



# **Aviation Investigation Final Report**

Location: LOWELL, Arkansas Accident Number: MKC88LA127

Date & Time: July 15, 1988, 12:30 Local Registration: N3738X

Aircraft:

AERO COMMANDER
100180

Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

ABOUT ONE HOUR AFTER TAKEOFF, THE PLT NOTED THAT THE ENG BEGAN TO RUN ROUGH. HE REDUCED THE POWER TO 2000 RPM & ENRICHED THE MIXTURE. HE CONTINUED FLYING FOR ABOUT ANOTHER HOUR, THEN THE ENG LOST POWER. THE PLT ATTEMPTED AN EMERGENCY LANDING ON A FRONTAGE ROAD, BUT WAS UNABLE TO REACH IT. THE ACFT WAS DAMAGED WHEN IT TOUCHED DOWN ON ROUGH TERRAIN JUST SHORT OF THE ROAD. AN EXAM REVEALED THE EXHAUST & INTAKE VALVES AT THE #4 CYLINDER HAD STUCK.

### **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(TOTAL) - MECH FAILURE/MALF

Phase of Operation: CRUISE

#### **Findings**

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - BINDING (MECHANICAL)

2. (C) ENGINE ASSEMBLY, VALVE, INTAKE - BINDING (MECHANICAL)

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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## **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	64,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 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2000 hours (Total, all aircraft), 1125 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	AERO COMMANDER	Registration:	N3738X
Model/Series:	100-180 100-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5047
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	14 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2109 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A2F
Registered Owner:	HUCKE, SAMUEL T.	Rated Power:	180 Horsepower
Operator:	SAMEUL T. HUCKE	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	25 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	29°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	HARRISONVILLE , MO (MO85)	Type of Flight Plan Filed:	None
Destination:	SPRINGDALE , AR (ASG)	Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	NONE	Runway Surface Type:	
Airport Elevation:	0 ft msl	<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.369808,-94.580894(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Hruban, John
Additional Participating Persons:	CHARLES BURGE;
Original Publish Date:	September 19, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=34602

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 here.

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