



Aviation Investigation Final Report

Location:	ALMA, Michigan	Accident Number:	CHI87LA091
Date & Time:	March 7, 1987, 16:30 Local	Registration:	N12KT
Aircraft:	Beech BE 36	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

ACCORDING TO THE PLT, DURING THE PREFLIGHT INSPECTION, HE DETERMINED THAT BOTH GAS TANKS WERE FULL AND 'EVERYTHING WAS IN ORDER.' AFTER APRX ONE HOUR OF LOCAL FLIGHT, THE PLT ENTERED A LEFT DOWNWIND FOR RWY 27 AT GRATIOT COMMUNITY AIRPORT, ALMA, MICHIGAN. THE PLT STATED THAT HE THEN SWITCHED TO THE OTHER FUEL TANK, WHICH WAS FULL, AND SHORTLY THEREAFTER 'ENCOUNTERED ENGINE OUT.' ACCORDING TO THE PLT, HE OBSERVED THE TANK INDICATOR AND CHECKED THE FUEL SLECTOR VALVE, WHICH 'SEEMED TO BE FIRMLY IN PLACE.' THE ACFT LANDED SHORT OF THE RWY, IN A DITCH PARALLEL TO THE RWY. INSPECTION OF THE ACFT REVEALED THAT THE ENGINE HAD NO FUEL IN ITS SYSTEMS. THE #6 FUEL LINE FROM THE FUEL SELECTOR VALVE TO THE ENGINE DRIVEN FUEL PUMP WAS DRY. WHEN THE SELECTOR VALVE WAS MOVED TO THE LH AND RH POSITIONS, WITH THE ELECTRIC FUEL BOOST PUMP ON, THE ENGINE HAD FUEL FLOW OUT OF THE ENGINE FUEL PUMP OUTLET TO THE FUEL CONTROL.

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(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (C) FLUID,FUEL - STARVATION
2. (C) EMERGENCY PROCEDURE - INADEQUATE - PILOT IN COMMAND
3. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

4. TERRAIN CONDITION - DITCH

Factual Information

Pilot Information

Certificate:	Private	Age:	59, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 16, 1985
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	835 hours (Total, all aircraft), 346 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N12KT
Model/Series:	BE 36 BE 36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	E-1193
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	January 8, 1987 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1587 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	IO 520 8A
Registered Owner:	BONANZA AIRCRAFT LEASING CO	Rated Power:	285 Horsepower
Operator:	BONANZA AIRCRAFT LEASING CO.	Operating Certificate(s) Held:	None
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:	MBS ,668 ft msl	Distance from Accident Site:	29 Nautical Miles
Observation Time:	16:00 Local	Direction from Accident Site:	65°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	20°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GRAND RAPIDS , MI (GRR)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	GRATIOT COMMUNITY AMN	Runway Surface Type:	Asphalt
Airport Elevation:	754 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	Forced landing;Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	43.370948,-84.650581(est)

Administrative Information

Investigator In Charge (IIC): Carmien, Amy

Additional Participating Persons:

Original Publish Date: March 30, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=13739>

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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](#).