



Aviation Investigation Final Report

Location:	AINSWORTH, Nebraska	Accident Number:	CHI96LA212
Date & Time:	June 21, 1996, 11:45 Local	Registration:	N6014F
Aircraft:	Beech C23	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he performed thorough preflight fuel consumption calculations. The 'first indication of a minimum fuel situation' was when he noticed the right fuel gauge 'deep into the yellow.' He selected the right fuel tank until the gauge indicated empty. The left fuel tank was selected and 1/8 fuel was indicated when the engine lost power. He switched to the right fuel tank and the engine regained power. The engine lost power again. The pilot selected a landing site in a field. On final, he realized that the terrain in the field was sloping about 20 degrees. He turned left to line up with a road and the left wing impacted the road. The airplane departed the right side of the road and descended a steep embankment. It traveled through a fence and came to rest in a flooded field sustaining substantial damage. The pilot and passenger egressed uneventfully.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate fuel consumption calculations which led to fuel exhaustion and the pilot's selection of an unsuitable landing area for the forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings

1. (F) FUEL SYSTEM - EXHAUSTION
2. (F) FUEL CONSUMPTION CALCULATIONS - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Findings

3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

Factual Information

On June 21, 1996, at 1145 central daylight time, Beech C23, N6014F, sustained substantial damage during a forced landing, following a total loss of engine power near Ainsworth, Nebraska. The private pilot and one passenger reported no injuries. The personal, 14 CFR Part 91 flight departed the Kansas City International Airport, Kansas City, Missouri about 0730 with a planned destination of Ainsworth, Nebraska. Visual meteorological conditions prevailed and no flight plan was filed.

In his written statement the pilot reported that he performed thorough preflight fuel consumption calculations. He switched between fuel tanks every 20 minutes and the "first indication of a minimum fuel situation" was when he noticed the right fuel gauge "deep into the yellow." He calculated that Ainsworth, Nebraska was the closest airport. He selected the right fuel tank until the gauge indicated empty. The left fuel tank was selected and 1/8 fuel was indicated when the engine lost power. He switched to the right fuel tank and the engine regained power. The engine lost power again.

The pilot selected a landing site in a field. On final, he realized that the terrain in the field was sloping about 20 degrees. He turned left to line up with a road and the left wing impacted the road. The airplane departed the right side of the road and descended a steep embankment. It traveled through a fence and came to rest in a flooded field. The pilot and passenger egressed uneventfully.

The Federal Aviation Administration (FAA) Inspector who examined the airplane reported that he drained about 1 pint of fuel from the main fuel drain, one pint from the left main fuel tank, and 1/2 pint from the right main fuel tank.

Pilot Information

Certificate:	Private	Age:	37, 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:	July 16, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	185 hours (Total, all aircraft), 73 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N6014F
Model/Series:	C23 C23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	M-2107
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360
Registered Owner:	EXECUTIVE BEEHCRAFT, INC.	Rated Power:	180 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:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	20 miles
Lowest Ceiling:	Overcast / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	27°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KANSAS CITY , MO (MKC)	Type of Flight Plan Filed:	VFR
Destination:	(ANW)	Type of Clearance:	VFR
Departure Time:	07:30 Local	Type of Airspace:	Class E

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.540225,-99.849189(est)

Administrative Information

Investigator In Charge (IIC): Robbins, Wesley

Additional Participating Persons:

Original Publish Date: May 23, 1997

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=10284>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).