



# Aviation Investigation Final Report

<b>Location:</b>	WYNNE, Arkansas	<b>Accident Number:</b>	FTW93LA178
<b>Date &amp; Time:</b>	June 5, 1993, 14:45 Local	<b>Registration:</b>	N9238Z
<b>Aircraft:</b>	Bell-Transworld 47G-2	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

ACCORDING TO THE PILOT, HE HAD PULLED UP FROM A SWATH RUN WHEN THE ENGINE LOST PARTIAL POWER. HE FURTHER STATED THAT HE WAS UNABLE TO SUSTAIN LEVEL FLIGHT AND THE AIRCRAFT SETTLED INTO TREES. ACCORDING TO THE OPERATOR, POST-ACCIDENT INSPECTION REVEALED THAT THE ENGINE HAD EXPERIENCED A MAGNETO FAILURE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PARTIAL POWER LOSS DUE TO THE FAILURE OF ONE MAGNETO. A FACTOR WAS THE LACK OF SUITABLE TERRAIN FOR THE FORCED LANDING.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: MANEUVERING - AERIAL APPLICATION

### Findings

1. (C) IGNITION SYSTEM,MAGNETO - FAILURE,TOTAL
2. REASON FOR OCCURRENCE UNDETERMINED

-----

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

-----

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

Findings

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

## Factual Information

On June 5, 1993, at approximately 1445 central daylight time, a Bell-Transworld Helicopter Corporation 47G-2, N9238Z, was substantially damaged when it collided with trees during an uncontrolled descent, near Wynne, Arkansas. The aircraft, owned and operated by Jimair, and flown by a commercial pilot, was on a local aerial application flight. There was no flight plan filed and visual meteorological conditions prevailed throughout the area. The pilot, the sole occupant, was not injured.

According to the pilot, he was about to finish seeding a field with rice when he pulled up from a swath run and the engine lost power. The pilot stated that as he pulled up, the engine "bogged down" and lost power, but did not quit totally. He further stated that the aircraft began to settle toward the ground and collided with trees. The aircraft subsequently impacted the ground. According to information received from the operator, post-accident inspection revealed that the engine had experienced a magneto failure.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	42, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<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>	May 28, 1993
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6599 hours (Total, all aircraft), 6500 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Bell-Transworld	<b>Registration:</b>	N9238Z
<b>Model/Series:</b>	47G-2 47G-2	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	TWH-5
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	January 1, 1992 Annual	<b>Certified Max Gross Wt.:</b>	2450 lbs
<b>Time Since Last Inspection:</b>	102 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	IO-430
<b>Registered Owner:</b>	JIMAIR	<b>Rated Power:</b>	265 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	SVOG

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	25 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	16°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>	(NONE)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<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 None	<b>Latitude, Longitude:</b>	35.230278,-90.780815(est)

## Administrative Information

**Investigator In Charge (IIC):** Wandel, Warren  
**Additional Participating Persons:** R. DOSS; LITTLE ROCK , AR

**Original Publish Date:** September 13, 1994

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=18766>

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](#).