



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Byhalia, Mississippi	Accident Number:	ERA19LA016
Date & Time:	October 12, 2018, 13:45 Local	Registration:	N503CM
Aircraft:	SA300 Starduster	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot reported that he was practicing landings. He departed and flew over a nearby town and noted that the air was "quite turbulent." Upon returning to the airport, the pilot entered the downwind leg of the traffic pattern and began a constant-radius, descending turn to the final leg of the traffic pattern. He noticed that the airplane was too low and applied engine power to maintain level flight. The airplane leveled off, and the pilot continued the approach to the runway. The pilot added that, as the airplane approached a tree line, which was about 100 ft before the approach end of the runway, the airplane "suddenly sank" and impacted trees before he could arrest the descent. The airplane came to rest inverted in a wooded area. The wings, fuselage, and empennage sustained substantial damage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation. Given the evidence, it is likely that the pilot did not maintain a proper approach path, which resulted in the impact with trees.

Examination of upper air sounding data revealed that no turbulence nor low-level wind shear existed in the area at the time of the accident. A review of meteorological data revealed that the wind conditions had the potential to develop into a 1-knot tailwind. However, the pilot should have been able to anticipate and adequately respond to the slight tailwind.

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 a proper approach path, which resulted a collision with trees short of the runway.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Tree(s) - Effect on operation

Factual Information

History of Flight

Approach-VFR pattern final	Collision during takeoff/land (Defining event)
Landing	Roll over

On October 12, 2018, about 1345 central daylight time, an experimental amateur-built SA300 Starduster, N503CM, was substantially damaged when it struck trees during final approach to land at Maidment Field Airport (7MS3), Byhalia, Mississippi. The private pilot was seriously injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local flight, which originated about 1315. The personal flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91.

According to the pilot, the purpose of the flight was to practice landings on runway 35 at 7MS3. He departed and flew over a nearby town and noted that the air was "quite turbulent," which he did not notice on the ground. On the way back, the pilot entered the downwind leg of the traffic pattern to land on runway 35 and began a constant radius descending turn to the final leg of the traffic pattern. He noticed that the airplane was "too low" and applied engine power to maintain level flight. The airplane leveled off and the pilot continued the approach to the runway. As the airplane approached the tree line, which was 100 ft prior to the approach end of the runway, the airplane "suddenly sank" and impacted the trees before he could arrest the descent.

The airplane came to rest inverted in a wooded area. The wings, fuselage, and empennage were substantially damaged in the accident sequence.

After the accident, the pilot reported that there were no mechanical malfunctions or failures of the airplane that would have precluded normal operation prior to the accident.

The 1350 recorded weather observation at Olive Branch Airport (OLV), Olive Branch, Mississippi, located about 16 nautical miles north of the accident location, included wind from 360° at 5 knots, visibility 10 miles, clear skies, temperature 19°C, dew point 5°C, and an altimeter setting of 29.98 inches of mercury.

An upper air sounding for accident site for 1400 was reviewed and indicated that there was no clear-air turbulence or low-level wind shear. In addition, the wind below 4,000 ft mean sea level indicated 5 knots.

Two non-official weather sites about 16 nautical miles to the west of the accident location (one to the northwest and one to the southwest) were reviewed for weather data. Wind speeds were similar to OLV around the time of the accident; however, both indicated a tailwind wind component of about 1 knot.

Pilot Information

Certificate:	Foreign; Private	Age:	64, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	December 27, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 24, 2017
Flight Time:	331 hours (Total, all aircraft), 40 hours (Total, this make and model), 292 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 0.5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SA300	Registration:	N503CM
Model/Series:	Starduster	Aircraft Category:	Airplane
Year of Manufacture:	1991	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 3, 2017 Condition	Certified Max Gross Wt.:	1850 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	264 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	HO-360-B1B
Registered Owner:		Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	OLV,402 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	13:50 Local	Direction from Accident Site:	348°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	19°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Byhalia, MS (7MS3)	Type of Flight Plan Filed:	None
Destination:	Byhalia, MS (7MS3)	Type of Clearance:	None
Departure Time:	13:15 Local	Type of Airspace:	

Airport Information

Airport:	Maidment Field 7MS3	Runway Surface Type:	Grass/turf
Airport Elevation:	370 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	2100 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	34.710834,-89.719169(est)

Administrative Information

Investigator In Charge (IIC):	Kemner, Heidi
Additional Participating Persons:	James S Flickner; FAA/FSDO; Jackson, MS
Original Publish Date:	April 13, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98496

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).