



National Transportation Safety Board Aviation Accident Final Report

Location:	DES MOINES, IA	Accident Number:	CHI91FA035
Date & Time:	11/29/1990, 1016 CST	Registration:	N1879W
Aircraft:	PIPER PA-31T2	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

ON FINAL APPROACH, AFTER BEING CLEARED TO LAND, THE PILOT INFORMED THE CONTROLLER THAT HE MIGHT HAVE TO SHUT DOWN AN ENGINE. HE DECLINED TO DECLARE AN EMERGENCY OR REQUEST ASSISTANCE. ON SHORT FINAL, THE AIRCRAFT WAS OBSERVED TO ROLL TO THE LEFT AND DESCENT INTO THE TERRAIN. SUBSEQUENT EXAMINATION REVEALED EVIDENCE THAT THE LEFT ENGINE WAS NOT DEVELOPING POWER, ALTHOUGH THE LEFT PROPELLER WAS NOT FEATHERED. THERE WAS EVIDENCE THAT THE RIGHT ENGINE WAS PRODUCING HIGH POWER DURING IMPACT. NO MECHANICAL DEFICIENCY OF THE LEFT ENGINE OR PROPELLER WAS FOUND.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER EMERGENCY PROCEDURES BY NOT FEATHERING THE LEFT ENGINE AFTER IT LOST POWER AND/OR WAS SHUT DOWN, AND HIS FAILURE TO KEEP THE AIRCRAFT AT OR ABOVE THE MINIMUM CONTROL AIRSPEED (VMC), WHICH RESULTED IN A LOSS OF AIRCRAFT CONTROL. A FACTOR RELATED TO THE ACCIDENT WAS: AN UNDETERMINED PROBLEM CONCERNING THE LEFT ENGINE THAT CAUSED IT TO LOSE POWER OR PROMPTED THE PILOT TO SHUT IT DOWN.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. 1 ENGINE
2. (F) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

3. (C) EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND
4. (C) PROPELLER FEATHERING - NOT ATTAINED - PILOT IN COMMAND
5. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND
6. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: APPROACH

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	48, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	11/05/1990
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	7754 hours (Total, all aircraft), 4093 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N1879W
Model/Series:	PA-31T2 PA-31T2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	31T-8166065
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	9000 lbs
Time Since Last Inspection:	0 Hours	Engines:	2 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed, activated	Engine Model/Series:	PT6A-135
Registered Owner:		Rated Power:	620 hp
Operator:	CENTURY LIFE OF AMERICA	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DSM, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1021	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	20 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:	MADISON, WI (MSN)	Type of Flight Plan Filed:	IFR
Destination:	(DSM)	Type of Clearance:	IFR
Departure Time:	0915 CST	Type of Airspace:	

Airport Information

Airport:	DES MOINES INTL (DSM)	Runway Surface Type:	Asphalt
Airport Elevation:	957 ft	Runway Surface Condition:	
Runway Used:	30R	IFR Approach:	Visual
Runway Length/Width:	9001 ft / 150 ft	VFR Approach/Landing:	Full Stop; Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEPHEN A WILSON	Report Date:	03/05/1993
Additional Participating Persons:			
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).