



Aviation Investigation Final Report

Location:	CHELAN, Washington	Accident Number:	SEA91LA226
Date & Time:	September 1, 1991, 12:15 Local	Registration:	N4111K
Aircraft:	RYAN NAVION	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

JUST AFTER TAKE OFF, THE AIRPLANE ENCOUNTERED A DOWN DRAFT. THE PILOT LOWERED THE NOSE OF THE AIRPLANE TO INCREASE AIRSPEED AND MADE A RIGHT TURN PASSING OVER BUILDINGS, HANGARS, AND THE PARKING RAMP. THE AIRPLANE COMPLETED A 360 DEGREE TURN AND THE RIGHT WING CONTACTED THE RAMP. THE PILOT WAS ABLE TO CONTINUE TO FLY THE AIRPLANE AND RETURNED FOR LANDING WITHOUT FURTHER INCIDENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: POOR IN FLIGHT PLANNING/DECISION BY THE PILOT IN COMMAND. FACTORS TO THE ACCIDENT WERE: DOWN DRAFTS, PROPER ALIGNMENT WAS NOT MAINTAINED AND INADEQUATE REMEDIAL ACTION.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

- 1. (F) WEATHER CONDITION - DOWNDRAFT

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING

Findings

2. TERRAIN CONDITION - RUNWAY
3. (F) PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
4. (F) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND
5. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	25, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 22, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	135 hours (Total, all aircraft), 19 hours (Total, this make and model), 75 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RYAN	Registration:	N4111K
Model/Series:	NAVION NAVION	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	NAV-4-1111
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3233 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	O-470
Registered Owner:		Rated Power:	205 Horsepower
Operator:	DONALD V. HANKS	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	

Airport Information

Airport:	CHELAN S10	Runway Surface Type:	Asphalt
Airport Elevation:	1263 ft msl	Runway Surface Condition:	Dry
Runway Used:	2	IFR Approach:	None
Runway Length/Width:	3539 ft / 60 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	47.890178,-119.990798(est)

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	DICK HAMM; RENTON , WA
Original Publish Date:	May 27, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=41526

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).