



National Transportation Safety Board Aviation Accident Data Summary

Location:	DEVILS TOWER, WY	Accident Number:	DEN83LA132
Date & Time:	06/01/1983, 1600 MDT	Registration:	N80711
Aircraft:	BELL 47G3-B1	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE ACFT CRASH LANDED IN TREES AFTER THE ENGINE LOST POWER. THE HELICOPTER WAS BEING USED IN AERIAL APPLICATION AT THE TIME OF THE ACCIDENT. THE OPERATION WAS BEING DONE IN 8 MINUTE SEGMENTS. EVERY 8 MINUTES THE HELICOPTER LANDED FOR A RELOAD OF HERBICIDE. AT ABOUT 1430-1500 HOURS THE ACFT WAS REFUELED WITH 29 GALLONS OF 100 OCTANE FUEL. AT 1600 HOURS THE ENGINE CEASED OPERATION 3 MINUTES AFTER A TAKEOFF. THE ACFT WAS AT 50 FT AGL GOING ABOUT 30 MPH. THERE WAS NO CLEAR AREA FOR A LANDING SO THE PILOT AUTOROTATED INTO TREES. THE ACFT HAS AN ENDURANCE OF ABOUT ONE AND ONE HALF HOURS. DURING THE FIRST INTERVIEW THE PILOT SAID THE ACFT RAN OUT OF FUEL. NO FUEL WAS ABOARD THE ACFT AFTER THE ACCIDENT. THE PILOT LATER FOUND AN AN FITTING WAS LOOSE ON THE GAS TANK SUMP DRAIN. HE SAID IT WAS NOT LEAKING WHEN THE ACFT WAS REFUELED. THE PILOT FOUND AN AREA OF LEAKED FUEL WHICH HE ESTIMATED AT 5 GALLONS NEAR THE SUMP DRAIN. THE ACFT HAS ONLY ONE FUEL TANK AND IT CONTAINS 2 UNUSABLE GALLONS OF FUEL.

Probable Cause

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: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
3. (F) FUEL SYSTEM,DRAIN - LOOSE
4. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

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

Findings

5. (F) AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. (F) OBJECT - TREE(S)

Pilot Information

Certificate:	Commercial	Age:	36
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	
Flight Time:	5550 hours (Total, all aircraft), 4570 hours (Total, this make and model), 5250 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N80711
Model/Series:	47G3-B1 47G3-B1	Engines:	1 Reciprocating
Operator:	AGRI HELICOPTERS	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:		Engine Model/Series:	IVO-435
Flight Conducted Under:	Part 137: Agricultural		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Weather Information Source:	Pilot
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 180°
Temperature:	24° C	Visibility	50 Miles
Precipitation and Obscuration:			
Departure Point:	Destination:		

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
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): FRED R WINNINGHAM

Adopted 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.