

Aviation Investigation Final Report

Location: JACKSON, Wyoming Accident Number: DEN00LA036

Date & Time: January 4, 2000, 17:25 Local Registration: N895TT

Aircraft: Beech B200 Aircraft Damage: Substantial

Defining Event: 3 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

While performing the ILS runway 18 approach to the airport, the pilot broke out of the clouds just above the decision height. He had the aircraft aligned with what he believed were the REILs (flashing white strobe lights that identify the end of the runway), but instead turned out to be the PAPI (four lights installed in a single row located on the left side of the runway). The airplane touched down on the left side between the runway and taxiway A, 2,200 feet from the threshold of the 6,299 foot runway. Upon touchdown, the nose landing gear collapsed. According to the Jackson Hole Airport Manager, the PAPI and REIL lighting systems for the runway were checked on the morning of and the morning following the accident. No discrepancies were observed, and the airport did not receive any reports from pilots or airport personnel that either system was inoperative.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot misreading the visual approach lighting system, resulting in his failure to maintain proper alignment with the runway and his selection of an improper touchdown point. Factors were the low ceiling weather conditions and the snow covered runway.

Findings

Occurrence #1: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 1. (C) VASI MISREAD PILOT IN COMMAND
- 2. (C) PROPER ALIGNMENT NOT MAINTAINED PILOT IN COMMAND
- 3. (C) PROPER TOUCHDOWN POINT NOT SELECTED PILOT IN COMMAND
- 4. (F) WEATHER CONDITION LOW CEILING
- 5. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION SNOW COVERED

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Factual Information

On January 4, 2000, at 1725 mountain standard time, a Beech B200, N895TT, registered to and operated by Whipple Development Corp. of Charleston, South Carolina, was substantially damaged when the nose gear collapsed during landing touchdown at Jackson Hole Airport, Jackson, Wyoming. The private certificated instrument rated pilot and two passengers were not injured. Visual meteorological conditions prevailed, and an IFR flight plan was filed for the personal cross-country flight being conducted under Title 14 CFR Part 91. The flight originated from Grand Island, Nebraska, at 1520 central standard time.

According to the pilot, while approaching the Jackson Hole Airport, he was in instrument meteorological conditions and was number two for landing behind a Gulfstream. He listened to the airport's AWOS (Automated Weather Observing System) over the radio, and the weather was forecast to be one thousand foot overcast ceilings and one mile visibility. After performing one holding pattern, he was cleared for the ILS (Instrument Landing System) runway 18 approach. He stated that he broke out of the clouds "just above the decision height [6,745 feet above mean sea level; 300 feet above ground level], and had before me what I believed were the runway threshold lights." According to recorded weather observations, at 1715 and again at 1735, the ceilings were reported to be broken clouds at 200 feet with overcast clouds at 1,000 feet.

The pilot stated during the landing approach, it was dusk and the runway as well as the surrounding airport area were covered by snow. He aligned the aircraft with what he "believed was the runway end identifier lights (REILs). Because of the position of my aircraft, thirty feet to the left of the runway, the best I can determine at this time is that I must have mistaken the precision approach [path indicator] (PAPI) for the REILs, and this lead [sic] me to conclude that I was lined up with the runway and runway threshold." The airplane touched down on the left side between the runway and taxiway A, approximately 2,200 feet from the threshold of the 6,299 foot runway, and traveled an additional 347 feet before coming to rest. The nose landing gear collapsed, and the aircraft sustained damage to the nose landing gear box, radome and forward bulkhead, and both engines and propellers.

According to the FAA's Airport/Facility Directory, runway 18 is equipped with REILs and a PAPI-L (the L indicates that the PAPI is on the left side of the runway only). REIL's are two flashing white strobe lights, one located on each side of the runway, that identify the end of the runway. PAPI lights have four lights installed in a single row. If an aircraft is on the glide path, the two lights on the left of the PAPI will be white and the two lights on the right will be red. If all four lights are white, the aircraft is slightly high on the glide path. According to the Jackson Hole Airport Manager, the PAPI and REIL lighting systems for runway 18 were checked on the morning of and the morning following the accident. No discrepancies were observed, and the airport did not receive any reports from pilots or airport personnel that either system was

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inoperative. There is no approach lighting system (ALS) installed on runway 18.

Pilot Information

Certificate:	Private	Age:	55,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:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 11, 1998
Occupational Pilot:	No Last Flight Review or Equivalent:		
Flight Time:	2605 hours (Total, all aircraft), 361 hours (Total, this make and model), 2475 hours (Pilot In Command, all aircraft), 52 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N895TT
Model/Series:	B200 B200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	BB-1239
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	September 10, 1999 Continuous airworthiness	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	120 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	3238 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	PT-6-A-42
Registered Owner:	WHIPPLE DEVELOPMENT CORP.	Rated Power:	850 Horsepower
Operator:	EDWARD L. TERRY	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Dusk
JAC ,6445 ft msl	Distance from Accident Site:	
17:15 Local	Direction from Accident Site:	
Unknown	Visibility	1 miles
Broken / 200 ft AGL	Visibility (RVR):	
13 knots / 16 knots	Turbulence Type Forecast/Actual:	/
220°	Turbulence Severity Forecast/Actual:	/
29 inches Hg	Temperature/Dew Point:	-5°C / -6°C
N/A - Blowing - Snow		
GRAND ISLAND , NE (GRI)	Type of Flight Plan Filed:	IFR
(JAC)	Type of Clearance:	IFR
15:20 Local	Type of Airspace:	Class D
	JAC ,6445 ft msl 17:15 Local Unknown Broken / 200 ft AGL 13 knots / 16 knots 220° 29 inches Hg N/A - Blowing - Snow GRAND ISLAND , NE (GRI) (JAC)	JAC ,6445 ft msl Distance from Accident Site: 17:15 Local Direction from Accident Site: Unknown Visibility Broken / 200 ft AGL Visibility (RVR): 13 knots / 16 knots Turbulence Type Forecast/Actual: 220° Turbulence Severity Forecast/Actual: 29 inches Hg Temperature/Dew Point: N/A - Blowing - Snow GRAND ISLAND , NE (GRI) Type of Flight Plan Filed: (JAC) Type of Clearance:

Airport Information

Airport:	JACKSON HOLE AIRPORT JAC	Runway Surface Type:	Asphalt
Airport Elevation:	6445 ft msl	Runway Surface Condition:	Snow
Runway Used:	18	IFR Approach:	ILS
Runway Length/Width:	6299 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	43.470741,-110.759208(est)

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Administrative Information

Investigator In Charge (IIC): Scott, B. beach

Additional Participating Persons:

Original Publish Date: November 29, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=48434

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.

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