

Aviation Investigation Final Report

Location: IDAHO FALLS, Idaho Accident Number: SEA98LA079

Date & Time: May 19, 1998, 06:30 Local Registration: N4326S

Aircraft: Air Tractor AT-301 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Other work use

Analysis

As the pilot approached the agricultural application airstrip, he decided that he would land downwind so that he would end his landing roll near the equipment that would be used to load the aircraft. After the aircraft touched down, the pilot became uncomfortable with the downwind landing, and elected to make a go-around. He applied power two separate times during the attempted go-around, but both times the engine coughed and sputtered and would not accelerate. The pilot therefore decided to abort the go-around, and attempted to stop the aircraft in the remaining runway. According to the pilot, as the aircraft was slowing, the tailwind picked up the aft end of the aircraft and caused it to nose over. In a post- accident telephone interview, the pilot said that he had failed to readjust the engine fuel mixture from its more-lean cruise setting prior to landing. He further stated that the engine had been working fine, and that he felt sure that if he had adjusted the mixture prior to landing that the engine would have accelerated when he added power for the go-around.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate inflight decision to land with a tailwind and his failure to maintain aircraft control. Also contributing was the pilot's improper setting of the fuel mixture which resulted in a partial loss of engine power.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL

Phase of Operation: LANDING - ABORTED

Findings

1. (F) MIXTURE - IMPROPER - PILOT IN COMMAND

2. (C) MIXTURE - NOT CORRECTED - PILOT IN COMMAND

Occurrence #2: NOSE OVER

Phase of Operation: LANDING - ROLL

Findings

3. (F) WEATHER CONDITION - TAILWIND

- 4. (C) IN-FLIGHT PLANNING/DECISION INADEQUATE PILOT IN COMMAND
- 5. ABORTED LANDING DISCONTINUED PILOT IN COMMAND
- 6. (C) AIRCRAFT CONTROL NOT MAINTAINED PILOT IN COMMAND

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Factual Information

On May 19, 1998, approximately 0630 mountain daylight time, an Air Tractor AT-301, N4326S, nosed over during an aborted landing at an agricultural application airstrip about three miles northwest of Idaho Falls, Idaho. The airline transport pilot, who was the sole occupant, was not injured, but the aircraft, which was owned and operated by Lewis Flying Service, sustained substantial damage. The 14 CFR Part 91 repositioning flight, which departed Rigby-Jefferson County Airport, about 15 minutes earlier, was being operated in visual meteorological conditions at the time of the accident.

According to the pilot, he elected to land with a tailwind because landing in that direction would allow him to come to a stop near the equipment that was going to be used to load chemicals into the aircraft. He said that after the aircraft touched down, he became uncomfortable with the downwind landing, and elected to execute a go-around. When he applied power, the engine coughed and did not accelerate, so he retarded the throttle and then applied power a second time. During the second power application, the engine again coughed and failed to accelerate, so the pilot retarded the power to idle and attempted to complete the landing. During the landing roll, the pilot brought the stick to the full-aft position, and the tailwheel settled onto the terrain. But, according to the pilot, as the aircraft slowed, the tailwind lifted the tail and the aircraft nosed over on the dirt airstrip.

In a post-accident interview, the pilot, who had leaned the fuel mixture en route, said that the engine had been running fine prior to the attempted go-around, but that he had failed to adjust the mixture prior to the landing. He further stated that he felt that if the mixture would have been richer when he applied power for the go-around that the engine would have accelerated normally.

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Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	36,U
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	December 5, 1997
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	6200 hours (Total, all aircraft), 6 hours (Total, this make and model), 3266 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N4326S
Model/Series:	AT-301 AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0006
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	May 6, 1998 Annual	Certified Max Gross Wt.:	5000 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8031 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	1340-AN1
Registered Owner:	ORLIN D. LEWIS	Rated Power:	600 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:	LEWIS FLYING SERVICE	Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dawn
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	10°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	RIGBY , ID (U56)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	06:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	PRIVATE AGRICULTURAL	Runway Surface Type:	Dirt
Airport Elevation:	4900 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

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:	43.430194,-111.889587(est)

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Administrative Information

Investigator In Charge (IIC): Anderson, Orrin

Additional Participating Persons:

Original Publish Date: February 11, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=42788

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.

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