



Aviation Investigation Final Report

Location:	GUTHRIE, Oklahoma	Accident Number:	FTW97FA097
Date & Time:	January 31, 1997, 17:50 Local	Registration:	N5366B
Aircraft:	Cessna 152	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

During a pre-solo dual instructional flight in the traffic pattern, the Cessna 152 impacted a power line 1.5 nautical miles (nm) south of the non-towered airport. A witness observed the Cessna flying over runway 16 and, approximately one minute later, observed a twin engine turboprop MU-2 land on runway 34. This witness reported that before the MU-2 exited the runway, the electricity went off at the airport. Witnesses south of the airport reported seeing/hearing a small single engine airplane reduce power, descend low over their houses, and continue south. A witness southwest of the airport heard a twin engine airplane heading northeast, and approximately 30 seconds later, observed the Cessna impact the power line. A 911 call reporting the accident was recorded at 1749, and an electrical power outage was recorded at 1750. These times could not be correlated with radar data, which indicated that, at 1749, the Cessna was 1/4 nm northeast of the airport on a left base for runway 16, while the MU-2 was 5 nm northeast of the airport. Since no further radar returns were recorded for the Cessna, it was not possible to ascertain whether an imminent collision threat occurred between the Cessna and the MU-2. Post-accident examination of the Cessna revealed no evidence of mechanical discrepancies. The sun set at 1756 on a heading of 238 degrees from the airport, indicating the Cessna pilots would have had to look into the setting sun to see the power line, which was located west of the extended centerline of runway 16.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to obtain/maintain clearance with the power line. A factor was the sunglare from the setting sun, which could have impaired the flight instructor's ability to see the power line.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

Findings

1. LOW ALTITUDE FLIGHT/MANEUVER - PERFORMED - PILOT IN COMMAND(CFI)
2. (C) CLEARANCE - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND(CFI)
3. (F) LIGHT CONDITION - SUNGLARE
4. OBJECT - WIRE,STATIC

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

HISTORY OF FLIGHT

On January 31, 1997, at 1750 central standard time, a Cessna 152, N5366B, was destroyed following impact with a static wire near Guthrie, Oklahoma. The airline transport rated flight instructor and the student pilot were both fatally injured. The airplane was registered to Seward Leasing, Inc., and operated by Crabtree Aircraft Co. under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the local instructional flight which originated from Guthrie Municipal Airport at approximately 1715. No flight plan had been filed.

Witnesses reported to the Investigator-In-Charge (IIC) that the Cessna 152 was on a training flight to "prepare the student for his solo ride." The flight school owner reported to the IIC that the pilots had been making takeoffs and landings on runway 16. Witnesses stated that they "believed that [N5366] Bravo had completed 4 to 5 touch-and-goes before the accident occurred."

Another flight instructor reported to the IIC that he and his student had landed at Guthrie Municipal Airport at approximately 1740. He stated that when they were approaching Guthrie's landing pattern, he spoke to the flight instructor in N5366B on his airplane's radio. He further stated that while he was taxiing back to the FBO office he heard the flight instructor making his traffic pattern radio calls while on downwind. A witness who services airplanes at Guthrie Municipal Airport reported to the IIC that he remembers seeing the flight instructor "at the dispatch log carrying his headset with him as he always did before a flight." The witness further reported that he "recalls hearing the flight instructor's transmission on the radio when he was on downwind for runway 16 and his student make a second radio call for downwind runway 16."

A witness who was standing in the lobby of the FBO (witness area one, see attached witness location chart) reported to the IIC that he observed N5366B flying over Runway 16 "at about an altitude of 300 or so feet in a nose low attitude. After I saw the Cessna, it was probably about no longer than one minute when I noticed a large twin prop MU-2 that had landed on runway 34, and before it had cleared the runway I noticed that the electricity went off in the airport." This witness further reported that he was approximately 10 feet from the FBO UNICOM radio and did "not recall any radio traffic from the pilot of the MU-2 from the UNICOM radio in the FBO." Another witness, who was airborne and approaching Guthrie Municipal Airport at approximately 1750, reported to the IIC that he was monitoring Guthrie's Common Traffic Advisory Frequency (CTAF--122.8) "with the volume turned up and at no time did he hear any traffic announcing for runway 34 at Guthrie."

The airplane observed by the witness in the FBO lobby was a Mitsubishi MU-2B-36A, N338CM.

It was arriving from a cross-country flight which had originated from Lansing Municipal Airport near Chicago, Illinois, approximately 2 hours and 35 minutes before the event.

