



Aviation Investigation Final Report

Location:	STATESVILLE, North Carolina	Accident Number:	MIA99LA098
Date & Time:	March 3, 1999, 13:30 Local	Registration:	N727MB
Aircraft:	Piper PA-60-601P	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

On the second localizer approach to runway 10 (5,004 feet long and 100 feet wide), the airplane touched down about 1,000 feet from the approach end. Once in the grass, the airplane slid sideways to the right, then regained a more positive straight ahead tracking, encountered a 3 to 4 foot embankment and became airborne again for a very short period of time until airspeed dropped off. The aircraft traveled horizontally for about 70 feet then vertically for 30 feet. The aircraft hit the ground, bounced and slid into the airport security fence. At 1815Z [1315], the pilot checked the weather again. He said, '...the ceiling was now 1,200 broken, 5 miles with winds out of the Southeast at 10 knots and light rain. During this time we were in and out of rain showers and moderate turbulence.' He said that during the approach, '...there was a strong wind from the west,' which gave him a higher ground speed, and he '...reached the MDA (minimum descent altitude) over the beginning of the runway.' He started a missed approach and requested vectors for another approach. The pilot said, '...when I was established on the approach, I got down to the MDA this time about 2.5 miles from the runway and saw the runway about 1 mile. We descended to the runway and touched down at the 1,000 feet marker, so I knew that I had 4,000 feet of runway remaining. The first 1,500 feet everything looked normal and I smoothly applied the brakes and I realized that the aircraft was acting like it was on ice and I was hydroplaning. I started pumping the brakes which seem to not make any difference, then I saw there was a big obstruction at the end of the runway (localizer antenna), and decided to go right of the obstruction. On the grass I had a hard time to keep the aircraft straight and to keep it going in the direction I wanted...we hit something and fell down 25 feet and came to a full stop....' During the post accident inspection of the aircraft evidence of hydroplaning was found on both main tires.' The reported weather at 1815Z (1315), the report the pilot had received prior to his first approach, was winds 200 degrees at 6 knots, the reported visibility was 3 sm. The reported winds at 1835Z (1335), about the time of the second approach and the accident were from 310 degrees, at 15 knots, with gusts to 31 knots. The reported visibility was 1 1/2 miles.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to attain the proper touchdown point on the runway. Factors in this accident were excessive approach speed, rain, and a wet runway.

Findings

Occurrence #1: UNDERSHOOT

Phase of Operation: LANDING - ROLL

Findings

1. WEATHER CONDITION - GUSTS
2. (F) WEATHER CONDITION - RAIN
3. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
4. (F) AIRSPEED(VREF) - EXCESSIVE - PILOT IN COMMAND
5. TERRAIN CONDITION - DROP-OFF/DESCENDING EMBANKMENT
6. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - WET

Factual Information

On March 3, 1999, about 1330 eastern standard time, a Piper PA-60-601P, N727MB, registered to MPW Industrial Services Inc., crashed during the landing roll at the Statesville Airport (SVH), Statesville, North Carolina, while on a Title 14 CFR Part 91 business flight. Instrument meteorological conditions were reported, and an IFR flight plan was filed. The airplane was substantially damaged. The airline transport-rated pilot reported minor injuries, and two passengers reported no injuries. The flight had originated at 1205, the same day, from Marietta, Georgia.

On the second localizer approach to runway 10 (5,004 feet long and 100 feet wide), the airplane touched down about 1,000 feet from the approach end. The runway was wet, and as the airplane reached the departure end of the runway, the pilot veered the airplane to the right to avoid a localizer antenna. The airplane struck an embankment, the terrain then dropped off, and the airplane struck a fence.

