

# **Aviation Investigation Final Report**

Location:	PRESTON, Minneso	ta	Accident Number:	CHI01LA042
Date & Time:	November 26, 2000	, 10:00 Local	<b>Registration:</b>	N713HM
Aircraft:	Aerostar	PA-60-601P	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal			

### Analysis

During initial climb after takeoff, the pilot noticed that the airspeed indicator was not increasing past 112-115 mph. The pilot reported that he lowered the nose of the airplane to increase airspeed, but no response was noted on the airspeed indicator. The pilot stated that the airplane made contact with a tree line located at the end of the runway, causing substantial damage to the airplane. The pilot reported, "I pulled up sharply, but clipped the tops of the trees, the airspeed was still at 115 MPH IAS [Indicated Airspeed] with 12+ degrees nose up, and the airplane climbing rapidly. I then looked at the GPS [Global Positioning System] ground speed read out, and realized that it was at 140 KTS [Knots]. After assessing things, it became obvious that airspeed was not reading correctly." The pilot stated, "I had a problem six weeks ago with a mud dauber wasp building a nest in the pitot tube, but this had been cleared out, and the aircraft flown several times since."

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: altitude/clearance from the trees not being obtained/maintained by the pilot. Factors to the accident were the trees and the contamination of the pitot/static system.

#### **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: TAKEOFF - INITIAL CLIMB Findings

- (F) OBJECT TREE(S)
  (C) ALTITUDE/CLEARANCE NOT OBTAINED/MAINTAINED PILOT IN COMMAND
  (F) PITOT/STATIC SYSTEM CONTAMINATION, OTHER THAN WATER

#### **Factual Information**

On November 26, 2000, at 1000 central standard time, an Aerostar PA-60-601P, N713HM, owned and operated by a commercial pilot sustained substantial damage during an in-flight collision with trees during initial climb from runway 28 (4000 feet by 75 feet, ice-covered/asphalt) at the Fillmore County Airport, Preston, Minnesota. Instrument meteorological conditions prevailed at the time of the accident. The personal flight was operating under the provisions of 14 CFR Part 91 and was on an instrument flight rules (IFR) flight plan. The pilot and his sole passenger reported no injuries. The flight was originating at the time of the accident and the pilot performed a precautionary landing at the Quad City International Airport, Moline, Illinois, subsequent to the in-flight collision with the trees.

According to the pilot's written statement, "I initiated the takeoff, on runway 28 accelerated to 100 MPH, rotated & lifted off. The gear and flaps were raised, and the aircraft stopped accelerating at about 112-115 MPH. I lowered the nose to pick up some speed, but it still wouldn't accelerate. I could see the trees approaching west of the airport & knew I didn't have climb speed, but also knew there was no choice but to pull up & hope I didn't stall."

The pilot reported, "I pulled up sharply, but clipped the tops of the trees, the airspeed was still at 115 MPH IAS [Indicated Airspeed] with 12+ degrees nose up, and the airplane climbing rapidly. I then looked at the GPS [Global Positioning System] ground speed read out, and realized that it was at 140 KTS [Knots]. After assessing things, it became obvious that airspeed was not reading correctly."

The pilot reported that he requested to divert from his IFR flight plan and land at the Quad City International Airport, Moline, Illinois, to determine the extent of damage to the airplane.

The pilot stated, "During the trip to Moline, the airspeed indicator stayed at 115 MPH for about 15 minutes then pegged out at the back side of the "0" indication, and stayed there for a few minutes and came back to 160 KTS. My GPS was showing about 170 KTS at 7000 ft during the trip."

The pilot reported, "I had a problem six weeks ago with a mud dauber wasp building a nest in the pitot tube, but this had been cleared out, and the aircraft flown several times since."

#### **Pilot Information**

Certificate:	Commercial	Age:	57,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	June 23, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	18286 hours (Total, all aircraft), 223 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Aerostar	Registration:	N713HM
Model/Series:	PA-60-601P PA-60-601P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	61P-0449-17Z
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	September 1, 2000 Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	15 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	1854 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-S1A5
Registered Owner:	GARY FRANCIS MCNEAR - TRUSTEE	Rated Power:	290 Horsepower
Operator:		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:	RST ,1317 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	09:54 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	100 ft AGL	Visibility	0.25 miles
Lowest Ceiling:	100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23°C / 21°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	(49Y)	Type of Flight Plan Filed:	IFR
Destination:	MOLINE , IL (MLI )	Type of Clearance:	IFR
Departure Time:	10:00 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:	FILMORE COUNTY AIRPORT 49Y	Runway Surface Type:	Asphalt
Airport Elevation:	1276 ft msl	<b>Runway Surface Condition:</b>	lce
Runway Used:	28	IFR Approach:	
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.66925,-92.080047(est)

#### Administrative Information

Investigator In Charge (IIC):	Fox, Andrew		
Additional Participating Persons:	ТОМ	SOERENS; WEST CHICAGO , IL	
Original Publish Date:	October 9, 2001		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51084		

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 <u>here</u>.