



National Transportation Safety Board Aviation Accident Final Report

Location:	BERTHOUD, CO	Accident Number:	DEN86FA070
Date & Time:	02/01/1986, 1725 MST	Registration:	N46193
Aircraft:	CESSNA 152	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

STUDENT PLT RENTED ACFT FROM FLYING CLUB, ACFT WAS OBSERVED BY WITNESSES TO APPROACH THE LAKE FROM THE SOUTH END AT A LOW ALT. ACFT STRUCK WATER WITH RIGHT MAIN LND GEAR AND RT WING TIP, AND NOSED OVER. THE WATER WAS DESCRIBED AS BEING 'GLASSY' AND THE SUN HAD SET. THE STUDENT PLT HAS 57 HOURS TOTAL FLT TIME.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (C) LOW PASS - ATTEMPTED - PILOT IN COMMAND
3. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
4. (F) LIGHT CONDITION - DUSK
5. (C) BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND
6. (F) VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
7. (F) TERRAIN CONDITION - WATER, GLASSY

Factual Information

Pilot Information

Certificate:	Student	Age:	17, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	12/05/1984
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	57 hours (Total, all aircraft), 57 hours (Total, this make and model), 14 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N46193
Model/Series:	152 152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	15283013
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	12/13/1985, Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	35 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3018 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	DONALD ALPHIN	Rated Power:	110 hp
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	RAINBOW AVIATION	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	2° C
Precipitation and Obscuration:			
Departure Point:	BROOMFIELD, CO (BJC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1630 MST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	GREGORY A FEITH	Report Date:	
Additional Participating Persons:	CLIFTON PATTY; WICHITA, KS		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).