



Aviation Investigation Final Report

Location:	WAMEGO, Kansas	Accident Number:	CHI97LA175
Date & Time:	June 21, 1997, 16:10 Local	Registration:	N6535R
Aircraft:	Beech C23	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane was fueled with 32.2 gallons of usable fuel prior to departure. While on final approach during the second leg of a cross country flight, the pilot spotted parachutists over the airport. He applied power to go-around at which time the engine did not respond. The airplane collided with the terrain while the pilot attempted to avoid powerlines. Inspection of the wreckage revealed 20 ounces of fuel in the left fuel tank which was selected. The right fuel tank was empty. No fuel was found in the carburetor nor was there any signs of fuel leakage at the accident site.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: inaccurate preflight planning which resulted in an inadequate fuel supply for the flight and ultimately fuel exhaustion. Factors associated with the accident were the powerlines and the parachutists over the runway.

Findings

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

Findings

1. (F) OBJECT - OTHER PERSON
2. (C) FLUID,FUEL - EXHAUSTION

- 3. (C) PREFLIGHT PLANNING/PREPARATION - INACCURATE - PILOT IN COMMAND
- 4. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

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

Findings

- 5. (F) OBJECT - WIRE, TRANSMISSION

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 6. TERRAIN CONDITION - CROP
- 7. (F) OBJECT - OTHER PERSON

Factual Information

On June 21, 1997, at 1610 central daylight time, a Beech C23, N6535R, operated by a private pilot collided with the terrain following a loss of engine power while on final approach to land at the Wamego Municipal Airport, Wamego, Kansas. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions without a flight plan. The pilot and three passengers received minor injuries. The airplane was substantially damaged. The flight originated from Spencer, Iowa, at 1345 cdt.

The pilot reported the purpose of the flight was to attend a funeral in Spencer, Iowa. He stated that on the day prior to the accident he and three passengers departed Dallas, Texas and they flew to Emporia, Kansas, then on to Denison, Iowa, where the airplane was refueled and they spent the night. The following morning, they departed Denison, Iowa, for Spencer, Iowa. At approximately 1345, they departed Spencer, Iowa, and were planning on stopping at Wamego for fuel.

The pilot reported he initiated his descent from 5,500 feet without using carburetor heat. The pilot stated that while on a straight in final approach to runway 17 at Wamego, he spotted two parachutists descending over the airport. He stated he initiated a go-around as he was concerned that the parachutists would drift over the runway. He stated that engine power was lost as he applied full throttle. The pilot reported, "With two notches of flaps in and no power I began losing altitude and airspeed. I dropped the nose further to break the oncoming stall but in the new configuration I did not believe I had the airspeed or the altitude to make the airport or the power lines directly in front of me. My last effort was to pull in the third notch of flaps and land in the cornfield short of the power lines."

The airplane came to rest approximately 100 feet north of Highway 24 which runs north of the airport. Post accident inspection of the airplane by an FAA Inspector revealed that all three landing gear were separated from the airplane, the engine and firewall were pulled away and down from the airframe, and the windscreen was broken. The right wing was damaged as was the right flap. The leading edge wing skin was separated at the first row of rivets just outside of the fuel filler cap. The left wing was relatively intact with most of the damage having occurred to the left flap. The right wing fuel tank was empty and the left wing fuel tank contained approximately 20 ounces of fuel. The fuel selector was positioned to the left wing tank. There was no fuel present in the carburetor. The carburetor fuel screen was pulled and it was clean. The fuel line to the fuel pump did not contain any fuel. The magnetos produced a spark when tested and the spark plugs were clean.

A Kansas State Highway Patrol Trooper who arrived at the accident site shortly after the accident occurred reported that he opened the fuel caps on each tank and he was unable to see any fuel in either tank. He also checked for signs of fuel leakage and reported that there

were none.

During a telephone conversation the pilot reported he did not top off the fuel tanks due to gross weight concerns. He stated he had the tanks filled to the "slot." According to the Pilot's Operating Handbook, this would have provided for 40 gallons of fuel of which 32.2 gallons were usable. He reported it took approximately 45 minutes to fly from Denison to Spencer and an additional 2 hours 40 minutes to fly from Spencer to Wamego.

The pilot stated he flew from Denison to Spencer at an altitude of 3,000 feet msl. The pilot flew the flight between Spencer and Wamego at 5,500 feet msl. He stated he used a power setting between 2,250 and 2,300 rpm.

Using a total front seat occupant weight of 415 lbs., a total rear seat occupant weight of 320 lbs., and 32 gallons of usable fuel, the airplane was a minimum of 92 pounds over the maximum gross weight at takeoff. This weight does not take into account the baggage which was on board the airplane.

Pilot Information

Certificate:	Private	Age:	28, 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:	March 4, 1997
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	97 hours (Total, all aircraft), 9 hours (Total, this make and model), 80 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N6535R
Model/Series:	C23 C23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	M1578
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	August 6, 1996 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	175 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2274 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-360-A4J
Registered Owner:	JASON C. WHITFIELD	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:	MHK ,1056 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	15:54 Local	Direction from Accident Site:	260°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	17 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	32°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SPENCER , IA (SPW)	Type of Flight Plan Filed:	None
Destination:	(69K)	Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	WAMEGO 69K	Runway Surface Type:	
Airport Elevation:	996 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	3 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Minor	Latitude, Longitude:	39.199657,-96.300758(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	ERIC JADERBORG; WICHITA , KS
Original Publish Date:	February 2, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=10602

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