

Aviation Investigation Final Report

Location: Mitchell, South Dakota Accident Number: CHI01LA086

Date & Time: February 7, 2001, 14:55 Local Registration: N10ET

Aircraft: Cessna 310Q Aircraft Damage: Substantial

Defining Event: 4 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

During cruise flight the aircraft encountered icing-conditions and the pilot elected to divert to a near-by airport. During the landing attempt, the aircraft slid into a snowbank, resulting in substantial damage to the aircraft. The pilot stated, "Trying to get on top after being cleared to 14,000 msl I decided it was better [to] land. Clearance was given for VOR 12 [instrument] approach at Mitchell S.D. [Mitchell Municipal Airport]. Due to poor forward visibility due to ice on the windshield, I landed on a very icy runway and slid into plowed snow, causing damage [to] the plane." According to records provided from the Federal Aviation Administration (FAA) records from Huron Automated Flight Service Station, the pilot had received a standard weather briefing prior to the accident flight. According to a transcript of the weather briefing, the Huron-AFSS briefer informed the pilot that there was, "moderate rime or mixed icing in clouds and in precipitation below flight level one eight zero for your entire route". At the completion of the standard weather briefing the pilot filed an instrument flight plan for a flight from Sioux Falls to Rapid City. Postaccident investigation of the airplane revealed a placard located on the instrument panel that stated, "Warning - Not Certified For Flight Into Known leing Conditions".

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot disregarded the aircraft limitation placard, and attempted flight into known adverse weather after receiving a hazardous weather advisory. Factors to the accident were the ice-covered cockpit windshield, the ice-covered runway, and the snowbank.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE - NORMAL

Findings

1. (F) WEATHER CONDITION - ICING CONDITIONS

2. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - ATTEMPTED - PILOT IN COMMAND

- 3. (C) UNSAFE/HAZARDOUS CONDITION WARNING DISREGARDED PILOT IN COMMAND
- 4. (C) HAZARDOUS WEATHER ADVISORY DISREGARDED PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

5. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ICY 6. (F) WINDOW, FLIGHT COMPARTMENT WINDOW/WINDSHIELD - ICE

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

7. (F) TERRAIN CONDITION - SNOWBANK

Page 2 of 6 CHI01LA086

Factual Information

On February 7, 2001, at 1455 central standard time, a Cessna 310Q, N10ET, piloted by a private pilot, sustained substantial damage during landing roll when the airplane slid off runway 12 (6,700 feet by 100 feet, ice-covered/asphalt) at the Mitchell Municipal Airport, Mitchell, South Dakota. Instrument meteorological conditions prevailed at the time of the accident. The personal flight was operating under the provisions of 14 CFR Part 91 and was on an active instrument flight plan. The pilot and his three passengers reported no injuries. The flight had departed from the Joe Foss Field Airport, Sioux Falls, South Dakota, at 1406.

According to the pilot's written statement, he was en route from Sioux Falls to Rapid City when he encountered icing-conditions at 6,000-feet mean sea level (msl). The pilot reported, "Trying to get on top after being cleared to 14,000 msl I decided it was better [to] land. Clearance was given for VOR 12 [instrument] approach at Mitchell S.D. [Mitchell Municipal Airport]. Due to poor forward visibility due to ice on the windshield, I landed on a very icy runway and slid into plowed snow, causing damage [to] the plane."

According to records provided from the Federal Aviation Administration (FAA) records from Huron Automated Flight Service Station, the pilot had received a standard weather briefing prior to the accident flight. According to a transcript of the weather briefing, the Huron-AFSS briefer informed the pilot that there was, "moderate rime or mixed icing in clouds and in precipitation below flight level one eight zero for your entire route". At the completion of the standard weather briefing the pilot filed an instrument flight plan for a flight from Sioux Falls to Rapid City. A copy of the transcript is appended to this factual report.

Postaccident investigation of the airplane revealed a placard located on the instrument panel that stated, "Warning - Not Certified For Flight Into Known Icing Conditions". A photo of the placard is appended to this factual report.

Page 3 of 6 CHI01LA086

Pilot Information

Certificate:	Private	Age:	46,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	March 12, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	May 1, 1999
Flight Time:	1674 hours (Total, all aircraft), 1038 hours (Total, this make and model), 1543 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N10ET
Model/Series:	310Q	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310Q0415
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	June 25, 2000 Annual	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:	45.9 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3956.4 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-420-V0
Registered Owner:	On file	Rated Power:	260 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None
Operator:	On file		None

Page 4 of 6 CHI01LA086

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	MHE,1304 ft msl	Distance from Accident Site:	
Observation Time:	14:59 Local	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	2.5 miles
Lowest Ceiling:	Overcast / 1000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	18 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	-5°C / -6°C
Precipitation and Obscuration:	Light - Freezing - Rain		
Departure Point:	SIOUX FALLS, SD (FSD)	Type of Flight Plan Filed:	IFR
Destination:	Mitchell, SD (MHE)	Type of Clearance:	IFR
Departure Time:	14:06 Local	Type of Airspace:	Class E

Airport Information

Airport:	MITCHELL MUNICIPAL AIRPORT MHE	Runway Surface Type:	Asphalt;Ice
Airport Elevation:	1304 ft msl	Runway Surface Condition:	Snow
Runway Used:	12	IFR Approach:	VOR
Runway Length/Width:	6700 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	43.73093,-98.029541(est)

Page 5 of 6 CHI01LA086

Administrative Information

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.

Page 6 of 6 CHI01LA086