



Aviation Investigation Final Report

Location:	SHERMAN, Texas	Accident Number:	FTW98LA414
Date & Time:	August 31, 1998, 18:00 Local	Registration:	N52TW
Aircraft:	Pitts S-2B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the tail wheel equipped airplane lost directional control while landing on runway 17L due to a crosswind condition. The private pilot stated that just prior to the wheels contacting the runway a gust of wind 'from 090 degrees' pushed the airplane to the right of the runway centerline. The airplane contacted the runway to the right of the runway centerline and the pilot began to use left rudder and braking to maintain directional control of the airplane. Subsequently, the tail of the airplane began to swing around to the right and the right main landing gear collapsed. The airplane slid approximately 15 feet and came to rest upright on the runway. The pilot estimates that at the time of the accident the winds were from 090 degrees at 10 to 12 knots and gusting to 15 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot in command to maintain directional control of the airplane during the landing flare. A factor was the gusty, crosswind condition.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

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

2. (F) WEATHER CONDITION - CROSSWIND
3. (F) WEATHER CONDITION - GUSTS

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On August 31, 1998, at 1800 central daylight time, a Pitts S-2B tail wheel equipped airplane, N52TW, was substantially damaged following a loss of control while landing at the Grayson County Airport, near, Sherman, Texas. The private pilot, owner and operator of the airplane, and sole occupant, was not injured. Visual meteorological conditions prevailed for the Title 14 CFR Part 91 local personal flight that originated from the Grayson County Airport at 1700. A flight plan was not filed.

The pilot stated in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that he entered the downwind leg for landing on runway 17L and noticed that the windsock indicated an "80 to 90 degree crosswind." Just prior to the wheels of the airplane contacting the runway "a gust of wind from 090 degrees" pushed the bi-plane to the right of the runway centerline. The airplane contacted the runway to the right of the runway centerline. The pilot tried to maintain directional control by "applying left rudder and brakes." Subsequently, the tail of the airplane started to swing out to the right and the right main gear collapsed. The airplane slid approximately 15 feet before stopping upright on the runway.

The pilot estimated that at the time of the accident, the wind was from 090 degrees at 10 to 12 knots, gusting to 15 knots.

The pilot had accumulated a total of 122 hours in the make and model. The airplane had accumulated a total of 112 hours since new.

An FAA inspector examined the airplane after the accident and stated that the right main gear collapsed and the lower right wing was structurally damaged. The pilot added that the right wing sustained spar and rib damage.

Pilot Information

Certificate:	Private	Age:	32, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
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:	January 1, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	239 hours (Total, all aircraft), 122 hours (Total, this make and model), 159 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Pitts	Registration:	N52TW
Model/Series:	S-2B S-2B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic	Serial Number:	5323
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	October 21, 1997 Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	60 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	112 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	AEIO540-D4A5
Registered Owner:	KEITH LEEDOM	Rated Power:	260 Horsepower
Operator:		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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(F39)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	GRAYSON COUNTY AIRPORT F39	Runway Surface Type:	Asphalt
Airport Elevation:	749 ft msl	Runway Surface Condition:	Dry
Runway Used:	17L	IFR Approach:	None
Runway Length/Width:	9000 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

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:	33.609802,-96.599899(est)

Administrative Information

Investigator In Charge (IIC):	Casanova, Hector
Additional Participating Persons:	TIMOTHY J SOKOL; DALLAS , TX
Original Publish Date:	February 15, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=44034

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](#).