



Aviation Investigation Final Report

Location:	EDELSTEIN, Illinois	Accident Number:	CHI99LA268
Date & Time:	July 30, 1999, 19:00 Local	Registration:	N61775
Aircraft:	Air Tractor AT-401B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported the airplane was refueled prior to takeoff with approximately 45 gallons of fuel. The pilot reported that for 'reasons unknown' the airplane lost power after liftoff. The airplane entered a corn field at the end of the airstrip and nosed over. Inspection of the airplane revealed there was less than one ounce of fuel remaining in the airplane. The fuel tanks were not compromised during the accident and there was no sign of fuel leakage around the accident site. The operator used a private fuel supply to refuel the airplane and there were no fueling records available.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an inadequate fuel supply which resulted in fuel exhaustion. Factors associated with the accident were the low altitude at which the power loss occurred and the corn crop the airplane contacted.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) ALTITUDE - LOW
2. (C) FLUID,FUEL - EXHAUSTION

3. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

4. (F) TERRAIN CONDITION - CROP

Occurrence #3: NOSE OVER
Phase of Operation: TAKEOFF

Factual Information

On July 30, 1999, at 1900 central daylight time, an Air Tractor AT-401B, N61775, operated by Brian Agricultural Aviation, Pekin, Illinois, nosed over following a loss of engine power during takeoff from the Chiquita Food Processing Airstrip (2,300' x 80', grass) in Edelstein, Illinois. The commercial pilot was seriously injured. The airplane was substantially damaged. The 14 CFR Part 137 agricultural flight was operating in visual meteorological conditions without a flight plan. The flight was originating at the time of the accident.

The pilot reported the airplane was refueled prior to takeoff with approximately 45 gallons of fuel, bringing the total on board to 75 gallons. In addition, the airplane was loaded with 240 gallons of water/fungicide. The pilot reported that everything appeared "normal" when the airplane lifted off. He continued to report, "For reasons unknown the aircraft lost power, entered the corn at the end of the airstrip, and came to rest upside down."

The post accident inspection of the airplane was conducted by inspectors from the Federal Aviation Administration Springfield, Illinois, Flight Standards District Office. The inspector reported that there was less than one ounce of fuel remaining in the airplane. The fuel tanks were not compromised during the accident. He reported that although the airplane had nosed over, there was no indication of fuel leakage around the accident site. Another inspector reported the operator used a private fuel supply to refuel the airplane and there were no fueling records available.

Pilot Information

Certificate:	Commercial	Age:	52, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	July 7, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4837 hours (Total, all aircraft), 550 hours (Total, this make and model), 4780 hours (Pilot In Command, all aircraft), 109 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N61775
Model/Series:	AT-401B AT-401B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401B1088
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	December 20, 1998 Annual	Certified Max Gross Wt.:	7800 lbs
Time Since Last Inspection:	110 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	557 Hrs	Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	R1340
Registered Owner:	BRIAN AGRICULTURAL AVIATION	Rated Power:	600 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(PVT)	Type of Flight Plan Filed:	None
Destination:	PEKIN , IL (PVT)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	PRIVATE	Runway Surface Type:	Grass/turf
Airport Elevation:	740 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	
Runway Length/Width:	2300 ft / 80 ft	VFR Approach/Landing:	Forced landing

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:	40.969902,-89.580368(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	RUSSELL ATKINS; SPRINGFIELD , IL
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46906

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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](#).