



National Transportation Safety Board Aviation Accident Data Summary

Location:	Grand Forks, ND	Accident Number:	CEN09CA156
Date & Time:	12/05/2008, 1338 CST	Registration:	N51RF
Aircraft:	ROCKWELL INTERNATIONAL 500-S	Injuries:	2 None
Flight Conducted Under:	Public Aircraft		

Analysis

The twin-engine airplane was being operated by the National Oceanic and Atmospheric Administration conducting snow survey flights. The airplane initially departed from the Grand Forks International Airport (GFK), Grand Forks, North Dakota, and made a refueling stop at the Fargo International Airport, Fargo, North Dakota. The airplane was on a repositioning flight back to GFK when the accident occurred. During the flight, the airplane was cleared by air traffic control for the runway 17R localizer backcourse approach to GFK. The airplane landed on runway 17R with the landing gear in the retracted position, resulting in substantial damage to the airplane. Subsequently, the engines were shut down and the aircraft was evacuated. The minimum descent altitude and visibility requirements for the approach were 1,200 feet above mean sea level (msl) and 1 mile respectively. The ceiling and visibility at the time of the accident were 800 feet (about 1,650 feet msl) and 1 mile respectively. The operator noted that there were no mechanical malfunctions.

Flight Events

Landing - Landing gear not configured

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to extend the landing gear prior to touchdown.

Findings

Aircraft-Aircraft systems-Landing gear system-(general)-Not used/operated - C
Personnel issues-Task performance-Use of equip/info-Use of equip/system-Pilot - C

Pilot Information

Certificate:	Commercial	Age:	38
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	1096 hours (Total, all aircraft), 587 hours (Total, this make and model)		

Co-Pilot Information

Certificate:	Commercial; Private	Age:	31
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	269 hours (Total, all aircraft), 53 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROCKWELL INTERNATIONAL	Registration:	N51RF
Model/Series:	500-S	Engines:	2 Reciprocating
Operator:	UNITED STATES DEPARTMENT OF COMMERCE	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	TIO-540 SER
Flight Conducted Under:	Public Aircraft		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	GFK, 845 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Instrument Conditions	Lowest Ceiling:	Overcast / 800 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	12 knots, 200°
Temperature:	-6° C / -8° C	Visibility	1 Miles
Precipitation and Obscuration:	Light - Blowing - Snow		
Departure Point:	Fargo, ND (FAR)	Destination:	Grand Forks, ND (GFK)

Airport Information

Airport:	Grand Forks International Airp (GFK)	Runway Surface Type:	Asphalt
Runway Used:	17R	Runway Surface Condition:	Unknown
Runway Length/Width:	7351 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	John M Brannen	Adopted Date:	07/28/2009
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
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/ .		

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