



Aviation Investigation Final Report

Location:	Evanston, Wyoming	Accident Number:	LAX08LA184
Date & Time:	June 10, 2008, 10:30 Local	Registration:	N1234G
Aircraft:	Mooney M20J	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he extended the landing gear while on approach for landing and got a "gear unsafe" red light indication. He recycled the landing gear and the gear light went out. The pilot called the local fixed base operator on the field and requested a flyby to confirm that the landing gear was down. Ground personnel indicated that the gear appeared to be down. The pilot accomplished the final pre-landing checks and landed the airplane. The landing gear collapsed immediately after touchdown. Postaccident examination of the airplane by a mechanic revealed that two wing skins and a metal tubular former in the belly needed to be replaced. The mechanic who inspected the landing gear stated that the gear collapsed because the over center tension for the nose wheel landing gear down locks was not properly adjusted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A collapse of the landing gear due to improper maintenance.

Findings

Personnel issues	Scheduled/routine maintenance - Maintenance personnel
Aircraft	Gear extension and retract sys - Incorrect service/maintenance

Factual Information

History of Flight

Prior to flight	Aircraft maintenance event
Landing-landing roll	Landing gear collapse (Defining event)

On June 10, 2008, approximately 1030 mountain daylight time, a Mooney M20J, N1234G, sustained substantial damage when the landing gear collapsed during the landing roll at Burns Field (EVW), Evanston, Wyoming. The private pilot, the sole occupant, was not injured. The pilot/owner was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed for the personal cross-country flight, which had originated from Rifle, Colorado, about 0800. The pilot had filed and opened a Visual Flight Rules flight plan.

In a written statement, the pilot reported that when he engaged the landing gear while on approach, he got an unsafe red gear light. The pilot recycled the landing gear and checked the circuit breakers. The light then went out. The pilot contacted the local Fixed Base Operator and requested a flyby to have someone confirm that the landing gear was down. Ground personnel reported to the pilot that the gear appeared down. The pilot accomplished his final pre-landing checks and landed the airplane. Immediately after touchdown, the landing gear collapsed.

Postaccident examination of the airplane by a mechanic revealed that two wing skins and a metal tubular former in the belly needed to be replaced. Two Federal Aviation Administration Form 337 approvals were required to return the airplane to service. The mechanic who performed the work said the gear collapsed due to the over center tension for the nose wheel landing gear down locks was not properly adjusted.

Pilot Information

Certificate:	Private	Age:	65, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 17, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 1, 2006
Flight Time:	728 hours (Total, all aircraft), 482 hours (Total, this make and model), 728 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N1234G
Model/Series:	M20J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1614
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	January 15, 2008 Annual	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3169 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360
Registered Owner:	On file	Rated Power:	200 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	EVW,7143 ft msl	Distance from Accident Site:	
Observation Time:	10:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	22 knots / 33 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.82 inches Hg	Temperature/Dew Point:	17°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rifle, CO (RIL)	Type of Flight Plan Filed:	VFR
Destination:	Evanston, WY (EVW)	Type of Clearance:	VFR
Departure Time:	08:00 Local	Type of Airspace:	

Airport Information

Airport:	Burns Field EVW	Runway Surface Type:	Asphalt
Airport Elevation:	7143 ft msl	Runway Surface Condition:	Dry
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	7300 ft / 100 ft	VFR Approach/Landing:	Full stop

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:	41.274723,-111.034721(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	Mike Maglione; FAA FSDO; Casper, WY
Original Publish Date:	April 15, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=68236

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