



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	RYDERWOOD, WA	<b>Accident Number:</b>	SEA91FA027
<b>Date &amp; Time:</b>	11/30/1990, 1841 PST	<b>Registration:</b>	N400N
<b>Aircraft:</b>	AERO COMMANDER 690A	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	5 Fatal, 1 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

AS THE FLT WAS APCHG THE DESTN, AT NGT, THE PLT OBTAINED VECTORS FOR A DSCNT OVER MOUNTAINOUS TERRAIN. DURING THE APCH, HE CANCELLED THE IFR FLT PLAN & THE ACFT DSNDD BELOW RADAR COVERAGE. SUBSEQUENTLY, THE ACFT CRASHED IN MOUNTAINOUS TERRAIN, NORTHWEST OF THE DESTN ARPT. IMPACT OCCURRED IN A WOODED AREA AT AN ELEVATION OF ABOUT 2700 FT. THE ELT DID NOT ACTIVATE DURING THE ACDNT. A SEARCH WAS INITIATED ON 12/1/90, BUT THE ACFT & SURVIVING PASSENGER WERE NOT FND UNTIL THE NEXT DAY. THE CANADIAN ATP PLT & OTHER 4 PASSENGERS WERE FATALLY INJURED. AFTER INITIAL IMPACT WITH TREES, THE MAIN PORTION OF THE FUSELAGE TRAVELED ABOUT 1000 FT BEFORE COMING TO REST. NO PREIMPACT MECHANICAL PROBLEM 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 INFLIGHT PLANNING AND FAILURE TO MAINTAIN PROPER ALTITUDE IN MOUNTAINOUS TERRAIN AT NIGHT.

## Findings

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Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT

### Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) LIGHT CONDITION - DARK NIGHT
3. (F) TERRAIN CONDITION - MOUNTAINOUS/HILLY
4. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	47, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	07/26/1990
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	11714 hours (Total, all aircraft), 2647 hours (Total, this make and model), 10976 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AERO COMMANDER	<b>Registration:</b>	N400N
<b>Model/Series:</b>	690A 690A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	11156
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	7
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	10250 lbs
<b>Time Since Last Inspection:</b>	0 Hours	<b>Engines:</b>	2 Turbo Prop
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	GARRETT
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TPE-331
<b>Registered Owner:</b>		<b>Rated Power:</b>	717 hp
<b>Operator:</b>	AERO AIR	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	KLS, 17 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	1834 PST	Direction from Accident Site:	129°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 1200 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	KELSO, WA (KLS)	Type of Clearance:	IFR
Departure Time:	1754 PST	Type of Airspace:	

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	4 Fatal, 1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 Fatal, 1 Serious	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	DEBRA J ECKROTE	Report Date:	12/14/1992
Additional Participating Persons:	TOM SEIDLER; HILLSBORO, OR STEVE MACON; PHOENIX, AZ		
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](#).