



Aviation Investigation Final Report

Location:	HASTINGS, Michigan	Accident Number:	CHI86LA072
Date & Time:	January 17, 1986, 19:30 Local	Registration:	N6900Q
Aircraft:	BEECH A23A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE PILOT ESTIMATED HE HAD 13 GALLONS OF FUEL ON BOARD FOR THE ESTIMATED FIFTY MINUTE FLIGHT. HE ESTIMATED HIS FUEL BURN AT NINE GALLONS PER HOUR GIVING HIM AN HOUR AND TWENTY FIVE MINUTE FUEL ENDURANCE. HE RAN OUT OF FUEL AN HOUR AND TWENTY FIVE MINUTES AFTER ENGINE START AFTER OVERFLYING SUITABLE INTERMEDIATE AIRPORTS TO LAND AND REFUEL. THE PILOT RECOMMENDED THAT HE 'CURB HIS URGE TO RUSH, FACTOR IN WIND SPEED, CARRY A 45 MINUTE RESERVE. FOLLOW INSTINCTS TO LAND WHEN IN DOUBT ABOUT CONTINUING, AND REREAD APPLICABLE FARs.'

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: CRUISE - NORMAL

Findings

1. (C) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
2. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
3. (F) SELF-INDUCED PRESSURE - PILOT IN COMMAND
4. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

5. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
 6. (C) FUEL CONSUMPTION CALCULATIONS - IMPROPER USE OF - PILOT IN COMMAND
 7. (C) VFR PROCEDURES - NOT FOLLOWED - PILOT IN COMMAND
 8. (C) JUDGMENT - POOR - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
9. TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Private	Age:	52, 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--w/ waivers/lim	Last FAA Medical Exam:	November 8, 1984
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	796 hours (Total, all aircraft), 655 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N6900Q
Model/Series:	A23A A23A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	M1068
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 6, 1986 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2166 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-346A
Registered Owner:	ROY A. MARTIN	Rated Power:	165 Horsepower
Operator:		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:	Night/dark
Observation Facility, Elevation:	GRR, 794 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	18:50 Local	Direction from Accident Site:	310°
Lowest Cloud Condition:	Scattered / 15000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	4°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PONTIAC, MI (PTK)	Type of Flight Plan Filed:	None
Destination:	HASTINGS, MI (9D9)	Type of Clearance:	None
Departure Time:	18:20 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.649269,-85.27964(est)

Administrative Information

Investigator In Charge (IIC):	Sebastian, R.
Additional Participating Persons:	ANSON L GRAY; GRAND RAPIDS , MI
Original Publish Date:	
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=13412

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