



# National Transportation Safety Board

## Aviation Accident Data Summary

<b>Location:</b>	Daggett, CA	<b>Accident Number:</b>	WPR11FA173
<b>Date &amp; Time:</b>	03/20/2011, 1234 PDT	<b>Registration:</b>	N50MC
<b>Aircraft:</b>	CESSNA P210	<b>Injuries:</b>	3 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

### Analysis

About 4 hours before the pilot's planned first leg of her return flight home, AIRMETs for instrument flight rules (IFR) and mountain obscuration conditions, moderate turbulence, and moderate icing were issued for the flight track region and timeframe. About 1 hour before the flight, the Federal Aviation Administration (FAA) issued a center weather advisory (CWA) that warned of moderate-to-severe turbulence. There were no records that the pilot obtained a formal weather briefing. According to the pilot's husband, the pilot typically obtained preflight weather information from "aviationweather.gov," but the website does not retain records of user access. A friend of the pilot reported that the pilot was aware that "a storm was coming" into southern California on the day she was leaving, but the friend was unaware of the pilot's specific pre-flight activities or preparations. The investigation was unable to determine whether or how the pilot obtained weather information regarding her planned flight. About 5 minutes after departure on the IFR flight, a second CWA for moderate to severe turbulence for the flight track region and timeframe was issued.

The flight proceeded uneventfully until an air traffic controller advised the pilot of a report of light rime icing at her altitude. The controller then broadcast an all-aircraft advisory regarding the issuance (but not content) of the second CWA and instructed pilots to contact flight service for further information. It could not be determined whether the pilot obtained any specific information regarding the CWA, but she did not request to go off frequency to contact flight service. However, she requested a higher altitude in an apparent effort to avoid the reported rime icing. About 2 minutes later, the flight was cleared to 15,000 feet, and several minutes after that, the pilot reported breaking out of the clouds at 13,300 feet. Later, an air traffic controller advised the pilot of a re-route, and she reported that she had encountered moderate turbulence at 15,000 feet. About 3 minutes after that, radar data indicated that the airplane was descending at nearly 12,000 feet per minute and, very shortly thereafter, the airplane was lost from air traffic control radio and radar contact.

Several ground eyewitnesses reported observing the airplane in a spin and in a vertical trajectory toward the ground, in an area where the local ceiling was about 12,000 feet above ground level. Although the airplane was substantially damaged by postcrash fire, the evidence indicated that the airplane impacted the ground in an aerodynamic spin. The investigation was unable to determine the specific reasons for the loss of control and resulting aerodynamic spin. Postaccident examination of the engine, propeller, and airframe did not reveal any preexisting mechanical deficiencies or failures that would have precluded normal operation or continued flight.

The airplane aerodynamic configuration and weight distribution were significantly modified via several supplemental type certificates (STCs) relative to the original FAA-certificated configuration. Neither the FAA nor any of the STC holders evaluated the individual or combined effects of the STC changes on the airplane's spin susceptibility, characteristics, or recovery capability. Evaluation of the mass properties of the modified airplane indicated that it would be more resistant to spin recovery than it would be as originally configured. However, the investigation was unable to determine if this played a role in the pilot's inability to recover from the aerodynamic spin. On May 24, 2012, the NTSB issued Safety Recommendations A-12-21 through -23 to the FAA to address the potential adverse

effects on an airplane's performance and structure if it has multiple STCs that are not properly analyzed for compatibility.

Toxicological testing by the FAA Civil Aeronautical Medical Institute detected Nortriptyline in the pilot's liver. This is a prescription antidepressant used in the treatment of major depression and for certain chronic pain conditions; it is not normally used for intermittent pain. The pilot did not report the medication during her FAA medical certification examination or on her medical certificate application; pilots taking this medication are not eligible for FAA medical certification. A warning associated with this medication stated that it may impair mental and/or physical ability required for the performance of potentially hazardous tasks. However, the degree to which the pilot may have been impaired from the medication could not be determined.

## Flight Events

Enroute-cruise - Unknown or undetermined

Uncontrolled descent - Unknown or undetermined

## Probable Cause

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

The pilot's decision to conduct the flight into a region of reported moderate to severe turbulence and icing conditions, followed by a loss of airplane control and an aerodynamic spin from which the pilot did not recover.

## Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Configuration-Not specified  
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C  
Environmental issues-Conditions/weather/phenomena-Turbulence-Convective turbulence-Effect on operation

Environmental issues-Conditions/weather/phenomena-(general)-(general)-Effect on operation  
Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to structural icing-Not specified

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	37
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	1100 hours (Total, all aircraft), 400 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N50MC
<b>Model/Series:</b>	P210 Silver Eag	<b>Engines:</b>	1 Turbo Prop
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	Rolls Royce
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	250
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	DAG, 1930 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>		<b>Wind Speed/Gusts, Direction:</b>	5 knots / , 80°
<b>Temperature:</b>	16° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Santa Ana, CA (SNA)	<b>Destination:</b>	Henderson, NV (HDN)

## Airport Information

<b>Airport:</b>	Barstow Daggett (DAG)	<b>Runway Surface Type:</b>	
<b>Runway Used:</b>	N/A	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>			

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Fatal	<b>Aircraft Fire:</b>	On-Ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>	34.828611, -116.791111		

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Michael C Huhn	<b>Adopted Date:</b>	05/30/2013
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78598">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78598</a>		

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