



National Transportation Safety Board Aviation Accident Final Report

Location:	Sugar Grove, IL	Accident Number:	CHI01LA255
Date & Time:	08/01/2001, 1131 CDT	Registration:	N136GR
Aircraft:	Beech A36	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Analysis

The pilot/mechanic performed a forced landing on a bean field after a total loss of engine power during departure from the airport. The pilot/mechanic reported that he was performing a maintenance test flight when the engine quit at approximately 500 feet agl. He reported that the no fuel leaks were noted during a ground test run and no anomalies were noted during a run up prior to departure. The main fuel line to the flow divider was reported to have backed off.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the inadequate maintenance inspection and the unsuitable terrain encountered by the pilot mechanic. The fuel system leak was a contributing factor.

Findings

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

Findings

1. (F) FUEL SYSTEM,LINE - LEAK
 2. (C) MAINTENANCE,INSPECTION - INADEQUATE - OWNER/PILOT MECHANIC
 3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - OWNER/PILOT MECHANIC
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Factual Information

On August 1, 2001, at 1131 central daylight time, a Beech A36, N136GR, piloted by a private pilot, was substantially damaged during a forced landing on a bean field near Sugar Grove, Illinois. The pilot reported a total loss of engine power during climb from runway 18 (3,199 feet by 75 feet, asphalt) at the Aurora Municipal Airport, Sugar Grove, Illinois. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 maintenance test flight was not operating on a flight plan. The private pilot reported no injuries. The local flight originated from the Aurora Municipal Airport, Aurora, Illinois at 1129.

The pilot/mechanic reported that the airplane had received an annual inspection. A ground test run was performed prior to the maintenance test flight with no fuel leaks noted. He reported that during a postaccident inspection of the airplane, a fuel line loosened but did not come completely off the fitting. He also stated that there was evidence of a small fire in the engine compartment area.

The pilot reported in a written statement, "Ground run up after annual [inspection] ok. No leakage noted. Run up before flight ok. Full power attained at takeoff. [Approximately] 500 [feet] engine quit. Changed fuel tanks [and] turned on fuel pump. Engine restarted [and] quit after [approximately] 5 [seconds]. Put down landing gear and landed straight ahead in a bean field. Beans collapsed nosegear [and] damaged wings [and] firewall. No injuries. Found main fuel line to flow divider had backed off about 3-4 turns. Fuel stain evident."

Pilot Information

Certificate:	Private	Age:	46, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	12/28/1999
Occupational Pilot:		Last Flight Review or Equivalent:	06/03/2000
Flight Time:	625 hours (Total, all aircraft), 25 hours (Total, this make and model), 585 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N136GR
Model/Series:	A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	E2115
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	08/01/2001, Annual	Certified Max Gross Wt.:	3650 lbs
Time Since Last Inspection:	0 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3400 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-550-B
Registered Owner:	Star Fleet Inc	Rated Power:	300 hp
Operator:	Luminair Aviation Services	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	CGFA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ARR, 706 ft msl	Distance from Accident Site:	
Observation Time:	1053 CDT	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	6 Miles
Lowest Ceiling:	Overcast / 20000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	31° C / 23° C
Precipitation and Obscuration:			
Departure Point:	Aurora, IL (ARR)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	1129 CDT	Type of Airspace:	

Airport Information

Airport:	Aurora Municipal Airport (ARR)	Runway Surface Type:	Asphalt
Airport Elevation:	706 ft	Runway Surface Condition:	Vegetation
Runway Used:	18	IFR Approach:	Unknown
Runway Length/Width:	3199 ft / 75 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Report Date:	06/03/2002
Additional Participating Persons:	Charles Hamilton; Federal Aviation Administration; 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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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