



National Transportation Safety Board Aviation Accident Final Report

Location:	PINSON, AL	Accident Number:	ATL89FA051
Date & Time:	12/02/1988, 1500 CST	Registration:	N3TV
Aircraft:	BELL 206B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

TWO FAA INSPECTORS WERE CONDUCTING CURRENCY TRAINING WHEN THE HELICOPTER LANDED HARD DURING A PRACTICE POWER RECOVERY AUTOROTATION. THE PILOT HAD DELAYED IN APPLYING POWER AND COLLECTIVE PITCH. UPON CONTACT WITH THE GROUND, ALL ENGINE INSTRUMENTS INDICATED NORMAL OPERATION AND THE ENGINE RPM INDICATED IDLE POWER. THE PILOT FAILED TO MAINTAIN ADEQUATE ROTOR RPM. AFTER THE TOUCHDOWN, AN INSPECTION FAILED TO DISCLOSED ANY DAMAGE, BUT WHEN THE FLIGHT RETURNED TO BIRMINGHAM SUBSTANTIAL STRUCTURAL DAMAGE WAS NOTED IN THE RIGHT REAR SKID AREA.

Probable Cause and Findings

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

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LEVEL OFF - MISJUDGED - PILOT IN COMMAND
2. (C) ROTORCRAFT FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
3. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	42, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Gyroplane; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/11/1988
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3644 hours (Total, all aircraft), 4 hours (Total, this make and model), 3127 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N3TV
Model/Series:	206B 206B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	206B
Landing Gear Type:	High Skid	Seats:	5
Date/Type of Last Inspection:	10/06/1988, 100 Hour	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:	50 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	3535 Hours	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	250-C20B
Registered Owner:	ROTOR WING, INC	Rated Power:	317 hp
Operator:	ROTOR WING INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	BHM, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1600 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14° C / -18° C
Precipitation and Obscuration:			
Departure Point:	BIRMINGHAM, AL	Type of Flight Plan Filed:	None
Destination:	PINSON, AL	Type of Clearance:	None
Departure Time:	1400 CST	Type of Airspace:	Class G

Airport Information

Airport:	GILMER	Runway Surface Type:	Grass/turf
Airport Elevation:	200 ft	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2500 ft / 150 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Report Date:	01/24/1990
Additional Participating Persons:	BILL SOWERS; PINSON, AL		
Publish Date:			
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/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).