



National Transportation Safety Board Aviation Accident Data Summary

Location:	Clarksdale, MS	Accident Number:	ERA14FA322
Date & Time:	07/01/2014, 1730 CDT	Registration:	N91331
Aircraft:	AIR TRACTOR INC AT-602	Injuries:	1 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

During an aerial application flight, the pilot initiated a low-level right turn to reverse course. A witness saw the airplane's bank angle increase to vertical, and the airplane subsequently descended into the ground. Examination of the accident site indicated a relatively straight-line impact path with the airplane's right wing tip hitting first followed by the nose. Examination of the wreckage revealed no preexisting mechanical anomalies that would have precluded normal operation; the engine was under power at impact, and the propeller was in the normal operating (not feathered) range. In addition, an autopsy of the pilot did not note any pertinent preexisting medical conditions. The airplane's high angle-of-bank turn, its subsequent descent to ground impact, and the resultant wreckage path were consistent with an accelerated stall.

Flight Events

Maneuvering-low-alt flying - Aerodynamic stall/spin
Maneuvering-low-alt flying - Loss of control in flight
Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed during a low-level, high angle-of-bank turn, which resulted in an exceedance of the critical angle of attack and a subsequent accelerated stall.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Lateral/bank control-Not specified
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Angle of attack-Capability exceeded - C
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Pilot Information

Certificate:	Commercial	Age:	58
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	12051 hours (Total, all aircraft), 4358 hours (Total, this make and model), 12051 hours (Pilot In Command, all aircraft), 183 hours (Last 90 days, all aircraft), 120 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	AIR TRACTOR INC	Registration:	N91331
Model/Series:	AT-602	Engines:	1 Turbo Prop
Operator:	SHANNON AGRICULTURAL FLYING INC	Engine Manufacturer:	Pratt & Whitney
Air Carrier Operating Certificate:	Agricultural Aircraft (137)	Engine Model/Series:	PT6A-60(AG)
Flight Conducted Under:	Part 137: Agricultural		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	CKM, 173 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	9 knots, 200°
Temperature:	32° C / 24° C	Visibility	8 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Clarksdale, MS (02CD)	Destination:	Clarksdale, MS (02CD)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Paul R Cox	Adopted Date:	10/19/2015
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89584		

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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.