



# **Aviation Investigation Final Report**

Location: MEADE, Kansas Accident Number: MKC87LA099

Date & Time: May 2, 1987, 18:15 Local Registration: N38687

Aircraft: PIPER PA-11 Aircraft Damage: Substantial

**Defining Event:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

AFTER TAKEOFF, THE ENGINE STARTED LOSING POWER. DURING THE TURN TOWARD A LANDING AREA, THE AIRPLANE STALLED, HIT THE GROUND TO THE RIGHT OF THE RUNWAY AND FLIPPED FORWARD TO THE INVERTED POSITION. A PARTIAL TEAR DOWN INSPECTION REVEALED THAT THE INTAKE VALVE ON THE NUMBER THREE CYLINDER HAD BEEN STICKING.

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

Phase of Operation: TAKEOFF - INITIAL CLIMB

**Findings** 

1. (C) ENGINE ASSEMBLY, VALVE, INTAKE - FAILURE, PARTIAL

2. (C) ENGINE ASSEMBLY, VALVE, INTAKE - JAMMED

Occurrence #2: FORCED LANDING

Phase of Operation: TAKEOFF - INITIAL CLIMB

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Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: DESCENT

Findings

3. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

4. STALL

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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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Occurrence #5: NOSE OVER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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## **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	24,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
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 Medicalno waivers/lim.	Last FAA Medical Exam:	December 18, 1985
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	110 hours (Total, all aircraft), 15 hours (Total, this make and model), 74 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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

Aircraft Make:	PIPER	Registration:	N38687
Model/Series:	PA-11 PA-11	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7195
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 6, 1986 Annual	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:	89 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	O-200-A
Registered Owner:	BRINGHAM FLYING SERVICE, INC	Rated Power:	90 Horsepower
Operator:	BRINGHAM FLYING. SERVICE,INC.	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:         Lowest Cloud Condition:       Clear       Visibility       15 miles         Lowest Ceiling:       None       Visibility (RVR):         Wind Speed/Gusts:       5 knots / 15 knots       Turbulence Type Forecast/Actual:       /
Observation Time:  Lowest Cloud Condition:  Clear  Visibility  15 miles  Lowest Ceiling:  None  Visibility (RVR):  Wind Speed/Gusts:  5 knots / 15 knots  Turbulence Type  /
Lowest Cloud Condition: Clear Visibility 15 miles  Lowest Ceiling: None Visibility (RVR):  Wind Speed/Gusts: 5 knots / 15 knots Turbulence Type /
Lowest Ceiling: None Visibility (RVR): Wind Speed/Gusts: 5 knots / 15 knots Turbulence Type /
Wind Speed/Gusts: 5 knots / 15 knots Turbulence Type /
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Wind Direction: 180° Turbulence Severity / Forecast/Actual:
Altimeter Setting: 29 inches Hg Temperature/Dew Point: 25°C / 14°C
Precipitation and Obscuration: No Obscuration; No Precipitation
Departure Point: Type of Flight Plan Filed: None
Destination: Type of Clearance: None
Departure Time: 18:15 Local Type of Airspace: Class G

### **Airport Information**

Airport:	MUNICIPAL 8K4	Runway Surface Type:	Asphalt
Airport Elevation:	2528 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	3400 ft / 50 ft	VFR Approach/Landing:	Forced landing

### Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	37.279846,-100.329444(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Roth, Eugene

Additional Participating Persons:

Original Publish Date: March 10, 1988

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=34378

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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