



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	ROCKFORD, IL	<b>Accident Number:</b>	CHI94LA031
<b>Date &amp; Time:</b>	11/03/1993, 1611 CST	<b>Registration:</b>	N8006R
<b>Aircraft:</b>	BEECH B36TC	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None

**Flight Conducted Under:** Part 91: General Aviation -

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## Analysis

THE AIRPLANE WAS FLOWN ON A CHECK FLIGHT AFTER MAINTENANCE FOR AN OIL-AND-FILTER CHANGE AND REPLACEMENT OF LEAKING GASKETS. DURING THE INITIAL CLIMB AFTER TAKEOFF, THE PILOT NOTED A MOMENTARY LOSS OF POWER, PROMPTING A TURN TOWARDS THE AIRPORT. THE ENGINE LOST ALL POWER IN THE TURN. DURING A LANDING SHORT OF THE RUNWAY, THE AIRPLANE HIT A FENCE. THE MAIN FUEL LINE CONNECTION TO THE FUEL PUMP WAS FOUND LOOSE. WHEN THE BOOST PUMP WAS ENERGIZED, THE LOOSE FITTING LEAKED SUBSTANTIALLY.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A LOOSE FUEL LINE FITTING, DUE TO IMPROPER MAINTENANCE, WHICH RESULTED IN AN INTERRUPTION OF FUEL TO THE ENGINE.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) MAINTENANCE - IMPROPER - OTHER MAINTENANCE PERSONNEL
2. (C) FUEL SYSTEM,LINE FITTING - LOOSE
3. (C) FLUID,FUEL - STARVATION

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

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

### Findings

4. OBJECT - FENCE

## Factual Information

On November 3, 1993, at 1611 central standard time, a Beech B36TC airplane, N8006R, experienced a loss of engine power during climb from takeoff, turned back, and landed short at Rockford, Illinois. The solo commercial pilot reported no injury. The airplane was substantially damaged. Visual meteorological conditions existed for the local, post-maintenance check flight. The flight commenced at 1610 and operated under 14 CFR 91.

The airplane went into maintenance on the accident date for an oil-and-filter change and replacement of leaking gaskets. At completion, maintenance personnel cleaned the engine and ran it on the ramp. The pilot for the owner intended a flight around the airport to check the airplane before departing to the airplane's home field.

The pilot recounted the engine coughed passing 200 to 300 feet above takeoff altitude. He turned toward the airport and notified the tower of engine difficulty. The engine lost power completely in the turn. The pilot estimated he would not make the runway, and aimed for open ground at the southwest corner of the airport. He stated he moved the gear selector down, but the gear were in transit at touchdown. He stated he did not select fuel boost ON.

Examination of fuel pump disclosed no mechanical abnormalities, but did show a loose fitting where the main fuel line connects to the fuel pump inlet. Pressurizing the line with the boost pump resulted in substantial fuel leakage.

## Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	24, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	05/06/1993
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	1796 hours (Total, all aircraft), 180 hours (Total, this make and model), 1722 hours (Pilot In Command, all aircraft), 137 hours (Last 90 days, all aircraft), 39 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N8006R
Model/Series:	B36TC B36TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	EA-531
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	05/19/1993, Annual	Certified Max Gross Wt.:	3850 lbs
Time Since Last Inspection:	216 Hours	Engines:	1 Reciprocating
Airframe Total Time:	338 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	TSIO-520-UB
Registered Owner:	TSA ENTERPRISES	Rated Power:	300 hp
Operator:	TSA ENTERPRISES	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	RFD, 736 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1615 CST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 20000 ft agl	Visibility	15 Miles
Lowest Ceiling:	Overcast / 20000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	11 °C / 2 °C
Precipitation and Obscuration:			
Departure Point:	(RFD)	Type of Flight Plan Filed:	None
Destination:	(RFD)	Type of Clearance:	VFR
Departure Time:	1610 CST	Type of Airspace:	Class D; Class E

## Airport Information

Airport:	GREATER ROCKFORD (RFD)	Runway Surface Type:	Asphalt
Airport Elevation:	736 ft	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	6500 ft / 150 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	J R VALLASTER	Report Date:	09/20/1994
Additional Participating Persons:	ROBERT E LUNA; WEST CHICAGO, IL		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.ntsbt.gov/pubdms/">http://dms.ntsbt.gov/pubdms/</a> .		

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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](#).