



# Aviation Investigation Final Report

<b>Location:</b>	DEWITT, Arkansas	<b>Accident Number:</b>	FTW99LA161
<b>Date &amp; Time:</b>	June 8, 1999, 10:00 Local	<b>Registration:</b>	N52401
<b>Aircraft:</b>	Wsk Pzl Mielec      M-18	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

The agricultural airplane settled back to the ground after takeoff to the south from a private air strip 'as if it had encountered a downdraft.' The airplane impacted a levee south of the 2,600 foot air strip and nosed over. Subsequently, a postimpact fire erupted and consumed the airplane's fuselage. The pilot stated that it was his sixth insecticide/fertilizer application flight of the day, and that the airplane had 'lifted off the ground at the same spot it always does.' The pilot added that there was a 'small thunderstorm' north of the air strip at the time of the accident. He reported that the wind had been from 263 degrees at 4 knots all morning. The closest weather reporting station, located about 15 miles southwest of the accident site, reported calm winds. The operator stated that he could find no anomalies with the airframe and engine. He added that the airplane was within weight and balance limitations at the time of the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent flight into adverse weather, which resulted in a loss of aircraft control. A factor was the downdraft weather condition.

### Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - DOWNDRAFT
2. (C) FLIGHT INTO ADVERSE WEATHER - INADVERTENT - PILOT IN COMMAND

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

3. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

## Factual Information

On June 8, 1999, at 1000 central daylight time, a Wsk Pzl Mielec M-18 agricultural airplane, N52401, was substantially damaged when it impacted terrain during takeoff from a grass strip near DeWitt, Arkansas. The aircraft was owned and operated by Bullock Flying Service of DeWitt, Arkansas. The commercial pilot, sole occupant, received minor injuries. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 137 aerial application flight. The flight was originating at the time of the accident.

During a telephone interview conducted by the NTSB investigator-in-charge (IIC), the pilot stated that the accident occurred during the sixth application flight of insecticide/fertilizer that day. The pilot added that during the takeoff roll to the south, the tail wheel had lifted up "at the same spot as always [and] the airplane came off the ground at the same spot it always does." Throughout the day, other agricultural application flights had been taking off to the south from the same 2,600 foot runway with a "light headwind".

The 17,500-hour pilot stated that after takeoff, the airplane settled back to the ground, "as if it had encountered a downdraft." The pilot then pulled the nose of the airplane up, in an attempt to avoid hitting a levee at the departure end of the runway.

The FAA inspector determined, based on ground scars and signatures at the accident site, that the tail wheel of the aircraft impacted the ground 300 to 500 yards beyond the departure end of the runway, followed by the main gear approximately 60 feet later. The aircraft then became airborne again, subsequently impacting the levee shearing the tail wheel from the aircraft. The airplane became airborne once more, and impacted the ground 100 yards beyond the levee, nosed over, and came to rest inverted heading back towards the runway.

The airplane's fuselage was consumed by a postimpact fire, the vertical stabilizer was separated from the empennage, and the engine was found separated from the airframe. The operator stated that he could not find any anomalies with the engine and airframe. He added that the airplane was within weight and balance limitations at the time of the accident.

At 1053, the Monticello Municipal Airport weather facility, which is located about 15 miles southwest of the accident site, was reporting the wind as calm. The pilot stated that the wind had been from 263 degrees at 4 knots all morning. The pilot added that at the time of the accident, a "small thunderstorm" had developed to the north of the grass strip.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	50, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	January 20, 1999
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	17500 hours (Total, all aircraft), 8800 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Wsk Pzl Mielec	<b>Registration:</b>	N52401
<b>Model/Series:</b>	M-18 M-18	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1Z004-07
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	9300 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Pzl-Kalisz
<b>ELT:</b>		<b>Engine Model/Series:</b>	ASZ-62IR
<b>Registered Owner:</b>	BILLY PAUL BULLOCK	<b>Rated Power:</b>	967 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>	BULLOCK FLYING SERVICE	<b>Operator Designator Code:</b>	KTWG

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LLQ ,270 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	09:53 Local	<b>Direction from Accident Site:</b>	220°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 22°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(NONE)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	BULLOCK FLYING SERVICE NONE	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	163 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	36	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	2600 ft / 75 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	34.280498,-91.329986(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lupino, Nicole
<b>Additional Participating Persons:</b>	EDWIN E MILLISER; LITTLE ROCK , AR
<b>Original Publish Date:</b>	December 4, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=46481">https://data.nts.gov/Docket?ProjectID=46481</a>

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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](#).