



# Aviation Investigation Final Report

<b>Location:</b>	ALLIANCE, Nebraska	<b>Accident Number:</b>	MKC83LA176
<b>Date &amp; Time:</b>	August 4, 1983, 17:20 Local	<b>Registration:</b>	N777EE
<b>Aircraft:</b>	PIPER PA-24-235	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT STATED THAT HE DEPARTED OSHROSH FOR SCOTTSDLUFF WITH AN ESTIMATED 80 GALLONS OF FUEL ON BOARD THE AIR CRAFT HIS ETE WAS 4 HOURS 30 MINUTES AND FUEL CONSUMPTION AT 15 GPH. APRX 37 NM SHORT OF SCOTTSDLUFF HE NOTICED THE RIGHT FUEL GAUGE INDICATING BELOW THE QUANTITY HE CALCULATED SHOULD HAVE BEEN ABOARD. THIS WAS THE ONLY TANK THAT NOW CONTAINED FUEL. HE REDUCED ENGINE POWER TO 55 PERCENT OF RATED. OVERFLEW ALLIANCE, WHERE FUEL WAS AVAILABLE, AND CONTINUED TO SCOTTSDLUFF. AS THE AIRCRAFT BEGAN ITS DESCENT, THE ENGINE FAILED. THE PILOT TURNED TOWARD ALLIANCE WHILE TRYING TO RESTART THE ENGINE. THE AIRCRAFT LANDED ON A ROLLING SAND HILL APRX 7 MILES SOUTHWEST OF ALLIANCE.

## 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) - NONMECHANICAL  
Phase of Operation: CRUISE - NORMAL

#### Findings

1. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

2. (C) REFUELING - NOT USED - PILOT IN COMMAND
3. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
4. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

5. (F) FLUID,FUEL - EXHAUSTION
6. (F) TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight instructor	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	February 23, 1983
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	15310 hours (Total, all aircraft), 900 hours (Total, this make and model), 15005 hours (Pilot In Command, all aircraft), 240 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N777EE
<b>Model/Series:</b>	PA-24-235 PA-24-235	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-2773
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	September 1, 1982 Annual	<b>Certified Max Gross Wt.:</b>	3000 lbs
<b>Time Since Last Inspection:</b>	98 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3565 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-540-B145
<b>Registered Owner:</b>	JOHN W. BIRCH	<b>Rated Power:</b>	235 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	AIA ,3965 ft msl	<b>Distance from Accident Site:</b>	7 Nautical Miles
<b>Observation Time:</b>	17:40 Local	<b>Direction from Accident Site:</b>	225°
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	20 miles
<b>Lowest Ceiling:</b>	Broken	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 19°C
<b>Precipitation and Obscuration:</b>	Light - Showers - Rain		
<b>Departure Point:</b>	OSHKOSH , WI (OSH )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	SCOTTSBLUFF , NE (BFF )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:43 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	42.100791,-102.870918(est)

## Administrative Information

**Investigator In Charge (IIC):** Wall, James

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=33458>

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