



Aviation Investigation Final Report

Location:	Buckeye, Arizona	Accident Number:	WPR14LA371
Date & Time:	September 9, 2014, 10:00 Local	Registration:	N3097F
Aircraft:	AYRES CORPORATION S2R T34	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The operator reported that the commercial pilot had conducted agricultural flights in the airplane for about 2 to 3 hours earlier on the morning of the accident without problems. During the initial climb for the accident flight, about 30 ft above ground level, the engine lost partial power. Subsequently, the pilot conducted an emergency landing straight ahead, and the airplane descended and impacted a field, during which the wings and fuselage were substantially damaged.

Postaccident examination of the airplane revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation. Fuel samples were taken from the fuel tanks and the operator's fuel supply tank. Testing of the samples revealed that the fuel from both the airplane's fuel tanks and the operator's supply tank were essentially water. It is likely that the loss of engine power was due to water contamination of the fuel.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A partial loss of engine power due to water contamination of the fuel.

Findings

Aircraft

Fuel - Fluid condition

Factual Information

History of Flight

Prior to flight	Fuel contamination
Initial climb	Loss of engine power (total)
Emergency descent	Collision with terr/obj (non-CFIT)

On September 9, 2014, about 1000 mountain standard time, an Ayres S2R-T34 airplane, N3097F, was substantially damaged during an off-airport emergency landing, following a loss of engine power during the takeoff initial climb from a private agricultural airstrip, about 30 miles west of Buckeye, Arizona. The commercial pilot was not injured. The airplane was registered to and operated by Farm AG Enterprises, as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight. Visual meteorological conditions prevailed at the time of the accident and no flight plan was filed for the local flight that was originating at the time.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), a company representative reported that the pilot had flown the airplane for about 2-3 hours that morning, and no problems with the airplane had been reported. He said the pilot told him that during the accident takeoff, all systems were normal as the airplane lifted off the ground. Upon reaching about 30 ft above the ground, the engine's rpm dropped as though someone had pulled the power lever to idle. The pilot flew the airplane straight ahead, and it descended into a field.

During the off-airport landing, the airplane sustained structural damage to the wings and fuselage.

During a post-accident examination of the airplane by a Federal Aviation Administration (FAA) air safety inspector no mechanical anomalies were found. Fuel samples were taken from the airplane and the operator's fuel supply tank and sent to an independent laboratory for testing.

According to the laboratory director, the fuel samples taken from both the airplane's fuel system and the operator's supply tank were essentially water, and there was insufficient fuel in the samples to test.

The operator/pilot did not submit the NTSB Pilot/Operator Aircraft Accident/Incident Form (NTSB 6120.1) to the NTSB.

Pilot Information

Certificate:	Commercial	Age:	68,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Unknown	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	300 hours (Total, all aircraft), 300 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	AYRES CORPORATION	Registration:	N3097F
Model/Series:	S2R T34 T34	Aircraft Category:	Airplane
Year of Manufacture:	1989	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	T34-114DC
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Turbo prop
Airframe Total Time:		Engine Manufacturer:	P&W CANADA
ELT:		Engine Model/Series:	PT6A-60A
Registered Owner:	FARM AG ENTERPRISES LLC	Rated Power:	1127 Horsepower
Operator:	FARM AG ENTERPRISES LLC	Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KGBN,858 ft msl	Distance from Accident Site:	24 Nautical Miles
Observation Time:	09:55 Local	Direction from Accident Site:	137°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	28.89 inches Hg	Temperature/Dew Point:	29°C / 20°C
Precipitation and Obscuration:			
Departure Point:	Buckeye, AZ	Type of Flight Plan Filed:	None
Destination:	Buckeye, AZ	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

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:	33.18,-113.050003(est)

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Daniel K Gilligan; FAA; Scottsdale, AZ Eugene Torrisi; Pratt Whitney Canada

Original Publish Date:	November 6, 2019
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Last Revision Date:

Investigation Class:	Class
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Note:

Investigation Docket:	https://data.nts.gov/Docket?ProjectID=90052
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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](#).