

Aviation Investigation Final Report

Location:	AUTAUGAVILLE, Alabama	Accident Number:	ATL94LA130
Date & Time:	July 3, 1994, 06:00 Local	Registration:	N3659D
Aircraft:	Air Tractor AT-301	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE AG PILOT WAS TAKING OFF FROM THE GRASS AIRSTRIP WITH A FULL CHEMICAL LOAD. WHEN THE AIRCRAFT DID NOT ACCELERATE AS EXPECTED, HE LOWERED FLAPS, AND DUMPED THE HOPPER LOAD. THE AIRCRAFT MOMENTARILY BECAME AIRBORNE, THEN SETTLED, COLLIDING WITH SOME PINE TREES. THE PILOT REPORTED NO MECHANICAL MALFUNCTION OR FAILURE WITH THE AIRCRAFT. HE DID REPORT THAT THE GRASS ON THE RUNWAY WAS EXCESSIVELY LONG.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE PREFLIGHT PLANNING, IN THAT HE DID NOT PROPERLY EVALUATE THE CONDITION OF THE RUNWAY PRIOR TO TAKEOFF, AND HIS FAILURE TO ABORT THE TAKEOFF WHEN ADEQUATE ACCELERATION WAS NOT OBSERVED. FACTORS WERE THE HIGH VEGETATION (GRASS) ON THE RUNWAY, AND THE TREES AT THE PERIMETER OF THE AIRSTRIP.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - HIGH VEGETATION

2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND
4. (F) OBJECT - TREE(S)

Factual Information

On July 3, 1994, at 0600 central daylight time, an Airtractor AT-301, N3659D, collided with trees during takeoff from a private, sod airstrip near Autaugaville, Alabama. The aerial application flight operated under 14 CFR Part 137 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage, and the pilot was not injured. The accident occurred during the initial takeoff of the day.

According to the pilot, with a full load of chemicals, and tall grass on the takeoff surface, the airplane would not accelerate sufficiently to accomplish a safe takeoff. He lowered additional flaps, to no effect. As the runway end approached, he dumped the chemical load, and the aircraft lifted off. As he closed the dump gate, the aircraft settled again, and collided with some small pine trees, located 250 feet beyond the runway end. His safety recommendation after the accident was to cut the grass, because it was too high at the end of the strip. He reported no aircraft mechanical failure or malfunction, after the accident.

Pilot	Infor	nation
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Certificate:	Airline transport; Commercial; Military	Age:	42,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	June 8, 1994
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	6200 hours (Total, all aircraft), 175 hours (Total, this make and model), 175 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N3659D
Model/Series:	AT-301 AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0327
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 8, 1994 Annual	Certified Max Gross Wt.:	7000 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4799 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-1340-AN1
Registered Owner:	MCCABE FLYING CO INC	Rated Power:	600 Horsepower
Operator:	FARM AIR, INC.	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:	Dawn
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	7 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:	17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	Special VFR;None
Departure Time:	06:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	MULBERRY STRIP NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	300 ft msl	Runway Surface Condition:	Vegetation
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2500 ft / 50 ft	VFR Approach/Landing:	None

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:	32.430797,-86.649024(est)

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip	
Additional Participating Persons:	MIKE MORGAN; BIRMINGHAM , AL	
Original Publish Date:	January 25, 1995	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3410	

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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 <u>here</u>.