



Aviation Investigation Final Report

Location: DES MOINES, Iowa Accident Number: MKC88LA017

Date & Time: November 13, 1987, 16:00 Local Registration: N6644P

Aircraft: PIPER PA-24-250 Aircraft Damage: Substantial

Defining Event: 2 Minor, 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

APPROX EIGHT MILES FROM THE DEST ARPT, THE PIC EXPERIENCED PARTIAL, THEN A COMPLETE POWER LOSS. AN EMERGENCY LNDG WAS MADE ON A GOLF COURSE, ABOUT ONE MILE SHORT OF THE DEST ARPT. POST ACCIDENT INSPECTION REVEALED NO FUEL IN ANY OF THE FOUR TANKS. DAMAGE WAS SUSTAINED TO THE WINGS, GEAR, PROP, AND NOSE OF THE AIRCRAFT DURING LANDING ON THE ROUGH SOD ADJACENT TO THE FAIRWAY.

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

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

2. (C) FLUID, FUEL - EXHAUSTION

3. (C) FUEL CONSUMPTION CALCULATIONS - MISJUDGED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Findings
4. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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Factual Information

Pilot Information

Certificate:	Private	Age:	44,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	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:	August 11, 1986
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1428 hours (Total, all aircraft), 257 hours (Total, this make and model), 1225 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N6644P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1677
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 1987 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2666 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540-A1A5
Registered Owner:	KWC AVIATION	Rated Power:	250 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	DSM ,957 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	16:12 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Unknown	Visibility	20 miles
Lowest Ceiling:	Broken / 14000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	GRUNNEL , IA (K29)	Type of Flight Plan Filed:	None
Destination:	DES MOINES , IA (DSM)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Airport advisory area;Class D;Class E

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Airport Information

Airport:	DES MOINES MUNI	Runway Surface Type:	Asphalt
Airport Elevation:	960 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	9001 ft / 150 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	41.569564,-93.749244(est)

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Administrative Information

Investigator In Charge (IIC): Hruban, John

Additional Participating Persons:

Original Publish Date: May 16, 1989

Last Revision Date:
Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=34521

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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