



Aviation Investigation Final Report

Location:	Batesville, Mississippi	Accident Number:	ATL01LA099
Date & Time:	August 28, 2001, 16:10 Local	Registration:	N91922
Aircraft:	Air Tractor AT-401	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The Air Tractor collided with trees and the ground during an attempted forced landing after a loss of engine power. According to the pilot, the engine power lost power during climb out from a swath run. As the pilot established a glide toward a hay field for an emergency landing, he attempted to restore engine power. The airplane struck trees, then the ground and caught fire. The post-crash fire prevented a functional examination of the airplane and engine assembly.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons. A factor was the lack of suitable terrain for an emergency landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

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

Findings

2. OBJECT - TREE(S)
3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On August 28, 2001, at 1610 central daylight time, an Air Tractor AT-401, N91922, registered to Cole and Turman Flying Service of Batesville, Mississippi, collided with trees and the ground then caught fire after a loss of engine power during an aerial application of pesticides to a field in Batesville, Mississippi. The agricultural flight was conducted under the provisions of Title 14 CFR Part 137. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed. The airplane was destroyed, and the commercial pilot received minor injuries. The flight had departed Panola County Airport in Batesville, Mississippi, at 1500.

While conducting an aerial application of pesticides to a field, the pilot initiated a climb after departing a spray swath. During the climb, the airplane lost engine power, and the pilot established a glide and turned left toward a hay field. The pilot stated, "At the point where the engine failed, I didn't see any way to make an off airport landing without hitting trees or unsuitable terrain." The pilot stated, "I tried switching the magneto selector to each left and right position with no change in power and pumped the manual fuel pump (wobble pump) which also resulted in no change. It was at this point that the plane contacted trees along the creek bank that runs North and South." After colliding with the trees, the airplane came to rest in a flat attitude in the adjacent field and caught fire. The pilot saw flames immediately on the sides of the fuselage and exited the left side of the airplane.

The airplane had departed Panola County Airport with a full oil reservoir (eight gallons), 126 gallons of 100LL fuel, and 50 gallons of a 95% malathion solution (pesticide). The pilot estimated that, at the time of the accident, the airplane held 7.5 gallons of oil, 80 gallons of fuel, and 36 gallons of pesticide. The pilot had checked the engine instruments before spraying the last swath of field and said the oil pressure and engine temperature appeared normal.

Examination of the wreckage revealed burn-pattern evidence in the header tank, wing tanks, and pesticide hopper consistent with the presence of both fuel and pesticide at the time of ignition. Aluminum components were found melted. Two cylinders, the magnetos, and the carburetor were also fire damaged. Extensive fire damage prevented a functional examination of the airplane.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	48, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	January 18, 2001
Occupational Pilot:		Last Flight Review or Equivalent:	March 12, 2001
Flight Time:	3054 hours (Total, all aircraft), 291 hours (Total, this make and model), 3009 hours (Pilot In Command, all aircraft), 272 hours (Last 90 days, all aircraft), 71 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N91922
Model/Series:	AT-401	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401-0931
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	June 1, 2001 Annual	Certified Max Gross Wt.:	7860 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3440 Hrs at time of accident	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	R1340 Series
Registered Owner:	On file	Rated Power:	600 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GWO,162 ft msl	Distance from Accident Site:	
Observation Time:	15:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 2800 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	999°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	28°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Batesville, MS (K0M6)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Panola County Airport K0M6	Runway Surface Type:	Asphalt
Airport Elevation:	219 ft msl	Runway Surface Condition:	Dry
Runway Used:	010	IFR Approach:	None
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	34.31084,-89.930557(est)

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	Theo A Mavridoglou; Jackson FAA FSDO-07; Jackson, MS
Original Publish Date:	June 3, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=53240

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](#).