILURE/MALF
Phase of Operation: DESCENT - EMERGENCY

Findings

1. (C) TURBINE ASSEMBLY,SHAFT - FAILURE,TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ROLL OVER
Phase of Operation: LANDING

Findings

2. (C) LANDING GEAR,FLOAT ASSEMBLY - PRESSURE TOO LOW

Factual Information

Pilot Information

Certificate:	Commercial	Age:	59,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	April 10, 1984
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	13525 hours (Total, all aircraft), 850 hours (Total, this make and model), 10154 hours (Pilot In Command, all aircraft), 217 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N5013F
Model/Series:	206L-1 206L-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	45205
Landing Gear Type:	Emergency float	Seats:	7
Date/Type of Last Inspection:	September 5, 1984 Annual	Certified Max Gross Wt.:	4150 lbs
Time Since Last Inspection:	73 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	3373 Hrs	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	250-C28B
Registered Owner:	BETTY L. FOSTER	Rated Power:	435 Horsepower
Operator:	COMMERCIAL HELICOPTERS	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	COMMERCIAL HELICOPTERS	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:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 12 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	28°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PATTERSON , LA	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

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

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): Daugherty, Jean

Additional Participating Persons: EARL MCCARTHY / SW-FSDO-62; BATON ROUGE , LA

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=21482>

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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](#).