



Aviation Investigation Final Report

Location:	BRADY, Texas	Accident Number:	FTW95FA407
Date & Time:	September 29, 1995, 22:38 Local	Registration:	N836AA
Aircraft:	Beech A36	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During a dark night visual approach to an unlighted airport, the airplane collided with a 50-foot tall pole, which was part of the antenna for a nondirectional radio beacon (NDB). The FAA aeronautical study for the installation of the NDB determined that the antenna was not a hazard to air navigation and did not require obstruction lighting. Airport personnel reported the runway lights and rotating beacon had been turned off to close the airport to night operations the night of 9/29; however, a Notice to Airmen (NOTAM) was not filed. Prior to initiating the flight, the pilot received a weather briefing during which he specifically requested NOTAMs on the airport and was informed that none were on file. Witnesses observed the airplane circle the airport 'two or three times' before entering a descent 'like it was going to land.' Toxicological testing detected doxylamine (Unisom), which is not approved for use while flying, in the pilot's urine. Dextromethorphan (an expectorant), pseudoephedrine and phenylpropanolamine (decongestants) were detected in the pilot's blood and urine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper decision to attempt a night landing without the visual cues necessary to establish runway alignment. Factors were the dark night light condition, the inoperative runway edge lights, and the failure of airport management to issue a NOTAM that the airport was closed to night operations.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH

Findings

1. (F) LIGHT CONDITION - DARK NIGHT
2. AIRPORT FACILITIES, ROTATING BEACON - NOT OPERATING
3. (F) AIRPORT FACILITIES, RUNWAY EDGE LIGHTS - NOT OPERATING
4. (F) NOTAMS - NOT ISSUED - AIRPORT PERSONNEL
5. PROPER ALIGNMENT - NOT POSSIBLE - PILOT IN COMMAND
6. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
7. USE OF INAPPROPRIATE MEDICATION/DRUG - PILOT IN COMMAND
8. OBJECT - ANTENNA

Factual Information

HISTORY OF FLIGHT

On September 29, 1995, approximately 2238 central daylight time, a Beech A36, N836AA, collided with a non-directional beacon (NDB) antenna pole during approach at the Curtis Field Airport near Brady, Texas. The airplane was destroyed and the commercial pilot was fatally injured. The airplane was rented from Abilene Aero, Inc., by the pilot for the personal flight conducted under Title 14 CFR Part 91. No flight plan was filed and dark night visual meteorological conditions prevailed for the flight which departed Brownwood, Texas, approximately 20 minutes before the accident.

Witnesses observed the airplane circle the airport "two or three times" before starting a descent "like it was going to land." The witnesses lost sight of the airplane behind buildings and then observed flames on the airport grounds. They reported that there were "no lights on" at the airport. One witness stated that it was "pitch dark" and a local law enforcement official reported that there was "no moon."

During a personal interview, conducted by the investigator-in-charge, the airport manager reported that runway 17/35 had been seal coated on September 27, 1995. The runway was reopened on the morning of September 29, 1995, and a Notice to Airmen (NOTAM) closing the runway, which had been in effect during the construction project, was canceled. He further reported that because the centerline and identification markings on the runway had not yet been repainted, a decision was made on the afternoon of the 29th to keep the airport closed to night operations. For this reason, the runway lights and the rotating beacon were not operating at Curtis Field on the night of the 29th.

A copy of the NOTAM log for the month of September 1995 was provided by the San Angelo Automated Flight Service Station. Review of the log revealed that NOTAMs closing runway 17/35 at Curtis Field were in effect from 0800 on September 26, 1995, until 1030 on September 29, 1995.

According to a business associate of the pilot, the pilot had landed at Curtis Field on September 26, 1995, and learned of the pending runway project. At that time, he was informed by the airport manager that the runway would be reopened by the morning of the 29th. On the night of the 29th, the pilot planned to land at Brady, pick up three passengers, and continue on to Houston, Texas.

On September 29, 1995, approximately 2100, the pilot contacted the Fort Worth Automated Flight Service Station and requested a weather briefing for a flight from Brownwood to Houston with an intermediate stop at Brady. A copy of the audio tape of this weather briefing

was provided by the FAA. Review of the tape by the investigator-in-charge revealed that the pilot specifically requested NOTAMs on the Curtis Field Airport. He asked the briefer if the airport was "still closed" and was informed that there were no NOTAMs on file. At the conclusion of the weather briefing, the pilot filed a VFR flight plan for the portion of the trip from Brady to Houston.

PERSONNEL INFORMATION

A review of the pilot's logbooks, conducted by the investigator-in-charge, revealed that the pilot had made numerous flights into and out of Curtis Field Airport. In 1984 and 1985, he had given flight instruction at the airport. In the 49 days before the accident, the pilot had logged 10 flights which included landings at Curtis Field with two of the landings occurring at night.