The flight school's chief flight instructor, other flight instructors employed by the school, and several of the flight instructor's current students reported to the IIC that the flight instructor always followed the FAA approved flight school procedures for the traffic pattern and the use of the airplane's check list which included the use of the airplane's flashing beacon and its strobe lights. The above individuals further reported that the flight instructor always had his headset with him and to the best of their knowledge, he always used it.

A witness in area two who was inside preparing dinner, heard what he believed was a single engine airplane flying normally, "then whoosh (kicked back the throttle), then chug, chug." The witness reported to the IIC that "a few moments later a second airplane, a double (double sound) and sounded strong (had it cranked up for approach) came by, banked hard left [and] headed for the airport." Another witness in area two who was in the yard hanging clothes reported to the IIC that she "saw a small craft flying southeast over her property; sounded like something was cutting out or throttling back."

Another witness in area two who was in her yard talking to her neighbor reported to the IIC that she saw a small airplane flying overhead (very low) and the engine was "chugging; then it flew towards the Interstate." She stated that "the sound had just gone out of my hearing range when the bigger airplane flew overhead going in the other direction (towards the airport). It sounded fine, but loud." The neighbor reported to the IIC that a "bigger than normal airplane (two engines) flew towards the airport, very low and very loud." This witness also pointed out to the IIC the twin engine airplane's route of flight, which was measured by the IIC as a magnetic course of 320 degrees.

Another witness in area two reported to the IIC that she and her husband were sitting in their living room watching TV, and she "heard a very loud small engine plane overhead (I ducked)." She reported that the plane became "quieter" as it flew south of the property. "Shortly later another small plane came in to land; it sounded healthier-stronger, quicker." This witness further reported to the IIC that "we were certain the second plane had to have seen the first."

Two other witnesses who were inside their home in area three (see attached witness location chart) reported that "they heard an airplane very low (under stress) real loud (rattled the walls). It went by very slow (working hard) going south." They reported to the IIC that they hear a lot of airplanes where they live and they believed that this was a single-engine airplane. In the front yard of the same house was a visiting friend who reported to the IIC that a "small plane flew very low right above the house. It sounded like a buzz-saw passing by and I at first thought it was going to hit the house. I ducked down thinking it might do just that." This witness further stated that "I remember it sounding so very loud, because it was so close."

The witness in area four reported to the IIC that she heard "a small airplane with the power coming off, sounded like a stall, like they practice out here all the time." She stated that she

then heard "a loud power coming on (jet engines) and she couldn't hear the little guy anymore."

The witness in area five reported to the IIC that approximately 10 minutes before 6, he "was in the shop and heard a different deeper sound (maybe two engines - noise wave discrepancies), very loud, like a 454 straight pipe engine [automotive]." He further reported that he then walked out the backdoor and could hear the "noise wave discrepancies fading towards the airport." He stated to the IIC that "he walked over a few more steps and saw a small airplane equal to the top of the large highway sign (see photographs). It started to bank left, but then nosed down kinda drastic like (simultaneously I saw sparks). The airplane then nosed down steeply and disappeared."

The witness in area six reported to the IIC that she "was driving north on Sooner Rd. (old 77), at approximated 10 minutes before 6, when I observed a two engine airplane, bigger than what I usually see in this area. It was very low and very loud." She reported that she "first saw it coming towards me from the northwest and it was in a left turn (tipped left); I last saw it turning Northeast."

One of several witnesses in area seven reported to the IIC that she was driving north on Interstate 35 when "suddenly there was an airplane right in front of her flying very low just above the cars." She stated that "he went right (west) and then left (southwest); next he hit the ground." Another witness in area seven reported that "I saw a small (private) plane circle low over the highway, heading first towards the east and then circling towards the south until it was aligned approximately along the route of the highway." He stated that "the plane struck an overhead electrical cable, at which point it immediately dropped, nose first, to the ground."

The IIC interviewed ten witnesses who were in area seven and observed the accident, none of them recalled seeing or hearing a second airplane over or near the accident site until approximately 5 to 10 minutes after the accident when a small single engine airplane circled directly over head.

According to FAA documentation, N338CM, arrived in the Guthrie, Oklahoma, area on an IFR flight plan. At approximately 5 NM out from Guthrie Municipal Airport, the ATC controller asked the pilot of N338CM if he had the airport in sight. The pilot responded that "we are looking right into the sun, we still don't have it." Approximately 40 seconds went by before the pilot radioed the controller that he had Guthrie Municipal Airport in sight; at which time he canceled his flight plan and was cleared to the CTAF by ATC. A review of recorded radar data indicated that at the time the pilot of N338CM reported Guthrie Municipal in sight, the MU-2 was approximately 2.8 nautical miles northeast of the airport at approximately 3,600 feet msl.

