



National Transportation Safety Board Aviation Accident Final Report

Location:	COLUMBUS, OH	Accident Number:	CHI85LA043
Date & Time:	11/02/1984, 1745 EST	Registration:	N1289J
Aircraft:	Rockwell AC-112A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

THE ACFT EXPERIENCED A MAIN GEAR COLLAPSE DURING A LANDING ROLL. THE PLT CLAIMED THAT THE ACFT SUFFERED A FAILURE OF THE ELECTRICAL SYSTEM SHORTLY AFTER INITIAL TAKEOFF. THE PLT LOWERED THE LNDG GEAR BUT WAS UNABLE TO ACHIEVE A GEAR DOWN & LOCKED INDICATION DUE TO THE ELECTRICAL FAILURE. THE RT MAIN GEAR COLLAPSED DURING LANDING. THIS WAS THE 1ST FLT SINCE AN ANNUAL INSPECTION DURING WHICH THE RT MAIN GEAR HYDRAULIC LINE WAS REPLACED. AFTER THE ACCIDENT, THE ACFT WAS JACKED UP ON THE RWY AND A BUNDLE OF SQUAT SWITCH WIRING FELL OUT OF THE WHEEL WELL. NO BUNDLE TIE WIRE WAS FOUND. AFTER THE ACFT WAS MOVED TO LANE AVIATION THE ENGINE WAS STARTED AND IT WAS DETERMINED THAT THE ALTERNATOR WAS NOT CHARGING. THE AMMETER INDICATED NO CHARGE OR DISCHARGE. WITH AN EXTERNAL JUMPER CABLE ATTACHED TO THE GEAR-UP RELAY A SUCCESSFUL GEAR RETRACTION WAS PERFORMED. AFTER THE BATTERY WAS CHARGED FROM AN EXTERNAL SOURCE, THE ALTERNATOR CAME ON LINE WITH 16.1 VOLTS BEFORE DROPPING OFF LINE AFTER APRX 2 MINS. THE ALTERNATOR PTS WERE PITTED & DIRTY. CLEANING DID NOT HELP.

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: CLIMB - TO CRUISE

Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. (F) ELECTRICAL SYSTEM - INOPERATIVE
3. (F) ELECTRICAL SYSTEM,ALTERNATOR - IMPROPER
4. (C) MAINTENANCE,ANNUAL INSPECTION - POOR - OTHER MAINTENANCE PERSONNEL
5. (F) ELECTRICAL SYSTEM,BATTERY - DISABLED

Occurrence #2: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

6. (F) EMERGENCY PROCEDURE - NOT UNDERSTOOD - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	66, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Unknown
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 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	05/10/1983
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N1289J
Model/Series:	AC-112A AC-112A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	289
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	0 Hours	Engines:	1 Reciprocating
Airframe Total Time:	602 Hours	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	IO-360-C1D6
Registered Owner:	FRANCIS D. BROWN	Rated Power:	200 hp
Operator:	FRANCIS D. BROWN	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CMH, 816 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1750 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 25000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	3°C / -8°C
Precipitation and Obscuration:			
Departure Point:	COLUMBUS, OH (CMH)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	1730 EST	Type of Airspace:	Class E

Airport Information

Airport:	COLUMBUS INTERNATIONAL (CMH)	Runway Surface Type:	Asphalt
Airport Elevation:	816 ft	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	6000 ft / 150 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PAMELA KLECKNER	Report Date:	
Additional Participating Persons:			
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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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](#).