AIRCRAFT INFORMATION

A review of the airframe and engine logbooks revealed no record of any uncorrected maintenance discrepancies.

AIRPORT INFORMATION

Curtis Field Airport is owned and operated by the City of Brady, Texas. The airport is not required to be, nor is it, certificated under Title 14 CFR Part 139. There are no regulatory requirements for non-Part 139 certificated airports to issue NOTAMs. Guidelines for airport managers concerning the issuance of NOTAMs are contained in FAA Advisory Circular 150/5200-28A. Paragraph 9 of the circular is entitled "Airport Management Responsibilities" and states, in part:

The management of a civil airport which is open for public use is expected to make known as soon as practical any condition on or in the vicinity of the airport, existing or anticipated, which would prevent, restrict, or present a hazard to arriving or departing aircraft. Public notification is normally accomplished by the NOTAM system.

The airport has two runways, runway 08/26 which is turf, and runway 17/35 which is paved and equipped with low intensity runway edge lights. As shown on the attached airport diagram, the Brady NDB is located 660 feet south of runway 08/26 and 635 feet east of runway 17/35. The NDB consists of a symmetrical T-antenna supported by two 50 foot tall poles and a transmitter housed in a metal building located at the midpoint between the poles. The poles are located 300 feet apart and situated parallel to runway 17/35.

A copy of the aeronautical study completed prior to the installation of the Brady NDB was obtained from the FAA. The study determined that the antenna "would not be a hazard to air navigation" and, therefore, did not require obstruction marking and lighting.

WRECKAGE AND IMPACT INFORMATION

Examination of the accident site revealed a linear wreckage path extending for 379 feet on a measured magnetic heading of 170 degrees. The wreckage path began at the northerly pole of the NDB antenna which was located about 1910 feet south of the threshold of runway 17. A section of the left aileron control cable was wrapped around the pole approximately 45 feet above ground level. The severed left wing was located 46 feet south of the pole and displayed a rounded indentation in the leading edge corresponding in diameter to the pole.

A ground scar measuring 13 feet in length and containing fragments of windshield plexiglass was located 311 feet south of the pole. The main wreckage consisting of the fuselage, right wing and engine came to rest inverted 379 feet south of the pole. The landing gear was extended and the flaps were partially extended. Post-impact fire consumed the right wing and the fuselage from the firewall to the tailcone. See enclosed wreckage diagram for further details.

An examination of the engine was conducted on October 18, 1995, under the supervision of the NTSB investigator-in-charge, and no evidence of pre-impact mechanical failure or malfunction was observed. The propeller remained attached to the crankshaft and the three blades remained attached to the hub. One blade was bent back, twisted 360 degrees, and gouged on the trailing edge near the tip. Another blade was loose in the hub, evidenced torsional twisting, and displayed chordwise scratches. The third blade was bent forward and separated 18 inches outboard from the hub.

MEDICAL AND PATHOLOGICAL INFORMATION

The autopsy was performed by Roberto J. Bayardo, M.D., Chief Medical Examiner of Travis County, at Austin, Texas. Toxicological testing detected dextromethorphan (non-narcotic, antitussive cough expectorant), pseudoephedrine, and phenylpropanolamine (decongestants) in blood and urine. According to Dr. Soper of the FAA's Civil Aeromedical Institute, these findings, while "insignificant" in terms of causing impairment, "suggest that the pilot had an underlying medical condition which may have caused discomfort or a distraction." Doxylamine (Unisom) was detected in urine; this over-the-counter sleep aid is not approved by the FAA for use while flying.

ADDITIONAL INFORMATION

The wreckage was released to a representative of the owner on October 18, 1995.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	44, 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):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 20, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	6544 hours (Total, all aircraft), 9 hours (Total, this make and model), 4581 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N836AA
Model/Series:	A36 A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	E-1187
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	August 21, 1995 100 hour	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	54 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6359 Hrs	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	IO-520-BA12
Registered Owner:	ABILENE AERO, INC.	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	GSTA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BROWNWOOD (BWD)	Type of Flight Plan Filed:	None
Destination:	(BBD)	Type of Clearance:	None
Departure Time:	22:18 Local	Type of Airspace:	Class G

Airport Information

Airport:	CURTIS FIELD BBD	Runway Surface Type:	Asphalt
Airport Elevation:	1827 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

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:	31.130908,-99.369331(est)

Administrative Information

Investigator In Charge (IIC):	Snyder, Georgia
Additional Participating Persons:	KENNETH L TIPTON; SAN ANTONIO , TX JOHN T KENT; MOBILE , AL EDDIE E WEBBER; WICHITA , KS
Original Publish Date:	July 11, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=19255

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](#).