



# Aviation Investigation Final Report

<b>Location:</b>	Dickinson, North Dakota	<b>Accident Number:</b>	CHI07LA064
<b>Date &amp; Time:</b>	February 1, 2007, 16:15 Local	<b>Registration:</b>	N6631C
<b>Aircraft:</b>	Cessna 414A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## 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

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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

<b>Certificate:</b>	Private	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	June 1, 2006
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4268 hours (Total, all aircraft), 818 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N6631C
<b>Model/Series:</b>	414A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	414A0038
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	8
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TSIO-520
<b>Registered Owner:</b>	D Porter Enterprises LLC	<b>Rated Power:</b>	325 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	DIK,2592 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	15:56 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Few / 1800 ft AGL	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	22 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	-18°C / -23°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Billings, MT (BIL )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Dickinson, ND (DIK )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	14:45 Local	<b>Type of Airspace:</b>	

## Airport Information

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

## Wreckage and Impact Information

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

## Administrative Information

**Investigator In Charge (IIC):** Gallo, Mitchell

**Additional Participating Persons:** Vance Q Emerson; Federal Aviation Administration; Fargo, ND

**Original Publish Date:** January 31, 2008

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=65269>

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