



# Aviation Investigation Final Report

<b>Location:</b>	SHELTON, Washington	<b>Accident Number:</b>	SEA88LA161
<b>Date &amp; Time:</b>	August 23, 1988, 16:30 Local	<b>Registration:</b>	N8370H
<b>Aircraft:</b>	PIPER J3C-65	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT REPORTED A COMPLETE LOSS OF POWER IN CRUISE FLIGHT WHILE FERRYING AN AIRCRAFT TO ITS HOME BASE AFTER AN ANNUAL INSPECTION. THE PILOT LANDED IN A SMALL FIELD OF RYE CROP. THE PILOT STATED THAT THE SIZE OF THE FIELD PRECLUDED A NORMAL APPROACH. THE AIRCRAFT MADE A HARD LANDING INTO THE SMALL FIELD. THE POST ACCIDENT INVESTIGATION REVEALED THAT THE FUEL FITTING TO THE CARBURETOR BROKE IN FLIGHT. FUEL STAINS WERE FOUND ALONG THE LOWER PORTION OF THE FUSELAGE. NO FUEL WAS FOUND IN THE CARBURETOR. EXAMINATION OF THE ENGINE REVEALED THAT THE FITTING HAD BEEN DEFORMED AT SOME PREVIOUS TIME. THE AIRCRAFT RECORDS SHOWED THAT THE FITTING HAD BEEN ADJUSTED DURING THE ANNUAL INSPECTION.

## 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) - MECH FAILURE/MALF  
Phase of Operation: CRUISE - NORMAL

#### Findings

1. (F) FUEL SYSTEM,LINE FITTING - PREVIOUS DAMAGE

2. (C) FUEL SYSTEM,LINE FITTING - OVERTORQUE
  3. (C) MAINTENANCE,ADJUSTMENT - IMPROPER - OTHER MAINTENANCE PERSONNEL
  4. (C) FUEL SYSTEM,LINE FITTING - LEAK
  5. (C) FLUID,FUEL - STARVATION
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Occurrence #2: FORCED LANDING

Phase of Operation: LANDING

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Occurrence #3: HARD LANDING

Phase of Operation: LANDING

Findings

6. (F) TERRAIN CONDITION - NONE SUITABLE
7. (F) PROPER TOUCHDOWN POINT - RESTRICTED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	Helicopter	<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 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	August 5, 1987
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	7195 hours (Total, all aircraft), 50 hours (Total, this make and model), 6490 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N8370H
<b>Model/Series:</b>	J3C-65 J3C-65	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	8874
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	August 13, 1988 Annual	<b>Certified Max Gross Wt.:</b>	1220 lbs
<b>Time Since Last Inspection:</b>	3 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2174 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	C-85-12F
<b>Registered Owner:</b>	BRANDON R. D. HARNISCH	<b>Rated Power:</b>	85 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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	50 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	45°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	29°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	ELMA , WA (WA22)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Vegetation
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	47.230861,-123.200721(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Daily, H
<b>Additional Participating Persons:</b>	JOHN JACKSON; SEATTLE , WA
<b>Original Publish Date:</b>	September 29, 1989
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=40872">https://data.ntsb.gov/Docket?ProjectID=40872</a>

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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](#).