



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	AUBURN, WA	<b>Accident Number:</b>	SEA94LA054
<b>Date &amp; Time:</b>	02/02/1994, 1500 PST	<b>Registration:</b>	N10717
<b>Aircraft:</b>	FOKKER DR-1	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

THE PILOT STATED THAT HE WAS IN CRUISE FLIGHT WHEN HE HEARD A LOUD BANG FROM THE TAIL AND THE AIRPLANE ENTERED A SPIN TO THE LEFT. THE PILOT REGAINED CONTROL AND INITIATED A FORCED LANDING NEAR AN AIRSTRIP WHERE THE AIRPLANE COLLIDED WITH TREES. THE PILOT REPORTED THAT THE RUDDER WAS BENT 90 DEGREES TO THE LEFT AND SUSPECTED THAT THE AIRPLANE HAD COLLIDED WITH A BIRD. A WITNESS REPORTED THAT HE OBSERVED THE AIRPLANE FLYING IN FORMATION WITH ANOTHER AIRPLANE WHEN A COLLISION OCCURRED. THE ACCIDENT AIRPLANE DESCENDED RAPIDLY, WHILE THE OTHER AIRPLANE CONTINUED OUT OF THE AREA AND WAS NOT IDENTIFIED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT FAILED TO MAINTAIN CLEARANCE WHILE MANEUVERING NEAR ANOTHER AIRPLANE.

## Findings

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Occurrence #1: MIDAIR COLLISION  
Phase of Operation: MANEUVERING

### Findings

1. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND  
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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: DESCENT - EMERGENCY

### Findings

2. OBJECT - TREE(S)

## Factual Information

On February 2, 1994, at 1500 Pacific standard time, a Fokker DR- 1, N10717, collided in flight with another airplane while maneuvering near Auburn, Washington. Visual meteorological conditions prevailed at the time and no flight plan was filed. The airplane was substantially damaged and the certificated Airline Transport pilot was not injured. The flight had originated from the Evergreen Skyranch private airstrip near Auburn, on February 2, 1994, at 1430, as a personal flight. The other airplane was not identified nor was there a report of another aircraft damaged at the time of the accident.

During a telephone interview and subsequent written statement, the pilot reported that after takeoff, he circled the airstrip several times and attained an altitude of approximately 2,000 feet above ground level. The airplane was leveled out and the pilot stated that he then heard a loud bang from the tail section. The airplane pitched up and entered a spin to the left. The pilot corrected with full right rudder, full right aileron control, and up elevator. The pilot was able to recover control of the airplane and reported that rudder control was not effective. The pilot headed back to the airstrip maintaining full right rudder and aileron control to maintain level flight. The pilot was unable to turn the airplane to the right without the airplane entering a left spin, so he set up for an off airport landing. The airplane collided with trees near the northeast end of the airstrip.

After the accident, the pilot reported that he found that all of the control cables were intact and functioning. The rudder was found bent over 90 degrees to the left and the leading edge was damaged. The pilot stated that "The rudder showed no sign of rust or old cracks at the failed joint. So I have to think that I may have had a collision with a large bird as there are many seen flying in this area."

An individual working in the area at the time of the accident reported that he heard the sound of airplanes overhead and looked up to see five small airplanes flying in formation and heading in a westerly direction. The witness noticed that one of the airplanes was red and had three wings. The witness reported that the other four airplanes were light colored or white. A short time later, the witness heard engine noise again and looked up to see only two airplanes flying in formation. One was the red airplane with three wings and the other was a slightly larger white airplane. The red airplane looked to be directly under the white airplane and both were very close to one another. The witness called to his co-workers to look at the two airplanes when the red airplane suddenly brought the nose up. The witness stated that "The other plane jerked a little - I am fairly certain that the 2 (two) planes actually made contact." The white airplane continued heading south and the red airplane started a rapid descent. The witness then lost sight of the airplane behind some trees.

## Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	67, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Center
<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 Single-engine; Instrument Airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Expired	<b>Last FAA Medical Exam:</b>	09/19/1991
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	18000 hours (Total, all aircraft), 200 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	FOKKER	<b>Registration:</b>	N10717
<b>Model/Series:</b>	DR-1 DR-1	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	421-17
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	08/10/1993, Annual	<b>Certified Max Gross Wt.:</b>	1000 lbs
<b>Time Since Last Inspection:</b>	3 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	230 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-290-G
<b>Registered Owner:</b>	FOKKER FLYING CLUB	<b>Rated Power:</b>	125 hp
<b>Operator:</b>	FOKKER FLYING CLUB	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SEA, 429 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	1450 PST	Direction from Accident Site:	300°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	7°C / 2°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1430 PST	Type of Airspace:	Class G

## Airport Information

Airport:	EVERGREEN SKY RANCH (51WA)	Runway Surface Type:	Grass/turf
Airport Elevation:	580 ft	Runway Surface Condition:	Dry
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	2650 ft / 75 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	DEBRA J ECKROTE	Report Date:	12/02/1994
Additional Participating Persons:	DON HAMILTON; RENTON, WA		
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](#).