



National Transportation Safety Board Aviation Accident Final Report

Location:	Lenora, TX	Accident Number:	DFW08LA035
Date & Time:	11/01/2007, 1800 CDT	Registration:	N32984
Aircraft:	Ayres S2-R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

A single-turbine engine airplane, lost engine power during cruise, and the pilot performed a forced landing. He reported that during cruise flight, "the engine just quit in mid-air". An examination of the airplane on-site revealed structural damage during the forced landing, and fuel was present in the airplane's fuel tanks. After the aircraft had been recovered, a visual inspection of the engine was conducted, and no noticeable reason for the loss of engine power was found. An additional inspection was to be conducted at the engine manufacturer's facility. However, when the mechanics were preparing the engine for removal from the airframe, a line going to the fuel control was found to be loose, and essentially fell apart. The line, identified as the "P3" line, had separated from the AN fitting. Further examination of the fitting/hose identified, sooting or heat marks, on and near the AN fitting, as well as further along the hose. The hose's fire-sleeve covering was removed and revealed, that approximately one-foot of the braided hose had been burnt. According to the engine manufacturer when the engine is running, if the "P3" line is disconnected from the fuel controller, fuel flow to the engine will be at the "sub- idle" condition.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to separation of the "P3" line from the engine's fuel control.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. (C) BLEED AIR SYSTEM - SEPARATION
2. FUEL SYSTEM,FUEL CONTROL - NOT ACTIVATED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. TERRAIN CONDITION - OPEN FIELD

Factual Information

On November 1, 2007, approximately 1800 central daylight time, a single-turbine engine Ayres S2-R, Thrush, airplane, N32984, was substantially damaged during a forced landing following a loss of engine power during cruise flight near Lenora, Texas. The commercial pilot and sole occupant, was not injured. The airplane was registered to and operated by Chiles Flying Service Inc. of LaMesa, Texas. day visual meteorological conditions prevailed for the 14 Code of Federal Regulations Part 91 cross-country positioning flight. The flight originated from the LaMesa Municipal Airport, near LaMesa, at an unknown time.

The pilot reported to the NTSB Investigator-in-charge (IIC), that during cruise flight, "the engine just quit in mid-air".

According to a Federal Aviation Administration (FAA) inspector, who responded to the accident site, the aircraft received structural damage during the forced landing. The FAA inspector also noted that fuel was present in the airplane's fuel tanks.

The aircraft was recovered to Air Salvage of Dallas, Lancaster, Texas, for further examination.

A visual inspection of the engine was conducted, and no noticeable reason for the loss of engine power was found. An additional inspection was to be conducted at the engine manufacturer's facility. However, when the mechanics were preparing the engine for removal from the airframe, a line going to the fuel control was found to be loose, and essentially fell apart. The line, identified as the "P3" line, had separated from the AN fitting. Further examination of the fitting/hose identified, sooting or heat marks, on and near the AN fitting, as well as further along the hose. The hose's fire-sleeve covering was removed and revealed that approximately one-foot of the braided hose had been burnt.

According to the engine manufacturer when the engine is running, if the "P3" line is disconnected from the fuel controller, fuel flow to the engine will be at the "sub- idle" condition.

Pilot Information

Certificate:	Commercial	Age:	51, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last FAA Medical Exam:	02/01/2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	01/01/2007
Flight Time:	12000 hours (Total, all aircraft), 11500 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft), 12 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ayres	Registration:	N32984
Model/Series:	S2-R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	G10-116
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	100 Hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	Garrett
ELT:	Not installed	Engine Model/Series:	TPE331
Registered Owner:	Chiles Flying Service, Inc.	Rated Power:	
Operator:	Chiles Flying Service, Inc.	Operating Certificate(s) Held:	None
Operator Does Business As:	Chiles Flying Service, Inc.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KBPG	Distance from Accident Site:	25 Nautical Miles
Observation Time:	1825 CDT	Direction from Accident Site:	280°
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.15 inches Hg	Temperature/Dew Point:	18° C / -3° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LAMESA, TX (2F5)	Type of Flight Plan Filed:	Unknown
Destination:	Lenora, TX	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.753611, -101.918333

Administrative Information

Investigator In Charge (IIC):	Craig R Hatch	Report Date:	04/30/2008
Additional Participating Persons:	Art Castillo; FAA, FSDO; San Antonio, TX		
Publish Date:	01/22/2014		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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