



National Transportation Safety Board Aviation Accident Final Report

Location:	Avalon, CA	Accident Number:	WPR10FA324
Date & Time:	07/01/2010, 1300 PDT	Registration:	N222CG
Aircraft:	CESSNA 182P	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

While on approach to land, the pilot reported over the UNICOM frequency that he was not able to feel his left side. Subsequently, the airplane crashed about 2 miles from the airport. A postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. Although diphenhydramine, an impairing medication, was detected in the pilot's liver and brain, the available information does not allow a determination of postmortem levels. The autopsy findings noted severe coronary artery disease of the left and right coronary arteries. It is likely that the pilot suffered an incapacitating heart attack while in flight, which led to a loss of airplane control.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's incapacitation due to a heart attack, which resulted in a loss of airplane control.

Findings

Personnel issues	Cardiovascular - Pilot (Cause) Aircraft control - Pilot (Cause)
Environmental issues	Sloped/uneven terrain - Not specified

Factual Information

HISTORY OF FLIGHT

On July 1, 2010, about 1300 Pacific daylight time, a Cessna 182P, N222CG, impacted terrain about 2 miles northeast of Catalina Airport (AVX), Avalon, California. The pilot was fatally injured and the airplane was substantially damaged in the post-impact fire. The pilot/owner operated the airplane under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight that departed the Gillespie Airport (SEE), San Diego, California, at an undetermined time. The airplane was destined for Catalina, and no flight plan had been filed.

According to the airport manager, who was monitoring the airport's UNICOM frequency at the time, the pilot reported no feeling on his right side and that he thought he was having a heart attack. The airport manager reported no further communications with the pilot. Shortly after the pilot radioed that he was having a medical issue, smoke was observed by one of the conservancy park rangers near Echo Lake. Responding personnel from the Los Angeles County fire department reported an airplane crash with an ensuing 20-acre fire.

A Federal Aviation Administration (FAA) inspector responded to the accident site the following day. He reported that the main wreckage came to rest on about a 45-degree slope and appeared to have tumbled as the wings were in their normal relative position, but upside down. He stated that both wings, a portion of the tail section, and the engine were not consumed by the post impact fire.

PERSONNEL INFORMATION

A review of Federal Aviation Administration (FAA) airman records revealed that the 54-year-old pilot held a private pilot certificate with ratings for airplane single-engine land, which he received on October 18, 2007.

The pilot held a third-class medical certificate issued on May 6, 2009. It had the limitations that the pilot must wear lenses for distant vision.

An examination of the pilot's logbook revealed that the pilot had recorded a total flight time of 702.2 hours. He logged 16.7 hours in the last 90 days, and 0 hours in the last 30 days. He had an estimated 131 hours in the accident airplane make and model, and had completed a flight review on October 13, 2009.

AIRCRAFT INFORMATION

Investigators were not able to locate the airplane's logbooks. They were, however, able to obtain copies of the most current inspections from the maintenance facility that had performed the last annual inspection on February 18, 2010. The airplane, a Cessna 182P serial number 18263934, had a total time of 1,697.3 hours. The total time since major overhaul for the Continental O-470-S2K engine, serial number 819162-R, was 220.5 hours. Total time for the McCauley propeller 2A34C203-C, serial number 982234, was 441.7 hours (time since new).

MEDICAL AND PATHOLOGICAL INFORMATION

The Department of Coroner, County of Los Angeles, completed an autopsy on July 3, 2010. The FAA Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, performed toxicological testing of specimens from the pilot.

The autopsy noted severe coronary atherosclerosis 90-percent narrowing of the right and left coronary arteries, and soot in the upper and lower airways. The Forensic Science Laboratory detected less than 0.50 ug/ml of diphenhydramine. The cause of death was listed as traumatic injury with thermal burns; other conditions contributing to, but not related to the immediate cause of death was listed as occlusive coronary arteriosclerosis.

Analysis of the specimens for the pilot detected diphenhydramine in the liver and brain. There was no ethanol detected in volatiles test. They did not perform tests for carbon monoxide or cyanide.

TESTS AND RESEARCH

Examination of the wreckage revealed that fire had consumed most of the airplane's structure. The cabin floor where the main gear attached was the largest identifiable portion of the cabin.

Recovery personnel reported having to cut all of the control cables to facilitate the recovery of the airplane. The aileron control cables were connected to each aileron bellcrank and the control column. The rudder cables were attached to the rudder horn and the rudder pedal bars. The elevator cables were attached to the rear elevator bellcrank.

Investigators noted that the fuel system had been consumed by the post-impact fire. The fuel selector valve and handle were not located. The fuel strainer screen was clear of debris. They were not able to determine the ignition switch position.

The engine sustained significant fire damage. Portions of all valve covers were melted. The cylinder head for the number 5 cylinder was melted. The top of the crankcase had melted away; consequently investigators were not able to rotate the engine. The right magneto had partially melted away, and the carburetor was found in multiple pieces.

The two-bladed propeller remained attached to the propeller hub. One propeller blade had melted off near the hub. The other propeller blade was bent aft and exhibited scrape marks along its forward side and had leading edge damage.

The inspection of the airframe and engine revealed no abnormalities that would have prevented normal operation.

History of Flight

Approach	Miscellaneous/other (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	53, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	05/06/2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	10/13/2009
Flight Time:	702 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N222CG
Model/Series:	182P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18263934
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	02/18/2010, Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Not installed	Engine Model/Series:	O-470 SERIES
Registered Owner:	On file	Rated Power:	230
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	LGB, 60 ft msl	Observation Time:	1253 PDT
Distance from Accident Site:	28 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	60°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	21° C / 16° C
Lowest Ceiling:	None	Visibility	5 Miles
Wind Speed/Gusts, Direction:	8 knots, 190°	Visibility (RVR):	
Altimeter Setting:	29.85 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	Haze; No Precipitation		
Departure Point:	San Diego, CA (SEE)	Type of Flight Plan Filed:	None
Destination:	Avalon, CA (AVX)	Type of Clearance:	None
Departure Time:	PDT	Type of Airspace:	

Airport Information

Airport:	Catalina Airport (AVX)	Runway Surface Type:	
Airport Elevation:	1602 ft	Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal		

Administrative Information

Investigator In Charge (IIC):	Tealeye Cornejo	Adopted Date:	09/30/2013
Additional Participating Persons:	George Mahurin; Federal Aviation Administration; Long Beach, CA		
Publish Date:	09/30/2013		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=76522		

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.