



# National Transportation Safety Board Aviation Accident Final Report

<b>Location:</b>	GREENBUSH, MN	<b>Accident Number:</b>	CHI85LA001
<b>Date &amp; Time:</b>	10/03/1984, 1650 CDT	<b>Registration:</b>	N37JL
<b>Aircraft:</b>	PIPER PA-23-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

## Analysis

FOLLOWING AN UNEVENTFUL APPROACH AND LANDING, THE PLT WAS TAXIING BACK UP THE RUNWAY WHEN THE RIGHT ENGINE QUIT. THE RIGHT SEAT PASSENGER IMMEDIATELY NOTED FLAMES COMING FROM THE ENGINE AND NOTIFIED THE PLT, WHO SWUNG THE ACFT INTO POSITON FOR WIND TO KEEP FLAMES FROM THE WING WHILE SECURING BOTH ENGINE FUEL SHUT-OFF VALVES, HEATER FUEL SHUT-OFF AND THE ACFT ELECTRICAL SYSTEM. PLT ORDERED EVACUATION AND ATTEMPTED TO EXTINGUISH FIRE WITH HAND-HELD EXTINGUISHER. FIRE CONTINUED TO BURN FOR ABOUT 15 MINUTES UNTIL LOCAL FIRE DEPT PUT OUT FLAMES. DAMAGE PRECLUDED DETERMINATION OF FIRE SOURCE, BELIEVED TO BE A BROKEN LINE OR SEPARATED FITTING IN THE ENGINE FUEL SYSTEM WHICH ALLOWS A QUANTITY OF FUEL TO COLLECT IN THE NACELLE BEFORE ENGINE QUIT FROM FUEL STARVATION, FIRE IGNITED, AND PLT CLOSED SHUT-OFF VALVE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: FIRE  
Phase of Operation: TAXI - FROM LANDING

Findings  
1. (C) FUEL SYSTEM - UNDETERMINED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	31, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<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--no waivers/lim.	<b>Last FAA Medical Exam:</b>	06/22/1984
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1945 hours (Total, all aircraft), 162 hours (Total, this make and model), 1713 hours (Pilot In Command, all aircraft), 163 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N37JL
<b>Model/Series:</b>	PA-23-250 PA-23-250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	27-2600
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	07/13/1984, Annual	<b>Certified Max Gross Wt.:</b>	5200 lbs
<b>Time Since Last Inspection:</b>	97 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3899 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-540-C4B5
<b>Registered Owner:</b>	ARROWHEAD AIRWAYS, INC.	<b>Rated Power:</b>	250 hp
<b>Operator:</b>	ARROWHEAD AIRWAYS, INC.	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1655	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:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:	ST. PAUL, MN (STP)	Type of Flight Plan Filed:	VFR
Destination:	GREENBUSH, MN (02Y)	Type of Clearance:	None
Departure Time:	1500 CST	Type of Airspace:	Class D

## Airport Information

Airport:	GREENBUSH MUNICIPAL ARPT. (024)	Runway Surface Type:	Grass/turf
Airport Elevation:	1070 ft	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	1897 ft / 192 ft	VFR Approach/Landing:	Traffic Pattern

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	ROBERT BENZON	Report Date:	
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).