



National Transportation Safety Board Aviation Accident Final Report

Location:	NEW BRAUNFELS, TX	Accident Number:	FTW84LA217
Date & Time:	05/02/1984, 1130 CST	Registration:	N5063G
Aircraft:	HUGHES 500D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

DESPITE ADVERSE WX WHICH FORCED THE PLT TO STOP ONCE ENROUTE TO HIS DEST THE FLT WAS CONTINUED. DIRECTIONAL CONTROL WAS LOST WHEN THE TAIL ROTOR CONTACTED THE TERRAIN SEPARATING BOTH TAIL ROTOR BLADES FROM THE ACFT AND TORSIONALLY SHEARING THE TAIL ROTOR DRIVE SHAFT. PWR WAS REDUCED AND THE PLT AUTOROTATED INTO A FIELD. THE TAILBOOM WAS STRUCK BY THE MAIN ROTOR BLADE DURING THE LDG. DURING THE LDG.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE

Findings

1. (F) PREFLIGHT BRIEFING SERVICE - NOT OBTAINED - PILOT IN COMMAND
2. (F) WEATHER CONDITION - LOW CEILING
3. (F) WEATHER CONDITION - OBSCURATION
4. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND

Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID

Phase of Operation: MANEUVERING

Findings

5. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING

Findings

6. (C) ROTORCRAFT FLIGHT CONTROL, TAIL ROTOR CONTROL - LOSS, TOTAL
7. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #4: FORCED LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

8. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	44, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine	Toxicology Performed:	No
Medical Certification:	None Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/05/1984
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	15120 hours (Total, all aircraft), 120 hours (Total, this make and model), 120 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N5063G
Model/Series:	500D 500D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	711021D
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	04/01/1984, Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	35 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	835 Hours	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	250-C20B
Registered Owner:	JOE R. BROWN	Rated Power:	375 hp
Operator:	JOE R. BROWN	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SAT, 810 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1053 CST	Direction from Accident Site:	244°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	Overcast / 800 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23° C / 21° C
Precipitation and Obscuration:			
Departure Point:	KERRVILLE, TX	Type of Flight Plan Filed:	None
Destination:	NEW BRAUNFELS, TX (3R5)	Type of Clearance:	None
Departure Time:	1000 CST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	T D MCFALL	Report Date:	
Additional Participating Persons:	RAYMOND MORANTES; SAN ANTONIO, TX WARREN V WANDEL; FORT WORTH, TX		
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](#).