

Aviation Investigation Final Report

Location: Oscoda, Michigan Accident Number: CEN18FA387

Date & Time: September 25, 2018, 06:13 Local Registration: N241CK

Aircraft: Beech 200 Aircraft Damage: Destroyed

Defining Event: Altitude deviation **Injuries:** 1 Fatal

Flight Conducted Under: Part 91: General aviation

Analysis

The airline transport pilot of the multiengine airplane was cleared for the VOR approach. The weather at the airport was reported as 400 ft overcast with 4 miles visibility in drizzle. When the airplane failed to arrive at the airport as scheduled, a search was initiated, and the wreckage was located soon thereafter. Radar data indicated that the pilot was provided vectors to intercept the final approach course. The last radar return indicated that the airplane was at 2,200 ft and 8.1 miles from the runway threshold. It impacted terrain 3.5 miles from the runway threshold and left of the final approach course. According to the published approach procedure, the minimum descent altitude was 1,100 feet, which was 466 ft above airport elevation.

Examination of the wreckage revealed that the airplane had impacted the tops of trees and descended at a 45° angle to ground contact; the airplane was destroyed by a postcrash fire, thus limiting the examination; however, no anomalies were observed that would have precluded normal operation. The landing gear was extended, and approach flaps had been set. Impact and fire damage precluded an examination of the flight and navigation instruments. Autopsy and toxicology of the pilot were not performed; therefore, whether a physiological issue may have contributed to the accident could not be determined. The location of the wreckage indicates that the pilot descended below the minimum descent altitude (MDA) for the approach; however, the reason for the pilot's descent below MDA could not be determined based on the available information.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's descent below minimum descent altitude during the nonprecision instrument approach for reasons that could not be determined based on the available

information.

Findings

Personnel issues	Incorrect action performance - Pilot	
Aircraft	Altitude - Not attained/maintained	
Personnel issues	Use of policy/procedure - Pilot	
Not determined	(general) - Unknown/Not determined	

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Factual Information

History of Flight

 Approach-IFR final approach
 Altitude deviation (Defining event)

 Approach-IFR final approach
 Collision with terr/obj (non-CFIT)

 Post-impact
 Fire/smoke (post-impact)

HISTORY OF FLIGHT

On September 25, 2018, at 0613 eastern daylight time, a Beech 200, N241CK, collided with trees and terrain while on an instrument approach to Oscoda-Wurtsmith Airport (OSC), Oscoda, Michigan. The airline transport pilot was fatally injured, and the airplane was destroyed by impact forces and a post-impact fire. The airplane was registered to Kalitta Equipment LLC, and was operated by Kalitta Charters as a Title14 *Code of Federal Regulations (CFR)* Part 91 positioning flight. Instrument meteorological conditions prevailed at the accident site at the time of the accident, and an instrument flight rules (IFR) flight plan was filed for the flight which originated from Willow Run Airport (YIP), Ypsilanti, Michigan, about 0513.

According to Kalitta personnel, the pilot was flying to OSC to pick up passengers and subsequently fly them to Memphis, Tennessee. The airplane departed YIP about 0513 and climbed to a cruise altitude of about 13,500 ft. The airplane en route airspeed was about 250 knots. At 0537, when the airplane was about 85 miles south of OSC, it began its initial descent. At 0548, the airplane was vectored to the right to intercept the final approach course and was cleared for the VOR runway 6 approach at OSC. The last radar return was at 0550 and indicated that the airplane was at an altitude of 2,200 ft and 8.1 miles from the runway threshold. It impacted terrain 4.6 miles past this point, about 3.5 miles from the runway threshold. According to the VOR runway 6 approach procedure, an altitude of 2,500 ft (or higher) is flown during the procedure turn. If the OSC altimeter setting is used, descent is made to 1,660 feet to Dogsy intersection, and then to 1,100 feet, the minimum descent altitude (MDA) to Au Sable (ASP) intersection.

When the airplane failed to arrive at the airport as scheduled, Kalitta officials notified the Federal Aviation Administration (FAA0. The wreckage was subsequently located about 1030.

PERSONNEL INFORMATION

The 33-year-old pilot held an airline transport pilot certificate with an airplane multiengine land rating, type ratings in the Learjet, Dassault DA-20 Falcon, and Canadair 601 Challenger, and commercial privileges with an airplane single-engine land rating. He also held a flight instructor certificate with airplane single-engine, multiengine, and instrument ratings, and a ground instructor certificate with an instrument rating. His first-class FAA airman medical certificate, dated March 9, 2018, contained no

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restrictions or limitations. According to the operator, the pilot had logged 3,806 total hours of flight experience, of which 201 hours were in the Beech 200.

