



Aviation Investigation Final Report

Location:	WASHINGTON, Kansas	Accident Number:	CHI00LA191
Date & Time:	July 10, 2000, 11:00 Local	Registration:	N9557G
Aircraft:	Cessna A188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

During an aerial application flight the aircraft engine sustained a loss of power and the pilot performed a forced landing to nearby field. During the landing the aircraft sustained substantial damage. Post-accident examination of the engine revealed that the number-two cylinder connecting rod bearing was in several pieces and the connecting rod bolts were broken. The number-two piston was removed from the cylinder and no anomalies were found with the piston or piston-rings. The cylinder wall was inspected and no scoring was noted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the number-two connecting rod bearing and the unsuitable terrain for landing encountered by the pilot during the forced landing. A factor to the accident was the rough/uneven field.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings
1. (C) ENGINE ASSEMBLY, BEARING - FAILURE, TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

2. (F) TERRAIN CONDITION - ROUGH/UNEVEN

3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

On July 10, 2000, at 1100 central daylight time, a Cessna A188B, N9557G, piloted by a commercial pilot, sustained substantial damage during an in-flight collision with terrain while executing a forced landing following a loss of engine power while maneuvering near Washington, Kansas. Visual meteorological conditions prevailed at the time of the accident. The aerial application flight was operating under the provisions of 14 CFR Part 137 and was not on a flight plan. The pilot, the sole occupant, reported no injuries. The flight departed the pilot's private airstrip near Morrowville, Kansas, at 1000, and was conducting aerial application operations at the time of the accident.

According to the pilot's written statement, "Upon completing spraying a feild [field], I heard a different sound in the engine[.] I then noticed power loss and oil smoke coming from the engine compartment." The pilot reported, "I truned [turned] to land on a near by road, but was loosing altitude too fast to complete the trun [turn], so I attempted to land across the road in a feild [field]."

Post-accident examination of the engine revealed that the number-two cylinder connecting rod bearing was in several pieces and the connecting rod bolts were broken. The number-two piston was removed from the cylinder and no anomalies were found with the piston or piston-rings. The cylinder wall was inspected and no scoring was noted.

Pilot Information

Certificate:	Commercial	Age:	55, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
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-w/ waivers/lim	Last FAA Medical Exam:	July 19, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7000 hours (Total, all aircraft), 1500 hours (Total, this make and model), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9557G
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18800757
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 21, 2000 100 hour	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	122 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4109 Hrs	Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	IO-520-D
Registered Owner:	JEM FLYING, INC.	Rated Power:	300 Horsepower
Operator:		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:	CNK ,1469 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	10:55 Local	Direction from Accident Site:	249°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	88°C / 75°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MORROWVILLE , KS (PVT)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	39.80944,-97.05001(est)

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	JACK WILLIAMS; WICHITA , KS
Original Publish Date:	October 9, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51064

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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](#).