



Aviation Investigation Final Report

Location:	ROLAND, Arkansas	Accident Number:	FTW98LA087
Date & Time:	January 4, 1998, 15:30 Local	Registration:	N87SD
Aircraft:	Starduster SA-100	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After an uneventful 20-minute flight in his tailwheel-equipped biplane, the pilot decided to do a few touch-and-go landings at a private grass airstrip. After a normal touchdown, the aircraft slowed down prematurely. During the end of the landing roll, the two main landing gear tires became bogged down in soft grass, and the aircraft flipped inverted. The pilot stated that he had landed on the runway numerous times before and that he thought that the 'grass looked ok' during his approach. According to local witnesses, it had rained on the day prior to the accident, but not on the day of the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent encounter with soft, wet grass during landing.

Findings

Occurrence #1: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

1. (C) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SOFT
2. (C) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - WET
3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

On January 4, 1998, approximately 1530 central standard time, a homebuilt Starduster SA-100 tail wheel equipped bi-plane, N87SD, registered to and operated by the pilot, flipped over during landing roll on a private grass airstrip (Pecan Grove) near Roland, Arkansas. The aircraft was substantially damaged and the private pilot was not injured. No flight plan was filed and visual meteorological conditions prevailed for the Title 14 CFR Part 91 personal flight, which originated from North Little Rock, Arkansas, at 1510.

In a telephone interview with the NTSB investigator, the pilot reported that, after an uneventful 20 minute flight from North Little Rock, he decided to do a few touch and go landings at the Pecan Grove Airstrip. The pilot stated that, after a normal touchdown, the aircraft slowed down prematurely. During the end of the landing roll, the two main landing gear tires became bogged down in soft grass, and the aircraft flipped inverted.

Examination of the airplane by an FAA inspector revealed structural damage to the vertical stabilizer, and a cracked spar on the right upper wing. Also, no mechanical anomalies were discovered with the landing gear or braking system.

The pilot stated that he had landed on the 3,000 foot grass runway numerous times before and that he thought that the "grass looked ok" during his approach. According to local witnesses, it had rained on the day prior to the accident, but not on the day of the accident. Additionally, the pilot reported that the aircraft had just had an annual inspection performed and that no preexisting anomalies were known to him.

Pilot Information

Certificate:	Private	Age:	59, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
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 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 25, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1164 hours (Total, all aircraft), 122 hours (Total, this make and model), 1108 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Starduster	Registration:	N87SD
Model/Series:	SA-100 SA-100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	001
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	January 3, 1998 Annual	Certified Max Gross Wt.:	1350 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	650 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-290
Registered Owner:	GARY D. CHAMBERLIN	Rated Power:	125 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	N/A	Operator Designator Code:	N/A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LIT	Distance from Accident Site:	
Observation Time:	15:20 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 11000 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 20000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	N. LITTLE ROCK, AR (1M1)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:15 Local	Type of Airspace:	Class E

Airport Information

Airport:	PECAN GROVE AIRSTRIP NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	250 ft msl	Runway Surface Condition:	Soft;Wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3000 ft / 60 ft	VFR Approach/Landing:	Full stop

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:	34.889228,-92.519714(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	WES CROOK; LITTLE ROCK , AR
Original Publish Date:	December 8, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=20512

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