



Aviation Investigation Final Report

Location: WALLS, Mississippi Accident Number: MIA94LA168

Date & Time: June 27, 1994, 09:00 Local **Registration:** N45332

Aircraft: AIR TRACTOR AT-401 Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 137: Agricultural

Analysis

THE ENGINE LOST PARTIAL POWER DURING THE TAKEOFF ROLL. THE PILOT ABORTED THE TAKEOFF; HOWEVER, HE COULD NOT STOP THE AIRCRAFT PRIOR TO OVER-RUNNING THE RUNWAY AND NOSING OVER IN SAND. POST CRASH EXAMINATION OF THE ENGINE REVEALED NO REASON FOR THE LOSS OF ENGINE POWER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PARTIAL LOSS OF ENGINE POWER FOR UNDETERMINED REASONS. THE SANDY TERRAIN WAS A FACTOR.

Findings

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

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

.

Occurrence #2: OVERRUN

Phase of Operation: TAKEOFF - ABORTED

Occurrence #3: NOSE OVER

Phase of Operation: TAKEOFF - ABORTED

Findings
2. (F) TERRAIN CONDITION - SOFT

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Factual Information

On June 27, 1994, about 0900 central daylight time, an Air Tractor AT-401, N45332, registered to Broadway and Freiman Aircraft, nosed over during an aborted takeoff from the Delta Dusters, Inc. strip at Walls, Mississippi, while on a 14 CFR Part 137 aerial application flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the commercial-rated pilot received minor injuries. The flight was originating at the time of the accident.

The pilot stated the engine began to "spit and sputter" and lose power during the takeoff roll. He aborted the takeoff; however, he was unable to stop the aircraft before over running the runway and nosing over in sand.

Postcrash examination of the engine by the operator indicated the carburetor contained clean fuel. The engine assembly rotated freely and there was no evidence to indicate cylinder malfunction or failure.

Pilot Information

Certificate:	Commercial	Age:	40,Male
Airplane Rating(s):	None	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 Medicalno waivers/lim.	Last FAA Medical Exam:	November 19, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4777 hours (Total, all aircraft), 1200 hours (Total, this make and model), 4709 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 125 hours (Last 30 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR	Registration:	N45332
Model/Series:	AT-401 AT-401	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401-0772
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 1, 1994 Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-1340-AN1
Registered Owner:	BROADWAY AND FREIMAN AIRCRAFT	Rated Power:	600 Horsepower
Operator:	DELTA DUSTERS, INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	ZDWG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MEM ,332 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	08:51 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	27°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	Class G

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Airport Information

Airport:	DELTA DUSTERS ZDWG	Runway Surface Type:	Asphalt
Airport Elevation:	210 ft msl	Runway Surface Condition:	Wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	2640 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	34.949531,-90.129409(est)

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Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey	
Additional Participating Persons:	CONRAD HOUSE; MEMPHIS , TN	
Original Publish Date:	November 18, 1994	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=37568	

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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