



Aviation Investigation Final Report

Location:	WILDWOOD, New Jersey	Accident Number:	NYC97LA136
Date & Time:	July 6, 1997, 19:30 Local	Registration:	N97011
Aircraft:	Cessna 172P	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After a 1 hour cruise flight, the pilot established a straight in approach to the landing runway. The pilot set the flaps to 10 degrees, the carburetor heat on, and noticed he was 'slightly low for landing.' He then increased the throttle, but there was no increase in power. According to the pilot at this point he checked that the primer was in and the mixture was full rich. The pilot added that he realized he was not going to make the runway, so he started to look for an alternate landing area. The airplane then struck a tree, and came to rest in a pond. Fuel was found in the wing tanks, and a post accident run of the engine was satisfactory. A carburetor icing chart revealed the conditions were conducive for moderate icing for cruise power, and serious icing for glide power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate use of carburetor heat, which resulted in carburetor icing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. (C) CARBURETOR HEAT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. OBJECT - TREE(S)

Factual Information

On July 6, 1997, at 1930 eastern daylight time, a Cessna 172P, N97011, was substantially damaged when it impacted trees during an emergency landing at the Cape May County Airport (WWD), Wildwood, New Jersey. The certificated private pilot was not injured. Visual meteorological conditions prevailed for the flight that departed Caldwell, New Jersey, about 1830, destined for WWD. No flight plan was filed for the personal flight conducted under 14 CFR Part 91.

In the NTSB form 6120.1/2, the pilot stated that he choose a straight in approach to Runway 28 at WWD. The pilot set the flaps to 10 degrees, the carburetor heat on, and noticed he was "slightly low for landing." He then increased the throttle, but there was no increase in power. According to the pilot at this point he check that the primer was in and the mixture was full rich. The pilot added that he realized he was not going to make the runway, so he started to look for an alternate landing area. The pilot observed a "slight" clearing about 300 feet short of the runway. At 80 feet AGL, the propeller came to a complete stop, the stall horn sounded, and the left gear and wing struck a tree at the edge of the clearing. The impacted rotated the airplane 45 degrees left before it impacted the water just short of the runway environment.

In a telephone interview the Chief of the New Jersey Department of Transportation, Bureau of Inspection and Aircraft Operation, he stated that the environmental protection agency recovered approximately 15 gallons of fuel while cleaning up the accident site.

Examination, and operational testing of the engine was preformed after water was drained from the carburetor. The engine was then operated to 1700 RPM, and both magnetos dropped 100 RPM when tested.

A weather sequence report from WWD, at 1940, listed the visibility as 10 miles, with the temperature at 74 degrees and the dewpoint at 63 degrees. A carburetor icing chart found in an FAA publication, Tips on Winter Flying was examined. The point where a temperature of 73 degrees, and dewpoint of 64 degrees intersected on the chart, was listed as "moderate icing - cruise power or serious icing - glide power."

Pilot Information

Certificate:	Private	Age:	27, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 14, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	192 hours (Total, all aircraft), 115 hours (Total, this make and model), 123 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N97011
Model/Series:	172P 172P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17276145
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	April 9, 1997 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	7319 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	AIRMAN LEASING CORP.	Rated Power:	160 Horsepower
Operator:	CALDWELL FLIGHT ACADEMY	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	WWD ,23 ft msl	Distance from Accident Site:	
Observation Time:	19:40 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CALDWELL (CDW)	Type of Flight Plan Filed:	None
Destination:	(WWD)	Type of Clearance:	None
Departure Time:	18:15 Local	Type of Airspace:	Class D

Airport Information

Airport:	CAPE MAY COUNTY AIRPORT WWD	Runway Surface Type:	Asphalt
Airport Elevation:	22 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	4998 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Muzio, David
Additional Participating Persons:	RICHARD HECKENBERGER; PHILADELPHIA , PA
Original Publish Date:	January 28, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=39395

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](#).