



# Aviation Investigation Final Report

<b>Location:</b>	GREENFIELD, Indiana	<b>Accident Number:</b>	CHI85FEX02
<b>Date &amp; Time:</b>	June 8, 1985, 21:07 Local	<b>Registration:</b>	N1773H
<b>Aircraft:</b>	CESSNA 310C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

WHILE EN ROUTE, THE L ENG SUDDENLY LOST POWER & WOULD NOT RESTART, SO THE PLT FEATHERED THE L PROP. AFTER LETTING IT COOL APRX 5 MIN, HE TRIED RESTARTING IT AGAIN, BUT STILL WAS UNABLE. HE STATED HE THOUGHT HE THEN SECURED (FEATHERED) THE L ENG. THE PLT DIVERTED TOWARD INDIANAPOLIS. HE NOTED THAT THE R ENG BEGAN TO OVERHEAT & LOSE POWER. SUBSEQUENTLY, THE ACFT CRASH LANDED IN A CORN FLD AT NGT WITH THE LNDG GEAR RETRACTED & W/O LNDG LGTS (LGTS WOULD NOT EXTEND). AN EXAM REVEALED FUEL WAS REMAINING IN ALL TANKS. SHERIFF PSNL HAD MOVED THE FUEL SELECTORS WHEN THEY ARRIVED, SO THE SELECTOR POSITIONS WERE NOT VERIFIED. FOUND L THROTTLE FULL FWD, L MIX CTL MID-RANGE, L PROP CTL FULL LOW RPM (NOT FEATHERED). THE L PROP WAS NOT FEATHERED; BUT THE R PROP WAS FEATHERED (PLT SAID HE FEATHERED IT JUST BEFORE IMPACT). A TEARDOWN OF THE L ENG REVEALED THE #4 MAIN BEARING HAD FAILED; BOTTOM HALF OF OIL COOLER WAS 95% BLOCKED FROM SOFT METAL CONTAMINATION, PROP GOV MOUNTING GASKET WAS 75% BLOCKED BY METAL CONTAMINATION; BUT THE L ENG CRANKSHAFT WOULD STILL TURN.

## Probable Cause and Findings

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

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (C) ENGINE ASSEMBLY,BEARING - FAILURE,TOTAL
  2. PROPELLER FEATHERING - PERFORMED - PILOT IN COMMAND
  3. PROPELLER FEATHERING - NOT MAINTAINED - PILOT IN COMMAND
  4. (C) PROPELLER FEATHERING - IMPROPER - PILOT IN COMMAND
  5. (F) ENGINE ASSEMBLY,OTHER - OVERTEMPERATURE
  6. (C) AIRCRAFT PERFORMANCE,TWO OR MORE ENGINES - UNDETERMINED
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING

### Findings

7. (F) LIGHT CONDITION - DARK NIGHT
8. (F) LANDING LIGHT(S) - INOPERATIVE
9. WHEELS UP LANDING

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	62, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<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--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 11, 1985
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2445 hours (Total, all aircraft), 1227 hours (Total, this make and model), 2296 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N1773H
<b>Model/Series:</b>	310C 310C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	35873
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	June 10, 1984 Annual	<b>Certified Max Gross Wt.:</b>	4830 lbs
<b>Time Since Last Inspection:</b>	0 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	52944 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-470-D
<b>Registered Owner:</b>	HERBERT . OAKLEY	<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>	IND ,866 ft msl	<b>Distance from Accident Site:</b>	23 Nautical Miles
<b>Observation Time:</b>	09:15 Local	<b>Direction from Accident Site:</b>	278°
<b>Lowest Cloud Condition:</b>	2500 ft AGL	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ST.LOUIS , MO (STL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	COLUMBUS , OH (CMH )	<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>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Serious	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 Serious	<b>Latitude, Longitude:</b>	39.789463,-85.769035(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Shanks, Delmus
<b>Additional Participating Persons:</b>	JAMES R FRESEMAN; LEWIS J PENCE; PALESTINE , IN
<b>Original Publish Date:</b>	
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=12900">https://data.ntsb.gov/Docket?ProjectID=12900</a>

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