



Aviation Investigation Final Report

Location:	BUTLER, Pennsylvania	Accident Number:	BF094FA021
Date & Time:	November 28, 1993, 16:10 Local	Registration:	N707JS
Aircraft:	PIPER PA32R-301	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PRIVATE PILOT, WITH TWO HOURS OF ACTUAL INSTRUMENT TIME ACCORDING TO HIS LOG BOOK, HAD DEPARTED UNDER VFR CONDITIONS. UPON HIS RETURN TO HIS DESTINATION, HE ENCOUNTERED INSTRUMENT METEOROLOGICAL CONDITIONS (IMC). THERE WERE SEVERAL WITNESSES WHO HEARD THE AIRPLANE OVERFLY THEIR HOMES AT A LOW ALTITUDE. SOME OF THE WITNESSES STATED THAT IT WAS SNOWING HEAVILY, AND THEY WERE UNABLE TO SEE THE AIRPLANE DUE TO THE LOW VISIBILITY. THE PILOT CONTACTED PITTSBURGH APPROACH CONTROL AND WAS RECEIVING VECTORS FOR THE ILS RUNWAY 8 APPROACH WHEN RADAR CONTACT WAS LOST. RADAR DATA OBTAINED FROM THE AIR ROUTE TRAFFIC CONTROL CENTER SHOWED THE AIRPLANE MAKING SEVERAL CIRCLES. THE AIRPLANE STRUCK A 50 FOOT TALL TREE BEFORE COLLIDING WITH A RESIDENTIAL HOUSE AND WAS CONSUMED BY FIRE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADVERTENT FLIGHT INTO IMC CONDITIONS AND HIS FAILURE TO MAINTAIN PROPER ALTITUDE. THE WEATHER CONDITIONS WERE A FACTOR.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (F) WEATHER CONDITION - LOW CEILING
2. (F) WEATHER CONDITION - FOG
3. (F) WEATHER CONDITION - SNOW
4. (C) VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

5. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
6. OBJECT - TREE(S)
7. OBJECT - RESIDENCE

Factual Information

HISTORY OF FLIGHT

On Sunday, November 28, 1993, about 1610 eastern standard time, N707JS, a Piper PA32R-301, collided with a tree and a house during an ILS approach about 5 miles southeast of the Butler County Airport, Butler, Pennsylvania. The airplane was being operated by the pilot/owner. Instrument meteorological conditions prevailed and a flight plan was not filed. The certificated private pilot, the sole occupant, was fatally injured. The airplane was destroyed. The local, personal flight was conducted under 14 CFR 91, and originated in Butler, Pennsylvania at an undetermined time.

According to witnesses, the pilot departed earlier the afternoon of the accident for the local flight. The witnesses further reported that visual meteorological conditions prevailed at the time of the departure. According to the witnesses and weather information provided by the FAA, instrument meteorological conditions existed during the pilot's instrument approaches and at the time of the accident.

According to recorded communications between the pilot and FAA controllers, the pilot first contacted Pittsburgh Approach about 15 miles east of the airport. The air traffic controller advised the pilot that the leading edge of the weather was about 6 to 8 miles west of the airport. About 3 miles from the airport, the controller advised the pilot that radar service was terminated. At that time, the pilot said he was in the clouds and requested to remain under ATC control. The controller provided radar vectors and cleared the pilot for an ILS approach. The pilot did not report that he had landed. The controller attempted to re-establish radio contact with the pilot. When communications were re-established, the pilot was provided with vectors for a second ILS approach. The controller cleared the pilot for the approach and during the approach, radar contact and radio communications were lost.

Radar data recorded at the FAA Pittsburgh Air Route Traffic Control Center (ARTCC) were obtained for the accident aircraft. The radar data provide the latitude, longitude, and the altitude of the airplane. The radar data indicate the airplane's headings and altitude were "erratic" during this phase of flight. Details of the study are attached to this report.

Several witnesses in the vicinity of the accident site were interviewed. One of the witnesses reported that it was snowing heavily with low visibility. She stated that she did not see the airplane, but "it sounded like a chain saw with the power surging off and on." Other witnesses reported that they hear airplanes fly over their homes frequently, but this one was so low that it "shook the house." The airplane struck a 50 foot tree initially before colliding with a house. The house and airplane were destroyed as a result of the collision and a post-impact fire.

