



Aviation Investigation Final Report

Location: FINLEY, Tennessee Accident Number: ATL94LA127

Date & Time: June 27, 1994, 09:00 Local Registration: N36484

Aircraft: AIR TRACTOR AT-301 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 137: Agricultural

Analysis

ACCORDING TO THE PILOT, THE AIRCRAFT LOST POWER DURING THE THIRD TAKEOFF OF THE MORNING. THE PILOT ATTEMPTED TO ABORT THE TAKEOFF BUT DURING THE BRAKING PHASE, THE WET GRASS PREVENTED THE AIRPLANE FROM STOPPING BEFORE ROLLING OFF THE END OF THE RUNWAY; THE AIRPLANE NOSED OVER IN AN ADJACENT SOFT FIELD. AFTER THE AIRPLANE WAS RECOVERED FROM THE FIELD, AN EXAMINATION OF THE ENGINE FAILED TO DISCLOSE A MECHANICAL PROBLEM. DURING THE FUNCTIONAL EXAMINATION, THE ENGINE OPERATED NORMALLY THROUGH ALL POWER RANGES.

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. FACTORS WERE WET AND SOFT TERRAIN.

Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: OVERRUN

Phase of Operation: TAKEOFF - ABORTED

Findings

2. TERRAIN CONDITION - WET

Occurrence #3: NOSE OVER

Phase of Operation: TAKEOFF - ABORTED

Findings

3. TERRAIN CONDITION - SOFT

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Factual Information

On June 27, 1994, at 0900 central daylight time, an Air Tractor AT-301, N36484, nosed over during a rejected takeoff from a sod airstrip in Finley, Tennessee. 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. According to the pilot, the accident occurred during the third departure of the morning.

The pilot stated that he experienced a reduction in engine rpm during the takeoff roll, and elected to reject the takeoff; the wet grass prevented the pilot from stopping the airplane before it rolled off the departure end of the runway. The airplane nosed over in an adjacent plowed field.

An examination of the aircraft and engine assembly failed to disclose a mechanical problem. After the airplane was placed upright on the landing gear, a functional check was completed; the engine operated normally throughout the power ranges.

Pilot Information

| Certificate: | Commercial | Age: | 38,Male |
|---------------------------|--|-----------------------------------|------------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| 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 Medicalno waivers/lim. | Last FAA Medical Exam: | February 3, 1994 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 3106 hours (Total, all aircraft), 850 hours (Total, this make and model), 150 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

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Aircraft and Owner/Operator Information

| Aircraft Make: | AIR TRACTOR | Registration: | N36484 |
|----------------------------------|-----------------------------|-----------------------------------|-----------------|
| Model/Series: | AT-301 AT-301 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 301-0232 |
| Landing Gear Type: | Tailwheel | Seats: | 1 |
| Date/Type of Last Inspection: | February 23, 1994 Annual | Certified Max Gross Wt.: | 5000 lbs |
| Time Since Last Inspection: | 150 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 4173 Hrs | Engine Manufacturer: | P&W |
| ELT: | Not installed | Engine Model/Series: | 1340 |
| Registered Owner: | H & H FLYING COMPANY | Rated Power: | 600 Horsepower |
| Operator: | GREENHILL FLYING COMPANY | 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: | DYR ,337 ft msl | Distance from Accident Site: | 3 Nautical Miles |
| Observation Time: | 08:56 Local | Direction from Accident Site: | 270° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 4 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 60° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 24°C / 19°C |
| Precipitation and Obscuration: | No Obscuration; No Precipit | ation | |
| Departure Point: | | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 09:00 Local | Type of Airspace: | Class G |

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Airport Information

| Airport: | PRIVATE NONE | Runway Surface Type: | Grass/turf |
|----------------------|-----------------|----------------------------------|------------|
| Airport Elevation: | 250 ft msl | Runway Surface Condition: | Wet |
| Runway Used: | 18 | IFR Approach: | None |
| Runway Length/Width: | 2500 ft / 75 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: | 35.980945,-89.579071(est) |

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Administrative Information

| Investigator In Charge (IIC): | Powell, Phillip | |
|--------------------------------------|---|--|
| Additional Participating Persons: | CONDAD B HOUSE; MEMPHIS , TN | |
| Original Publish Date: | January 25, 1995 | |
| Last Revision Date: | | |
| Investigation Class: | <u>Class</u> | |
| Note: | | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=3407 | |

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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.

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