



Aviation Investigation Final Report

Location:	DAYTONA BEACH, Florida	Accident Number:	MIA95FA107
Date & Time:	April 14, 1995, 20:18 Local	Registration:	N577M
Aircraft:	BEECH 55-E55	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT HAD FLOWN ABOUT 2 HOURS 33 MINUTES WHEN HE ADVISED CONTROLLERS ON DUTY THAT HE WAS OUT OF FUEL, AND BOTH ENGINES HAD QUIT. THE AIRPLANE CRASHED ABOUT 3 MILES FROM THE AIRPORT AND EXPLODED AND BURNED FOR ABOUT 5 HOURS. THE RIGHT WING SEPARATED WHEN IT STRUCK A TREE AND WAS NOT IN THE MAIN WRECKAGE AREA. THERE WAS NO FUEL IN THE RIGHT MAIN NOR AUXILIARY FUEL TANK, NOR WAS ANY RESIDUE OF FUEL FOUND ON THE GROUND OR FOLIAGE NEAR THE RIGHT WING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE PILOT-IN-COMMAND TO MANAGE THE FUEL AVAILABLE IN FLIGHT BY IMPROPERLY SELECTING THE FUEL SELECTORS TO FUEL AVAILABLE IN OTHER TANKS, RESULTING IN BOTH ENGINES LOSING POWER. CONTRIBUTING TO THE ACCIDENT WAS THE LACK OF SUITABLE TERRAIN FOR THE FORCED LANDING.

Findings

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

Findings

1. (F) FUEL SYSTEM - STARVATION

2. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
3. (C) FUEL MANAGEMENT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

Findings

4. OBJECT - TREE(S)
5. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

HISTORY OF FLIGHT

On April 14, 1995, about 2019 eastern daylight time, N577M, a Beechcraft 55-E55 registered to the pilot, Ronald O. Osbon, crashed in Daytona Beach, Florida, while on a 14 CFR Part 91 personal flight. Visual meteorological conditions prevailed at the time and an IFR flight plan was filed. The airplane was destroyed and the pilot and one passenger received fatal injuries. The flight originated from Shelbyville, Tennessee, about 2 hours 33 minutes earlier the same day.

The flight had originated from West Bend, Wisconsin, earlier in the day and had proceeded to Chicago, Illinois, and then to Shelbyville,. Interviews with ramp service personnel in Shelbyville, revealed that the pilot purchased 80.7 gallons of 100 LL aviation fuel and all four fuel tanks were full on departure from Shelbyville. The flight departed about 1746 EDT. A review of air traffic control transcripts revealed that all communications with the flight were normal until about 2001, when the flight was cleared to descend from 8,000 feet to 4,000 feet. About 2015, the pilot radioed controllers on duty in Daytona Beach, that his right engine was "kicking in and out" The controllers cleared the pilot to land at Daytona Beach Regional Airport. The pilot radioed controllers at about 2017, that "he was losing power on both engines, and was out of gas." The airplane crashed about 3 miles west of the airport and an impact explosion was observed. A postimpact fire ensued and burned for about 5 hours after the accident.

PERSONNEL INFORMATION

The pilot, Ronald O. Osbon was the holder of a private pilot's certificate with ratings for airplane single and multiengine land airplanes. He also had an instrument rating for airplanes. Additional pilot information is included in attachments to this report.

METEOROLOGICAL INFORMATION

The Daytona Beach Regional Airport weather observation at 1955 was: sky clear, visibility 10 miles, temperature 64 degrees fahrenheit, dew point 57 degrees fahrenheit, wind 350 degrees magnetic at 8 knots, altimeter 29.96 inHg.

WRECKAGE AND IMPACT INFORMATION

The main wreckage was located about 3 miles northwest of Daytona Beach Regional Airport in a wooded area. All of the wreckage was massively burned and was in an impact crater, except the right wing outboard of the right engine nacelle, which was found unburned about

150 feet southeast of the main wreckage. The burned landing gear was found in the up position and both engines and propellers were removed from the scene for examination in Mobile, Alabama. The fire damaged fuel selectors were identified and removed for further examination in Wichita, Kansas. The examination of the fuel selectors revealed that both selectors were in the auxiliary position at impact. The engine and propeller examination were conducted with no preimpact failures noted. Copies of the engine, propeller, and fuel selector examinations are attached. The right wing was examined and both the main and auxiliary tank were found empty with no fuel residue around them on the ground nor in the foliage around the wing from the point of impact with the first tree to the place the wing came to rest.

MEDICAL AND PATHOLOGICAL INFORMATION

On April 15, 1995, a postmortem examination of the pilot was conducted by Dr. Ronald Reeves. Dr. Reeves reported the cause of death to be multiple blunt trauma. Toxicological examination of tissues from the pilot was conducted by the Armed Forces Institute of Pathology and was negative for alcohol and basic and acetic drugs.

ADDITIONAL INFORMATION

Postaccident fuel consumption calculations were performed to account for the right wing being found with no fuel and the left wing with adequate fuel to burn in the fire for 5 hours after the accident. Using the manufacturer's fuel consumption rates, there was exactly enough fuel in the right wing to power both engines for the 2 hour 33 minute flight before power loss. The wreckage was released to Sample International Insurance Adjusters on April 12, 1995.

Pilot Information

Certificate:	Private	Age:	58, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	May 13, 1994
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1000 hours (Total, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N577M
Model/Series:	55-E55 55-E55	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	TE 649
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 4, 1994 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-C7B
Registered Owner:	OSBON, RONALD O.	Rated Power:	285 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:	Dusk
Observation Facility, Elevation:	DAB ,12 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	19:55 Local	Direction from Accident Site:	125°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ 8 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SHELBYVILLE , TN (SYI)	Type of Flight Plan Filed:	IFR
Destination:	SPRUCE CREEK , FL (44J)	Type of Clearance:	IFR
Departure Time:	17:46 Local	Type of Airspace:	Air traffic control;Class B

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 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	On-ground
Total Injuries:	2 Fatal	Latitude, Longitude:	29.189846,-81.049026(est)

Administrative Information

Investigator In Charge (IIC): Alston, Andrew

Additional Participating Persons: DALE CARTER; MOBILE , AL
EDDIE WEBBER; WICHITA , KS
ERNIE WILSON; ORLANDO , FL

Original Publish Date: October 27, 1995

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=37648>

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