The accident occurred during the hours of darkness about 40 degrees 46 minutes north latitude and 80 degrees 5 minutes west longitude.

PERSONNEL INFORMATION

The pilot held a private pilot certificate with single and multi-engine land ratings and instrument rating. According to the pilot's log book, he had logged over 3792 hours of total flight time including 2 hours of actual instrument flight time.

AIRCRAFT INFORMATION

The 1985 year model Piper PA-32R-301 airplane, serial no. 32R- 8513014 was equipped with a Lycoming IO-540-K1G5D engine, serial no. L-22750-48A. According to the last repair order the airplane had accumulated over 1080 hours of total flight time. This time was recorded on the last work order. The last 100 hour inspection was completed on July 12, 1993. The aircraft and engine log books were not located.

METEOROLOGICAL INFORMATION

The 1616 hours surface weather observation for Butler County Airport, about 5 miles northeast of the accident site was as follows:

"Ceiling, 500 feet obscured; visibility, one half mile in fog and blowing snow; temperature, 33 degrees (F); dew point, 29 degrees (F); wind condition, 250 degrees at 8 knots gusting to 17 knots; and altimeter 29.78 inches."

WRECKAGE AND IMPACT INFORMATION

The aircraft struck a 50 foot tree initially before colliding with the house. The right wing, with its respective landing gear, was located about 10 feet from the main wreckage. Examination of the brake assembly of the right main gear contained fragments of tree bark. The wreckage was oriented on a 100 degree magnetic bearing and was located in the basement of the house. The airplane was destroyed by fire.

Examination of the wreckage was not possible due to fire damage. The house collapsed on top of the airplane and it was also destroyed by fire. After portions of the house were removed to access the airplane, the remains of the airplane were retrieved from the basement. Sections of the fuselage, stabilizer, and the engine were removed. The propeller hub separated from the engine. One of the propeller blades separated from the hub.

The engine was removed to the Butler County Airport on November 29, 1993. Examination of the engine was completed on November 30, 1993. The examination revealed that all six cylinders remained attached to the crankcase. All the engine accessories were destroyed by fire. The number two cylinder was removed, as well as the bottom six spark plugs. Removal of

the cylinder revealed its piston was intact. Due to the damage of the engine no further tests could be performed.

MEDICAL AND PATHOLOGICAL INFORMATION

A medical and toxicological examination were not performed.

ADDITIONAL INFORMATION

The wreckage was released to Kyle D. Moore, the Claims Manager for the pilot's insurance company on November 30, 1993.

Pilot Information

Certificate:	Private	Age:	79, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	November 23, 1992
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3792 hours (Total, all aircraft), 1050 hours (Total, this make and model), 3428 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N707JS
Model/Series:	PA32R-301 PA32R-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R-8513014
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	July 12, 1993 100 hour	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1100 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540-K1G5D
Registered Owner:	ARMSTRONG TELEPHONE CO.	Rated Power:	300 Horsepower
Operator:	ARMSTRONG TELEPHONE CO.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	BTP ,1248 ft msl	Distance from Accident Site:	
Observation Time:	16:19 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown / 500 ft AGL	Visibility	0.5 miles
Lowest Ceiling:	500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	1°C / -2°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	IFR
Departure Time:	00:00 Local	Type of Airspace:	Class D;Class E

Airport Information

Airport:	BUTLER COUNTY BTP	Runway Surface Type:	Asphalt
Airport Elevation:	1248 ft msl	Runway Surface Condition:	
Runway Used:	8	IFR Approach:	ILS
Runway Length/Width:	4005 ft / 100 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	On-ground
Total Injuries:	1 Fatal	Latitude, Longitude:	40.760456,-80.050079(est)

Administrative Information

Investigator In Charge (IIC):	Drake, Beverley
Additional Participating Persons:	DAN FLETCHER; WILLIAMSPORT , PA JEFF HALLIDAY; ALLEGHENY , PA
Original Publish Date:	October 20, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=8836

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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](#).