The pilot's most recent Part 135 proficiency check was satisfactorily completed on August 31, 2018, in the Dassault DA-20.

AIRCRAFT INFORMATION

The accident airplane, serial number BB272, was manufactured in 1977. It was powered by two Pratt and Whitney PT6A-41 turboprop engines (serial numbers PCE80581 left, and PCE80282 right), each rated at 850 shaft horsepower, driving two Hartzell 3-blade, all-metal, full feathering, constant speed propellers (model HC-B3TN-3G).

The airplane was maintained under an Approved Airworthiness Inspection Program (AAIP). The most recent inspection was performed on March 28, 2018, at an airframe time of 13,933.6 hours. At that time, the left engine had accrued 13,912.7 total hours and 7,742.2 hours since overhaul, and the right engine had accrued 12,802.5 total hours and 6,747.3 hours since overhaul.

METEOROLOGICAL INFORMATION

The following weather observations were recorded by the Automated Weather Observing System (AWOS):

<u>0555</u>: Wind from 180° at 7 knots; 5 miles visibility in light rain; 400 ft overcast ceiling; temperature, 18°C; dew point, 18°C; altimeter setting of 29.91 inches of mercury.

<u>0615</u>: Wind from 200° at 6 knots; 4 miles visibility in drizzle; 400 ft overcast ceiling; temperature, 19°C; dew point, 19°C; altimeter setting of 29.91 inches of mercury.

<u>0635</u>: Wind from 200° at 7 knots; 4 miles visibility in heavy drizzle; ceiling, 400 ft overcast ceiling; temperature, 19°C; dew point, 19°C; altimeter setting of 29.92 inches of mercury.

WRECKAGE AND IMPACT INORMATION

Examination of the accident site revealed that the airplane had impacted the tops of trees, then descended at a 45° angle to the ground. A postimpact fire consumed the cockpit and cabin area. There were numerous propeller contact marks in the trees. Examination of the wreckage revealed no evidence of mechanical malfunctions or anomalies. Actuator positions indicated that the landing gear was extended, and approach flaps had been set. Fire and impact damage precluded examination of the cockpit instruments.

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MEDICAL AND PATHOLOGICAL INFORMATION

Due to the condition of the remains, autopsy and toxicology protocols were not performed.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	33,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	March 9, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 31, 2018
Flight Time:	3806 hours (Total, all aircraft), 201 hours (Total, this make and model), 2687 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 64 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N241CK
Model/Series:	200 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	BB272
Landing Gear Type:	Retractable - Tricycle	Seats:	9
Date/Type of Last Inspection:	March 28, 2018 AAIP	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:	13933.5 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney Canada
ELT:	C91A installed, activated, aided in locating accident	Engine Model/Series:	PT6A-41
Registered Owner:		Rated Power:	850 Horsepower
Operator:	On file	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	KC8A

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night
Observation Facility, Elevation:	OSC,633 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	06:35 Local	Direction from Accident Site:	245°
Lowest Cloud Condition:		Visibility	4 miles
Lowest Ceiling:	Overcast / 400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None /
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	19°C / 19°C
Precipitation and Obscuration:			
Departure Point:	Ypsilanti, MI (YIP)	Type of Flight Plan Filed:	IFR
Destination:	Oscoda, MI (OSC)	Type of Clearance:	IFR
Departure Time:	05:13 Local	Type of Airspace:	Class E

Airport Information

Airport:	Oscoda-Wurtsmith Airport KOSC	Runway Surface Type:	Concrete
Airport Elevation:	633 ft msl	Runway Surface Condition:	Wet
Runway Used:	06	IFR Approach:	RNAV;VOR/DME
Runway Length/Width:	11600 ft / 200 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	44.416667,-83.485832

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Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Thomas G Kozura; FAA Flight Standards District Office; Grand Rapids, MI Ramon W Grillo; FAA Flight Standards District Office; Grand Rapids, MI Gerald Dotson; FAA Flight Standards District Office; Grand Rapids, MI Henry Soderlund; Textron Aviation (Beech Aircraft); Wichita, KS

Original Publish Date:

November 6, 2019

The NTSB traveled to the scene of this accident.

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=98348

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

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