



Aviation Investigation Final Report

Location:	KINGSTON, Oklahoma	Accident Number:	FTW99LA106
Date & Time:	April 5, 1999, 10:20 Local	Registration:	N227FG
Aircraft:	Starduster SA-100	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot lost control of the airplane during the landing roll. During the landing roll a gust of wind lifted the right wing and empennage into the air and, consequently, the nose dragged along the runway surface approximately 30 feet. The airplane exited the departure end of the runway, flipped over and came to rest in the inverted position. Thirty minutes after the accident occurred a weather observation facility, located 25 miles northwest of the accident site, reported that the winds were from 230 degrees at 25 knots, gusting to 30 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 control of the airplane during the landing roll. A factor was the gusty wind conditions.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (F) WEATHER CONDITION - GUSTS

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

Factual Information

On April 5, 1999, at 1020 central daylight time, a Starduster SA-100 experimental, tailwheel equipped airplane, N227FG, was substantially damaged following a loss of control while landing at the Lake Texoma State Park Airport, near Kingston, Oklahoma. The non-instrument rated private pilot, who was the owner and operator, and the sole occupant of the airplane, was not injured. Visual meteorological conditions prevailed for the Title 14 CFR Part 91 personal flight and no flight plan was filed. The local flight originated from Kingston, Oklahoma, at 0945.

The pilot reported that he maneuvered the single-place airplane to land on runway 36. Soon after touching down, the homebuilt airplane encountered "a gust of wind from the east." The right wing and empennage lifted into the air and, consequently, the nose of the airplane dragged along the runway surface approximately 30 feet. Subsequently, the airplane exited the departure end of the runway, flipped over and came to rest in the inverted position.

At 1050, a weather observation facility located 25 miles northwest of the accident site reported that the winds were from 230 degrees at 15 knots with gusts to 25 knots.

The pilot had accumulated a total of 1,700 flight hours at the time of the accident, of which 1,600 hours were in the make and model of the accident airplane.

An FAA inspector examined the airplane and reported that the rudder was folded over the vertical stabilizer and the right wing spar was damaged. One propeller blade was separated at the propeller hub and the second propeller blade remained attached to the propeller and was "scuffed" at the tip.

Pilot Information

Certificate:	Private	Age:	75, Male
Airplane Rating(s):	None	Seat Occupied:	Center
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 Invalid Medical for flight	Last FAA Medical Exam:	August 31, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1700 hours (Total, all aircraft), 1600 hours (Total, this make and model), 1700 hours (Pilot In Command, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Starduster	Registration:	N227FG
Model/Series:	SA-100 SA-100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	2424-2G
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	February 1, 1999 Annual	Certified Max Gross Wt.:	1140 lbs
Time Since Last Inspection:	18 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	649 Hrs	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-320
Registered Owner:	CHARLES C. GRANT	Rated Power:	150 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:	ADM ,844 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	300°
Lowest Cloud Condition:	Scattered / 8000 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 25 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(F31)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:45 Local	Type of Airspace:	Class E

Airport Information

Airport:	LAKE TEXOMA STATE PARK F31	Runway Surface Type:	Asphalt
Airport Elevation:	693 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	3000 ft / 50 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:	33.999935,-96.720672(est)

Administrative Information

Investigator In Charge (IIC): Casanova, Hector

Additional Participating Persons:

Original Publish Date: April 25, 2001

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=46074>

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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](#).