



National Transportation Safety Board Aviation Accident Final Report

Location:	RAWLINS, WY	Accident Number:	SEA97LA125
Date & Time:	06/01/1997, 2240 MDT	Registration:	N1233P
Aircraft:	Cessna 402C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

During the initial climb after takeoff, while executing a dark-night departure, the pilot failed to maintain clearance from rising terrain about one and one-quarter mile off the end of the runway. Operator records indicated that the pilot had flown out of this airport in the past, and that the aircraft was approximately 600 pounds below maximum certificated gross weight at the time of departure. A teardown inspection of both engines revealed no pre-impact anomalies, and visual and teardown inspections of the propellers showed damage signatures consistent with ground contact in a flat pitch under significant power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance from the terrain during the initial climb after a night takeoff. Factors include a dark night and rising terrain off the departure end of the runway.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) LIGHT CONDITION - DARK NIGHT
2. (F) TERRAIN CONDITION - RISING
3. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On June 1, 1997, approximately 2240 mountain daylight time, a Cessna 402C, N1233P, impacted the terrain just after takeoff from Rawlins Municipal Airport, Rawlins, Wyoming. The airline transport pilot, who was the sole occupant, received serious injuries, and the aircraft, which was owned and operated by Casper Air Service, sustained substantial damage. The 14 CFR Part 135 cargo flight was departing for Riverton, Wyoming, and was being operated in visual meteorological conditions on a dark night. The pilot had filed an IFR flight plan.

According to an FAA inspector who arrived at the scene the day after the accident, the aircraft impacted 200 foot high terrain about one and one-quarter mile off the end of runway 04, while making a VFR dark-night departure. Both propellers made a number of equally-spaced slash marks in the surface of the ground, and an inspection of the flight control system continuity showed no pre-impact anomalies. Both the flaps and the landing gear were in the up position. During the investigation, both engines and both propellers were subjected to teardown inspections. Except for impact damage, both engines and their fuel systems exhibited normal operational signatures throughout, with all components appearing well lubricated, and all magnetos producing a bright blue spark across a seven millimeter spark gap. The propeller blade visual inspections and the propeller hub teardown inspections revealed damage signatures consistent with ground impact in a flat pitch under significant power.

Records provided by the operator indicate that the pilot had flown out of this airport in the past, and that at the time of departure, the aircraft was approximately 600 pounds below maximum certificated gross weight. As of the date of the last investigative interview, the pilot has been unable to remember the sequence of events leading up to the crash.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	43, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/21/1996
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	13000 hours (Total, all aircraft), 4000 hours (Total, this make and model), 11500 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 36 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1233P
Model/Series:	402C 402C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	402C-0804
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	05/13/1997, Annual	Certified Max Gross Wt.:	7210 lbs
Time Since Last Inspection:	33 Hours	Engines:	2 Reciprocating
Airframe Total Time:	7674 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO520-VB
Registered Owner:	CASPER FLYING SERVICE	Rated Power:	325 hp
Operator:	CASPER FLYING SERVICE	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	CASPER AIR SERVICE	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 5000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21° C
Precipitation and Obscuration:			
Departure Point:	(RWL)	Type of Flight Plan Filed:	IFR
Destination:	RIVERTON, WY (RIW)	Type of Clearance:	
Departure Time:	2240 MDT	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	ORRIN K ANDERSON	Report Date:	04/24/1998
Additional Participating Persons:	CARROLL DYESS; CASPER, WY		
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 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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