



National Transportation Safety Board Aviation Accident Final Report

Location:	GREYBULL, WY	Accident Number:	FTW98LA201
Date & Time:	05/01/1998, 0900 MDT	Registration:	N3316Q
Aircraft:	Cessna 320D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

After landing, the pilot turned the airplane around and back taxied towards the ramp. As he exited the runway, the left landing gear collapsed. Postaccident inspection revealed that the left landing gear bellcrank assembly sustained a stress overload, causing the assembly to break and shear both assembly bolts. The gear retract arm was also found broken. When the gear collapsed, the left wing and left horizontal stabilizer struck the ground and were substantially damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Stress overload failure of the bellcrank assembly of the left landing gear.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAXI - FROM LANDING

Findings

1. (C) LANDING GEAR, GEAR LOCKING MECHANISM - FAILURE, TOTAL

Factual Information

On May 1, 1998, approximately 0900 mountain daylight time, a Cessna 320D, N3316Q, operated by Star West Industries, Inc., was substantially damaged while taxiing after landing at Greybull, Wyoming. The airline transport rated pilot and his four passengers were not injured. Visual meteorological conditions prevailed for the air taxi flight being conducted under Title 14 CFR Part 135, and an IFR flight had been filed. The flight originated at Evanston, Wyoming approximately 0745.

After landing on runway 33 at South Bighorn County Airport, the pilot turned the airplane around and back taxied towards the ramp. As he exited the runway, the left landing gear collapsed. Postaccident inspection of the landing gear performed by an FAA inspector revealed that the left landing gear bellcrank assembly sustained a stress overload, causing the assembly to break and shear both assembly bolts. The gear retract arm was also found broken. When the gear collapsed, the left wing and left horizontal stabilizer struck the ground and were substantially damaged.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	57, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/26/1997
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	15508 hours (Total, all aircraft), 800 hours (Total, this make and model), 159 hours (Last 90 days, all aircraft), 42 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3316Q
Model/Series:	320D 320D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	320D-0116
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	04/26/1998, 100 Hour	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	7 Hours	Engines:	2 Reciprocating
Airframe Total Time:	4536 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-ECBB
Registered Owner:	STAR WEST INDUSTRIES, INC.	Rated Power:	285 hp
Operator:	STAR WEST INDUSTRIES, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	STAR WEST AVIATION	Operator Designator Code:	DHFA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	30 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	7° C
Precipitation and Obscuration:			
Departure Point:	EVANSTON, WY (EVW)	Type of Flight Plan Filed:	IFR
Destination:	(GEY)	Type of Clearance:	IFR
Departure Time:	0745 MDT	Type of Airspace:	Class G

Airport Information

Airport:	SOUTH BIG HORN COUNTY (GEY)	Runway Surface Type:	Asphalt
Airport Elevation:	3933 ft	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	
Runway Length/Width:	6300 ft / 100 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	01/28/2000
Additional Participating Persons:	RICHARD L MASON; CASPER, WY		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).