



National Transportation Safety Board Aviation Accident Final Report

Location:	Dickinson, ND	Accident Number:	CHI07LA064
Date & Time:	02/01/2007, 1615 MST	Registration:	N6631C
Aircraft:	Cessna 414A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The airplane received substantial damage when the right main landing gear retracted upon landing. The pilot reported that when he attempted to lower the landing gear during approach, both main landing gear indications did not show a down and locked condition. After several attempts at recycling the landing gear, the pilot tried to use the emergency gear extension method, but both main landing gear indications were not down and locked. The pilot then contacted an individual at the airport who informed the pilot that his main gear appeared to be down. The pilot then attempted to land the airplane, during which the right main gear retracted. Post accident examination of the landing gear system revealed no anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The undetermined failure of the emergency landing gear system and the retraction of the right main landing gear during landing.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH

Findings

1. (C) LANDING GEAR - UNDETERMINED
2. (C) LANDING GEAR, EMERGENCY EXTENSION ASSEMBLY - UNDETERMINED

Occurrence #2: GEAR RETRACTION ON GROUND
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. TERRAIN CONDITION - RUNWAY

Factual Information

On February 1, 2007, about 1615 mountain standard time, a Cessna 414A, N6631C, piloted by a private pilot, received substantial damage when the right main landing gear retracted upon landing on runway 25 (4,700 feet by 75 feet, grooved asphalt) at Dickinson - Theodore Roosevelt Regional Airport (DIK), Dickinson, North Dakota. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 business flight was operating on an instrument rules flight plan. The pilot was uninjured. The flight originated from Billings Logan International Airport, Billings, Montana, about 1445, en route to DIK.

The pilot reported that as he neared DIK, he attempted to lower the landing gear. The pilot reported that he received a down and locked indication from the nose gear; however, both main landing gear did not show a down and locked indication. After several attempts at recycling the landing gear, the pilot tried to use the emergency gear extension method but still did not receive a down and locked indication for the main gear. The pilot then contacted an individual at the airport who informed the pilot that his main gear appeared to be down. The pilot then landed the airplane, during which the right main gear retracted.

According to the Federal Aviation Administration inspector, an Airframe & Powerplant (A&P) mechanic with Inspection Authorization (IA) reported that the airplane was placed on jacks in order to cycle the landing gear system. The landing gear system operated normally, no anomalies were detected, and no repairs were made to the landing gear system.

Pilot Information

Certificate:	Private	Age:	54, 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):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	06/01/2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4268 hours (Total, all aircraft), 818 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N6631C
Model/Series:	414A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	414A0038
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520
Registered Owner:	D Porter Enterprises LLC	Rated Power:	325 hp
Operator:	D Porter Enterprises LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DIK, 2592 ft msl	Distance from Accident Site:	
Observation Time:	1556 MST	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 1800 ft agl	Visibility	7 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	22 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	-18°C / -23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Billings, MT (BIL)	Type of Flight Plan Filed:	IFR
Destination:	Dickinson, ND (DIK)	Type of Clearance:	IFR
Departure Time:	1445 MST	Type of Airspace:	

Airport Information

Airport:	DICKINSON MUNI (DIK)	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	4700 ft / 75 ft	VFR Approach/Landing:	Straight-in

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:	46.797222, -102.801944

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Report Date:	01/31/2008
Additional Participating Persons:	Vance Q Emerson; Federal Aviation Administration; Fargo, ND		
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.ntsbt.gov/pubdms/ .		

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