The pilot said that ATC (air traffic control) had given him vectors for the localizer 10 approach, and at 1815Z [1315], he checked the SVH weather again. He said, "...the ceiling was now 1,200 broken, 5 miles with winds out of the Southeast at 10 knots and light rain. During this time we were in and out of rain showers and moderate turbulence." He said that during the approach, "...there was a strong wind from the west," which gave him a higher ground speed, and he "...reached the MDA (minimum descent altitude) over the beginning of the runway." He started a missed approach and requested vectors for another approach.

The pilot said, "...when I was established on the approach, I got down to the MDA this time about 2.5 miles from the runway and saw the runway about 1 mile. We descended to the runway and touched down at the 1,000 feet marker, so I knew that I had 4,000 feet of runway remaining. The first 1,500 feet everything looked normal and I smoothly applied the brakes and I realized that the aircraft was acting like it was on ice and I was hydroplaning. I started pumping the brakes which seem to not make any difference, then I saw there was a big obstruction at the end of the runway (localizer antenna), and decided to go right of the obstruction. On the grass I had a hard time to keep the aircraft straight and to keep it going in the direction I wanted...we hit something and fell down 25 feet and came to a full stop...."

According to the FAA inspector's report, after the pilot turned right to avoid the antenna at the end of the runway, "...the pilot had difficulty maintaining directional control. The aircraft once in the grass, slid sideways to the right then regained a more positive straight ahead tracking...then encountered a 3 to 4 foot embankment and became airborne again for a very short period of time until airspeed dropped off. The aircraft traveled horizontally for about 70 feet then vertically for 30 feet. The aircraft hit the ground, bounced and slid into the airport security fence. It came to rest at a heading of 141 degrees...Note: During [the] post accident

inspection of the aircraft evidence of hydroplaning was found on both main tires."

In addition, the inspector's report stated, "...the pilot's statement and existing weather conditions ie. Wind direction, speed and precipitation at the time of the accident indicate that the pilot landed on a wet runway with a tail wind component which may have affected the braking action of the aircraft and it's ability to stop prior to the end of the runway at SVH...the pilot failed to recognize the effects of landing the aircraft on a wet runway with strong tail wind and the effect of braking action on a wet runway with standing water."

The SVH weather report for March 3, 1999, at 1815Z (1315), Auto, was winds 200 degrees at 6 knots, the reported visibility was 3 sm, rain. This was the report the pilot had received before his first approach. The reported winds at 1835Z (1335), about the time of the second approach and the accident were winds from 310 degrees, at 15 knots, with gusts to 31 knots. The reported visibility was 1 1/2 miles, with rain.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	33, 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):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 25, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4538 hours (Total, all aircraft), 1325 hours (Total, this make and model), 4223 hours (Pilot In Command, all aircraft), 118 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N727MB
Model/Series:	PA-60-601P PA-60-601P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	07968063408
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	February 22, 1999 Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	16 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	2880 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540-S1A5
Registered Owner:	MPW INDUSTRIAL SERVICES INC.	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:	SVH ,1000 ft msl	Distance from Accident Site:	
Observation Time:	13:35 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 1000 ft AGL	Visibility	1.5 miles
Lowest Ceiling:	Broken / 3300 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 31 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	2°C / 2°C
Precipitation and Obscuration:	N/A - None - Rain		
Departure Point:	MARIETTA , GA (RYY)	Type of Flight Plan Filed:	IFR
Destination:	(SVH)	Type of Clearance:	IFR
Departure Time:	12:05 Local	Type of Airspace:	

Airport Information

Airport:	STATESVILLE SVN	Runway Surface Type:	Asphalt
Airport Elevation:	1000 ft msl	Runway Surface Condition:	Wet
Runway Used:	10	IFR Approach:	Localizer only
Runway Length/Width:	5002 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 2 None	Latitude, Longitude:	35.870868,-80.889678(est)

Administrative Information

Investigator In Charge (IIC):	Yurman, Alan
Additional Participating Persons:	CHARLES J KLEVEN; CHARLOTTE , NC
Original Publish Date:	May 8, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=45858

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](#).