

# **Aviation Investigation Final Report**

Location:	LA PORTE, Indiana		Accident Number:	CHI88LA054
Date & Time:	January 27, 1988, 17:	00 Local	<b>Registration:</b>	N6072X
Aircraft:	MOONEY	M20A	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal			

## Analysis

THE AIRCRAFT EXPERIENCED A COMPLETE POWER FAILURE AND WHILE THE PILOT WAS ATTEMPTING TO MAKE AN EMERGENCY LANDING RAN THROUGH A FENCE AND BETWEEN TWO TREES SUBSTANTIALLY DAMAGING THE AIRCRAFT. THE PILOT SUSTAINED MINOR INJURIES. POST ACC INVEST REVEALED A FAILED CYLINDER. FAA CONDUCTED AN ENG TEARDOWN AND INDICATED IN THEIR REPORT THAT THE TORQUE VALUES ON THE CYLINDERS WAS BELOW MANUFACTURERS VALUES FOR THE INSTALLATION OF CYLINDERS.

## **Probable Cause and Findings**

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

#### Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: CRUISE - NORMAL

Findings

1. (F) MAINTENANCE, INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL 2. (C) ENGINE ASSEMBLY, CYLINDER - FAILURE, TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings 3. (F) OBJECT - FENCE 4. (F) OBJECT - TREE(S)

# **Factual Information**

### **Pilot Information**

Certificate:	Commercial	Age:	56,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	August 26, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3505 hours (Total, all aircraft), 65 hours (Total, this make and model), 3505 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N6072X
Model/Series:	M20A M20A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1668
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 1, 1987 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	79 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3306 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	0-360-A1A
Registered Owner:	DAVAIR,INC	Rated Power:	180 Horsepower
Operator:	DAVAIR, INC.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	GYY ,591 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	16:46 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 8000 ft AGL	Visibility	6 miles
Lowest Ceiling:	Broken / 20000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-9°C
Precipitation and Obscuration:	N/A - None - Smoke		
Departure Point:	KALAMAZOO , MI (AZO )	Type of Flight Plan Filed:	None
Destination:	CHICAGO , IL (3HW )	Type of Clearance:	None
Departure Time:	16:15 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:		<b>Runway Surface Condition:</b>	Snow
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.599765,-86.710746(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Wilson, S	
Additional Participating Persons:	DEL HEITER; SOUTH BEND , IN	
Original Publish Date:	March 30, 1989	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=14038	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.