



Aviation Investigation Final Report

Location:	EATON RAPIDS, Michigan	Accident Number:	CHI97LA010
Date & Time:	October 13, 1996, 14:59 Local	Registration:	N7691
Aircraft:	Dellicker TOO SA300	STARDUSTER	Aircraft Damage: Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A private pilot, who was a witness to the accident, reported that he observed the airplane depart. 'After breaking ground contact, the airplane leveled off, gained airspeed, and then near the end of the runway, the pilot pulled up sharply into a steep climb. After a couple of hundred of feet of climb [the airplane] entered a steep right turn of approximately 45 degrees. The aircraft lost control and fell to the ground and crashed.' The witness reported that he did not hear any 'unusual' sound, and he believed the engine was at full power. A second witness reported that he noticed an airplane 'going 90 degrees straight up and straight down.' One propeller blade was bent near the root in the aft direction and exhibited minor torsional bending. The other blade exhibited minor 's' shaped bending.

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 adequate airspeed and subsequent inadvertent stall of the airplane. A factor was the ostentatious display.

Findings

Occurrence #1: ABRUPT MANEUVER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
2. (C) STALL - INADVERTENT - PILOT IN COMMAND
3. (F) OSTENTATIOUS DISPLAY - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On October 13, 1996, at 1459 eastern daylight time, an experimental Starduster Too SA300, N7691, was destroyed when it impacted the terrain during the initial climb following takeoff from a residential airstrip in Eaton Rapids, Michigan. Witnesses reported that the pilot performed an aggressive pull up, and lost control of the airplane. The commercial pilot and one passenger sustained fatal injuries. The local, 14 CFR Part 91, personal flight was operating in visual meteorological conditions. No flight plan was filed.

A private pilot, who was a witness to the accident, reported that he observed the airplane depart on runway 26 at the Skyway Estates Airport. " After breaking ground contact , the aircraft leveled off , gained airspeed, and then near the end of the runway the pilot pulled up sharply into a steep climb. After a couple of hundred of feet of climb [the airplane] entered a steep right turn of approximately 45 degrees. The aircraft lost control and fell to the ground and crashed." He reported that he did not hear any "unusual" sound and he believed the engine was at full power.

A second witness reported that he was driving east on Columbia highway with his family. He noticed an airplane "going 90 degrees straight up and straight down. We continued to travel east... past a set of woods and we saw a plane had crashed in a field and was fully involved in fire."

The wreckage was inspected by a Federal Aviation Administration (FAA) Inspector. He reported that a ground scar led to the main wreckage 75 feet away, with "no evidence of the airplane skidding... ." The main wreckage was located in a plowed field approximately 100 feet west and 500 feet north of the departure end of runway 26. The airplane was "badly burned and very little remained of it... the push pull tubes and cables for the ailerons, rudder, and elevator were intact... ."

One propeller blade was bent near the root in the aft direction and exhibited minor torsional bending. The other blade exhibited minor "s" shaped bending.

An autopsy of the pilot was conducted at the Sparrow Hospital, 1215 E. Michigan, Lansing, Michigan 48909-7980. FAA toxicological testing was negative for all tests conducted except phenyltoloxamine and pheniramine were detected in the blood and urine specimens and phenylpropanolamine was detected in the urine specimen. Phenyltoloxamine and pheniramine are nonprescription antihistamines and phenylpropanolamine is a nonprescription decongestant.

Pilot Information

Certificate:	Commercial	Age:	54, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 30, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2630 hours (Total, all aircraft), 145 hours (Total, this make and model), 22 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Dellicker	Registration:	N7691
Model/Series:	STARDUSTER TOO SA300 STARDUSTER	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	370
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	June 1, 1996 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	720 Hrs	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-540
Registered Owner:	TERRY O. THAYER	Rated Power:	250 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:	TEW ,919 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	14:58 Local	Direction from Accident Site:	95°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(60G)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	14:59 Local	Type of Airspace:	Class E

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	42.509269,-84.649307(est)

Administrative Information

Investigator In Charge (IIC):	Robbins, Wesley
Additional Participating Persons:	WILL ELLIOT; GRAND RAPIDS , MI
Original Publish Date:	August 29, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=10479

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](#).