



National Transportation Safety Board Aviation Accident Final Report

Location:	DENVER, CO	Accident Number:	DEN87FA003
Date & Time:	10/12/1986, 1051 MDT	Registration:	N3MU
Aircraft:	MITSUBISHI MU-2B-20	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

ACFT HAD BEEN REPOSSESSED AND WAS BEING FERRIED FROM GRAND JUNCTION, CO, TO CHICAGO, IL, WITH EN ROUTE STOP AT DENVER, CO. AFTER TAKEOFF FROM DENVER, LANDING GEAR WOULD NOT RETRACT. PLT MADE SEVERAL ATTEMPTS WITHOUT SUCCESS. HE ELECTED TO RETURN TO DENVER. PLT SAID THAT ON FINAL APCH THE RIGHT ENG BEGAN SURGING AND THE LEFT ENG WOULD NOT INCREASE PWR. ACFT MADE HARD LANDING ON RWY, BREAKING LEFT WING. INVESTIGATION REVEALED BOTH SPEED LEVERS WOULD NOT FUNCTION BECAUSE ENG PROP GOVERNORS AND UNDERSPEED FUEL GOVERNOR RESET ARMS, SPLINED ONTO UNDERSPEED FUEL GOVERNOR SHAFTS, WERE POSITIONED ON OPPOSITE SIDE OF SPEED LEVER ACTUATING ARMS. LANDING GEAR FUNCTIONED NORMALLY DURING SWING TESTS. IT WAS LATER LEARNED THAT RIGHT MAIN TIRE HAD BLOWN ON TAKEOFF 3 DAYS EARLIER AND REQUIRED REPAIR. MAINTENANCE PERSONNEL OPENED THE LANDING GEAR CIRCUIT BREAKERS TO PRECLUDE INADVERTENT GEAR RETRACTION. PLT SAID HE CHECKED CIRCUIT BREAKERS WHEN GEAR FAILED TO RETRACT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) ELECTRICAL SYSTEM,CIRCUIT BREAKER - NOT ENGAGED
 2. (F) MAINTENANCE - INADEQUATE - COMPANY MAINTENANCE PERSONNEL
 3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
 4. (F) LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
 5. (F) LANDING GEAR - INOPERATIVE
 6. GEAR RETRACTION - ATTEMPTED - PILOT IN COMMAND
 7. (F) LACK OF FAMILIARITY WITH AIRCRAFT - COPILOT/SECOND PILOT
 8. (C) ELECTRICAL SYSTEM,CIRCUIT BREAKER - OPEN
 9. (F) LANDING GEAR,GEAR INDICATING SYSTEM - FALSE INDICATION
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Occurrence #2: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

10. PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND
 11. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
 12. (C) PROPELLER GOVERNOR CONTROL,LINKAGE - INCORRECT
 13. (C) MAINTENANCE - NOT CORRECTED - COMPANY MAINTENANCE PERSONNEL
 14. (C) MAINTENANCE,SERVICE OF AIRCRAFT/EQUIPMENT - INADEQUATE - OTHER MAINTENANCE PERSONNEL
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Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

15. (C) AIRSPEED(VREF) - BELOW - PILOT IN COMMAND
16. (C) DIVERTED ATTENTION - PILOT IN COMMAND
17. (C) STALL - INADVERTENT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	36, 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:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	08/12/1986
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4186 hours (Total, all aircraft), 38 hours (Total, this make and model), 4050 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MITSUBISHI	Registration:	N3MU
Model/Series:	MU-2B-20 MU-2B-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	143
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	07/27/1985, 100 Hour	Certified Max Gross Wt.:	9920 lbs
Time Since Last Inspection:	100 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	5780 Hours	Engine Manufacturer:	GARRETT
ELT:	Installed, not activated	Engine Model/Series:	TPE331-1-151A
Registered Owner:	E. MICHAEL RIEBOLD	Rated Power:	665 hp
Operator:	GENE GARTKE	Operating Certificate(s) Held:	None
Operator Does Business As:	MIDWAY AIRCRAFT BROKERS	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DEN, 5333 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1051 MDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 6000 ft agl	Visibility	15 Miles
Lowest Ceiling:	Overcast / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	0°C / -8°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	CHICAGO, IL (MDW)	Type of Clearance:	IFR
Departure Time:	1051 MDT	Type of Airspace:	Class D; Class E

Airport Information

Airport:	STAPLETON INT'L (DEN)	Runway Surface Type:	Concrete
Airport Elevation:	5333 ft	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	10004 ft / 150 ft	VFR Approach/Landing:	

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
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	
Additional Participating Persons:	WAYNE MCCANNON; BROOMFIELD, CO EARL BERRY, JR.; WICHITA, KS DEAN M THOMPSON; WICHITA, KS ROGER H FRERICHS; PHOENIX, AR		
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.nts.gov/pubdms/ .		

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