



National Transportation Safety Board Aviation Accident Final Report

Location:	VEGA, TX	Accident Number:	FTW88LA142
Date & Time:	08/01/1988, 2317 CDT	Registration:	N3707Z
Aircraft:	BEECH A36TC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE AIRPLANE WAS ON A NIGHT CROSS COUNTRY FLIGHT WHEN ENGINE OIL STARTED TO APPEAR ON THE WINDOWS. THE PILOT WAS UNABLE TO GET THE AIRPLANE TO AN AIRPORT BEFORE THE OIL PRESSURE WENT TO ZERO. AFTER LOSS OF OIL PRESSURE, THE ENGINE STARTED TO VIBRATE, AND THE PROPELLER SEPARATED FROM THE ENGINE. WITH NO FORWARD VISIBILITY AND VERY LITTLE SIDE VISIBILITY, THE PILOT MADE A FORCED LANDING ON A HIGHWAY SERVICE ROAD; HOWEVER, DURING THE LANDING ROLL, THE AIRPLANE IMPACTED HIGHWAY SIGNS AND REFLECTORS. THE PILOT SAID THERE WAS A FIRE ON THE HIGHWAY, BEHIND THE AIRPLANE, BUT IT NEVER REACHED THE AIRPLANE. A TEARDOWN OF THE ENGINE REVEALED A FAILURE OF THE CRANKSHAFT THAT WAS INITIATED BY A PRE-EXISTING FATIGUE CRACK. THERE WAS EVIDENCE THAT OPENING OF THE FATIGUE CRACK LED TO GRADUAL LOSS OF LUBRICATING OIL, THEN SEPARATION OF THE PROPELLER.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY,CRANKSHAFT - FATIGUE
2. PROPELLER SYSTEM/ACCESSORIES - SEPARATION

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

3. FLUID,OIL - LOSS,TOTAL
4. WINDOW,FLIGHT COMPARTMENT WINDOW/WINDSHIELD - DIRTY(FOGGY)
5. (F) VISUAL LOOKOUT - RESTRICTED
6. (F) VISUAL/AURAL PERCEPTION
7. (F) LIGHT CONDITION - DARK NIGHT
8. OBJECT - SIGN

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	35, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/14/1988
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	5800 hours (Total, all aircraft), 250 hours (Total, this make and model), 5500 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N3707Z
Model/Series:	A36TC A36TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	EA 150
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	04/01/1988, Annual	Certified Max Gross Wt.:	3650 lbs
Time Since Last Inspection:	76 Hours	Engines:	1 Reciprocating
Airframe Total Time:	570 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-520-UB
Registered Owner:	PETRO JET AVIATION, INC.	Rated Power:	300 hp
Operator:	PETRO JET AVIATION, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	25 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	22° C / 16° C
Precipitation and Obscuration:			
Departure Point:	DENVER, CO (DEN)	Type of Flight Plan Filed:	None
Destination:	MIDLAND, TX (MAF)	Type of Clearance:	None
Departure Time:	2130 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARMOND V EDWARDS	Report Date:	01/16/1990
Additional Participating Persons:	LEE A BOEDEKER; LUBBOCK, TX RICHARD MURRAY JOHN KENT; MOBILE, AL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).