National Transportation Safety Board Washington, DC 20594

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Brief of Accident

Adopted 11/22/2011

WPR10FA397

File No. 29062 08/11/2010 Burns, OR Aircraft Reg No. N500FV Time (Local): 08:55 PDT Make/Model: Aero Commander / 500-B Fatal Serious Minor/None Engine Make/Model: Cont Motor / IO-470 SERIES Crew 0 1 0 Aircraft Damage: Substantial Pass 0 0 1 Number of Engines: 2 Operating Certificate(s): None Type of Flight Operation: Personal Reg. Flight Conducted Under: Part 91: General Aviation Last Depart. Point: Redding, WA Condition of Light: Day Destination: Butte, MT Weather Info Src: Witness Airport Proximity: Off Airport/Airstrip Basic Weather: Visual Conditions Lowest Ceiling: 4000 Ft. AGL, Overcast Visibility: 10.00 SM Wind Dir/Speed: Temperature (°C): Unk/Nr Precip/Obscuration: Moderate - Thunderstorms - Rain; No. Obscuration Pilot-in-Command Age: 58 Flight Time (Hours) Certificate(s)/Rating(s) Total All Aircraft: 1360 Private; Multi-engine Land; Single-engine Land Last 90 Days: Unk/Nr Total Make/Model: Unk/Nr Total Instrument Time: UnK/Nr Instrument Ratings None

*** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***

The evening prior to the accident, the pilot acquired a computer generated text weather briefing. On the day of the accident, the pilot acquired another computer generated text weather briefing, and then contacted the Flight Service Station (FSS) for an interactive telephonic weather briefing. The information provided in all three briefings indicated that a flight on a direct route between the pilot's point of departure and his planned destination would take him through an area of forecast rain showers, thunderstorms, and cloud tops significantly higher than his intended en route altitude. Although the FSS briefer recommended an alternate route, for which he provided weather information, after departure the pilot flew directly toward his destination airport. While en route, the pilot, who was not instrument rated, encountered instrument meteorological conditions, within which there was an 80 percent probability of icing. After entering the area of instrument meteorological conditions, the airplane was seen exiting the bottom of an overcast cloud layer with a significant portion of its left wing missing. It then made a high velocity steep descent into the terrain. A postaccident inspection of the airplane's structure did not find any evidence of an anomaly that would contribute to the separation of the wing structure, and it is most likely that the wing section separated as a result of the airplane exceeding its structural limitations after the pilot lost control in the instrument meteorological conditions.

Updated at Nov 22 2011 2:18PM

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08/11/2010

Burns, OR

Aircraft Reg No. N500FV

Time (Local): 08:55 PDT

OCCURRENCES

Enroute-cruise - VFR encounter with IMC Enroute-cruise - Loss of control in flight Uncontrolled descent - Aircraft structural failure Uncontrolled descent - Collision with terr/obj (non-CFIT)

FINDINGS

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Capability exceeded
Aircraft-Aircraft structures-Wing structure-(general)-Capability exceeded
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C
Environmental issues-Conditions/weather/phenomena-Ceiling/visibility/precip-Clouds-Contributed to outcome

Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to structural icing-Effect on equipment

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - C

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The non-instrument rated pilot's improper decision to continue flight into an area of known instrument meteorological conditions and his failure to maintain control of the airplane after entering those conditions.