



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	CHEHALIS, WA	<b>Accident Number:</b>	SEA91LA227
<b>Date &amp; Time:</b>	09/01/1991, 1430 PDT	<b>Registration:</b>	N91736
<b>Aircraft:</b>	NORTH AMERICAN NAVION A	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

JUST AFTER RETRACTING THE GEAR ON TAKEOFF, THE PILOT HEARD A LOUD BANG IN THE ENGINE COMPARTMENT, AND EXPERIENCED A TOTAL LOSS OF ENGINE POWER. THE PILOT, WHO WAS APPROXIMATELY 200 FFET ABOVE THE RUNWAY WHEN THE ENGINE FAILED, MADE A FORCED LANDING JUST OFF THE END OF THE RUNWAY, DURING THE FLARE THE AIRCRAFT IMPACTED NUMEROUS YOUNG CHRISTMAS TREES. LATER INVESTIGATION REVEALED THAT THE NUMBER ONE PISTON CONNECTING ROD HAD FRACTURED.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: TOTAL LOSS OF ENGINE POWER ON INITIAL TAKEOFF CLIMB DUE TO THE FATIGUE FRACTURE OF THE NUMBER ONE PISTON CONNECTING ROD RESULTING IN A FORCED LANDING AND IN FLIGHT COLLISION WITH TREES.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) ENGINE ASSEMBLY,CONNECTING ROD - FATIGUE
2. (C) ENGINE ASSEMBLY,CONNECTING ROD - FRACTURED

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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

3. (F) OBJECT - TREE(S)

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	68
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	1146 hours (Total, all aircraft), 431 hours (Total, this make and model), 968 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	NORTH AMERICAN	<b>Registration:</b>	N91736
<b>Model/Series:</b>	NAVION A NAVION A	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	MILLIGAN, LEWIS D.	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	E185-9
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	, 0 ft msl	<b>Weather Information Source:</b>	Pilot
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	/ , 150°
<b>Temperature:</b>	21° C	<b>Visibility</b>	25 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>		<b>Destination:</b>	PORT ANGELES, WA (CLM)

## Airport Information

<b>Airport:</b>	CHEHALIS (CLS)	<b>Runway Surface Type:</b>	N/A
<b>Runway Used:</b>	33	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>	5000 ft / 150 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Destroyed
<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

Investigator In Charge (IIC): ORRIN K ANDERSON      Adopted Date: 05/27/1993

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](mailto: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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