



Aviation Investigation Final Report

Location:	BORGER, Texas	Accident Number:	FTW88LA054
Date & Time:	January 25, 1988, 16:20 Local	Registration:	N8250R
Aircraft:	BELLANCA 17-30A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

SHORTLY AFTER TAKEOFF THERE WAS SMOKE IN THE CABIN. THE PLT STARTED A TURN BACK TOWARD THE RUNWAY. WHEN HE TURNED OFF THE ELECTRICAL MASTER SWITCH THE ENGINE STOPPED PRODUCING POWER. ATTEMPTS TO RESTART THE ENGINE WERE NOT SUCCESSFUL. HE IMPACTED A HEAVY CABLE DURING THE OFF-AIRPORT, FORCED LANDING. POST-CRASH INVESTIGATION REVEALED A BROKEN WELD AT THE REAR OF THE LEFT MUFFLER. HEAT FROM THE LEFT MUFFLER MELTED THE INSULATION ON THE 'P' LEADS TO THE MAGNETOS, GROUNDED THEM, AND SHUT OFF THE ENGINE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: FIRE
Phase of Operation: CLIMB - TO CRUISE

- Findings
1. (C) EXHAUST SYSTEM,MUFFLER - FAILURE,PARTIAL

Occurrence #2: LOSS OF ENGINE POWER
Phase of Operation: CLIMB - TO CRUISE

Findings

- 2. (C) IGNITION SYSTEM,MAGNETO GROUNDING LEAD (P-LEAD) - BURNED
- 3. (C) IGNITION SYSTEM,MAGNETO GROUNDING LEAD (P-LEAD) - SHORTED

Occurrence #3: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

Findings

- 4. (F) OBJECT - WIRE,TRANSMISSION

Factual Information

Pilot Information

Certificate:	Commercial	Age:	36, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	November 3, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3145 hours (Total, all aircraft), 1717 hours (Total, this make and model), 2945 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELLANCA	Registration:	N8250R
Model/Series:	17-30A 17-30A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20474
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2068 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520K
Registered Owner:	J & W OPERATING COMPANY	Rated Power:	300 Horsepower
Operator:	J & W OPERATING CO.	Operating Certificate(s) Held:	None
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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(BGD)	Type of Flight Plan Filed:	None
Destination:	OKLAHOMA CITY , OK (OKC)	Type of Clearance:	None
Departure Time:	16:16 Local	Type of Airspace:	Class G

Airport Information

Airport:	HUTCHINSON COUNTY BGD	Runway Surface Type:	Asphalt
Airport Elevation:	3054 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	3898 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	35.650543,-101.400543(est)

Administrative Information

Investigator In Charge (IIC):	Roth, E.
Additional Participating Persons:	ANTHONY D PIRRELLO; LUBBOCK , TX JUAN A GARCIA; LUBBOCK , TX
Original Publish Date:	March 30, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=22609

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](#).