



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	SPOKANE, WA	<b>Accident Number:</b>	SEA96LA181
<b>Date &amp; Time:</b>	08/01/1996, 0000	<b>Registration:</b>	N2839V
<b>Aircraft:</b>	Beech 35	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

About five minutes after takeoff, at 6,500 feet, the 1947 model airplane was cruising at 160 to 165 knots, when it encountered turbulence and experienced an airframe vibration. The pilot reduced airspeed, which eliminated the vibration, then he landed without further incident. Subsequent examination revealed that the fuselage station 256.9 bulkhead, located directly below the leading edge of the V-tail, was cracked at all four corners. Further investigation revealed that the airplane's ruddervators had been removed in 1995 for reskinning due to corrosion. Reskinning was accomplished with Beech factory replacement skins, and the ruddervators were then painted with several layers of paint. This necessitated the installation of an additional one-pound (lead) weight on the outboard tip of each ruddervator to achieve correct control surface balance. Also, the pilot stated that he could not be sure whether the station 256.9 bulkhead was damaged in flight, or when the ruddervator contacted a hangar support beam as the airplane was being pushed in a hangar.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure (cracking) of the aft fuselage bulkhead for undetermined reason(s).

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: CRUISE

### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. FUSELAGE,BULKHEAD - CRACKED
3. EMPENNAGE - VIBRATION

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	39
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	698 hours (Total, all aircraft), 680 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N2839V
<b>Model/Series:</b>	35 35	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	A-1 AERO SALES OF SPOKANE	<b>Engine Manufacturer:</b>	Continental
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	E-185-11
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Unknown	<b>Condition of Light:</b>	Not Reported
<b>Observation Facility, Elevation:</b>	, 0 ft msl	<b>Weather Information Source:</b>	Pilot
<b>Lowest Ceiling:</b>	Unknown / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	/ ,
<b>Temperature:</b>		<b>Visibility</b>	0 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	, WA (SFF)	<b>Destination:</b>	COLVILLE, WA (63S)

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	GREGG NESEMEIER	<b>Adopted Date:</b>	09/30/1997
<b>Investigation Docket:</b>	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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