Aviation Investigation Final Report

Location:	Galveston, Texas	**Accident Number:**	FTW04LA095
Date & Time:	March 16, 2004, 14:00 Local	**Registration:**	N572AS
Aircraft:	Piper PA-30	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The twin-engine airplane skidded off the runway 31 following a loss of directional control while landing downwind. The 580-hour pilot reported that the final approach was "normal." As the aircraft touched down on Runway 31, the main landing gear hit first, followed by the nose landing gear. After the nose wheel touched-down, the airplane immediately began to feel "squirrelly," and the inputs to the rudder "seemed" to be ineffective. The pilot stated that the brakes "locked up." The aircraft slid for approximately 350 feet and veered off the right side of the runway into an embankment. The winds at the airport at the time of the accident were reported from 130 degrees at 7 knots. Flight control continuity was established and no anomalies were found with the airframe.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control during the landing roll. A factor was the pilot's failure to evaluate the wind, prior to landing downwind.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

2. WEATHER CONDITION - TAILWIND
3. (F) WEATHER EVALUATION - IMPROPER - PILOT IN COMMAND

Factual Information

On March 16, 2004, at 1400 central standard time, a Piper PA-30 twin-engine airplane, N572AS, registered to and operated by Aerial Survey, Inc., of Galveston, Texas, was substantially damaged following a loss of directional control while landing at the Scholes International Airport (GLS), near Galveston, Texas. The commercial pilot and pilot-rated passenger were not injured. Visual meteorological conditions prevailed and a company visual flight rules (VFR) flight plan was filed for the Title 14 Code of Federal Regulations Part 91 personal flight. The local flight originated at 0945.

The 580-hour pilot reported in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that the final approach was "normal." As the aircraft touched down on Runway 31, the main landing gear hit first, followed by the nose landing gear. After the nose wheel touched-down, the airplane immediately began to feel "squirrelly," and the inputs to the rudder "seemed" to be ineffective. The pilot stated that the brakes "locked up." The aircraft slid for approximately 350 feet and veered off the right side of the runway into an embankment.

In a separate statement provided by the operator, the pilot-rated passenger stated that the pilot purchased a block of time from the operator to gain flight experience as a pilot in command of a twin-engine airplane and that he accompanied the pilot-in-command (PIC) as an observer. He reported that the PIC was the sole manipulator of the controls. The pattern entry was "normal," the downwind leg was "normal," and the pre-landing checks were completed. On the base leg, the PIC called for flaps and 10 degrees of flaps were deployed and visually verified. The final leg was "normal," and approach speed "appeared" to be correct, along with the alignment to the runway. Runway touchdown was "normal." During the rollout, the PIC lost directional control and applied "heavy" brake pressure, locking them up. As the airplane exited the runway, the pilot-rated passenger ensured that the throttles were closed. The airplane came to rest after skidding off the runway and into the grass.

Runway 31 was 6,000 feet long by 150 feet wide. The runway surface was reported to be in fair condition, with the first 1,300 feet of the runway concrete, and the remaining runway surface asphalt.

The reported winds at GLS at the time of the accident were from 130 degrees at 7 knots.

Examination of the aircraft by a FAA airworthiness inspector, who responded to the accident site, revealed structural damage to the right wing spar, and the right main landing gear was collapsed. Flight control continuity was established and no anomalies were found.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	22,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:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	September 17, 2003
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	580 hours (Total, all aircraft), 80 hours (Total, this make and model), 500 hours (Pilot In Command, all aircraft), 175 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N572AS
Model/Series:	PA-30	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	30-620
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	IO-320
Registered Owner:	Aerial Survey Inc.	**Rated Power:**	160 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	GLS,21 ft msl	**Distance from Accident Site:**	
Observation Time:	13:52 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	9 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.03 inches Hg	**Temperature/Dew Point:**	22°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Galveston, TX (GLS)	**Type of Flight Plan Filed:**	Company VFR
Destination:	Galveston, TX (GLS)	**Type of Clearance:**	None
Departure Time:	09:45 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	Scholes International GLS	**Runway Surface Type:**	Asphalt;Concrete
Airport Elevation:	6 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	31	**IFR Approach:**	None
Runway Length/Width:	6000 ft / 150 ft	**VFR Approach/Landing:**	Full stop

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:**	29.265277,-94.860275

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	David B Richardson; Flight Standards District Office; Houston, TX
Original Publish Date:	June 30, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=58915

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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.