Radar data indicates that N338CM flew over the north end of Guthrie Municipal Airport at approximately 2,850 feet msl and flew a descending curved flight path to a point approximately 2.5 nautical miles southwest of the airport where radar indicated he was at 1,800 feet msl (550 feet agl). At this geographical point, the radar indicates that he turned northeast bound, with the sun at his back, for approximately 2 nautical miles. At this location,

approximately 300 feet agl, N338CM turned to approximately 320 degrees (see statement of witness in area two) for an estimated one nautical mile final approach to runway 34 at Guthrie Municipal Airport. Throughout this approach flight path, his airspeed varied (see attached chart). The pilot of N338CM reported to the IIC that he believes that he made at least three radio transmissions on CTAF, during the three minute time period from his IFR cancellation to touchdown on runway 34.

A non-pilot witness sitting in the right seat of N338CM reported to the IIC that he believes the pilot of N338CM is a "meticulous pilot." He stated that when he flies with him, the pilot has him "read the checklist and look for other airplanes." He further stated that he believes the pilot of N338CM made approximately three radio transmissions on the CTAF during their approach into Guthrie.

PERSONNEL INFORMATION

According to the flight school's chief flight instructor, the flight instructor was an experienced flight instructor. According to the flight instructor's flight logbook, he had approximately 2800 hours of flight experience in airplanes. The chief flight instructor reported to the IIC that the flight instructor had been flying out of Guthrie Municipal Airport for approximately 4 years and had "acquired almost all of his flight experience there."

Examination of the flight instructor's logbook, interviews with the school's Chief Flight Instructor and fellow flight instructors indicated that the flight instructor had not received any training in aerobatic flight. Additionally, these witnesses had never heard the flight instructor talk about performing aerobatics. One of the flight instructor's fellow instructors described the flight instructor as "a very conservative pilot."

The student's flight logbook indicated that this was his 8th flight lesson (9.3 hours of flight training at the time of the accident) and he was a pre-solo student. The day before the accident, on January 30, 1997, the student received a medical examination from an FAA certified medical examiner and was issued a student pilot certificate.

AIRCRAFT INFORMATION

The accident airplane was a high-wing, fixed-gear, single-engine airplane built in 1979 and had accrued approximately 12,130 hours of flying time. The airplane's 110 HP engine had 3,780 hours on it since overhaul and the last annual inspection was accomplished on December 6, 1996. The airplane was equipped with two VHF radios and an intercom system with push to talk buttons on both control yokes. It was painted white with red and a lesser amount of blue trim. The airplane was equipped with navigation lights on the wing tips and rudder, a flashing beacon on the top of the vertical stabilizer (leading edge), and strobe lights on the wing tips.

At the time of the accident, using estimates derived from aircraft records, FAA medical records, fuel utilization charts, and personal belongings found in the airplane, the airplane

weighed approximately 1,659 pounds (the maximum certified gross weight is 1,670 pounds) and would have been within the center-of-gravity limitations when the accident occurred (see attached manufacturer charts). Using performance charts found in the owner's manual, if the airplane was at gross weight, it would climb at approximately 600 feet per minute.

N338CM was a 1977 Mitsubishi MU-2B-36A turbo prop. The pilot of that airplane had reported on his IFR flight plan request that his airplane was painted "white over gray with a red stripe." The MU-2B was also equipped with wing tip tanks which have landing lights in them; and, the nose wheel gear has two taxi lights mounted on it.

METEOROLOGICAL INFORMATION

The National Weather Service facility at the Will Rogers World Airport (OKC - approximately 28 NM south) in Oklahoma City, Oklahoma, reported on January 31, 1997, at 1756 CST, that the winds were calm, the visibility was 10 miles, the skies were clear, the temperature was 55 degrees fahrenheit, the dewpoint was 30 degrees fahrenheit, and the altimeter was 29.83. One witness at Guthrie Municipal Airport reported that, at the time of the accident, the winds were calm and another witness estimated that the winds were 290 degrees at 2 to 3 knots.

The U.S. Naval Astronomical Observatory reported that on the day of the accident, the sun set at 1756 CST. On February 1, 1997, the day after the accident, the sun was observed by the IIC to sink below the horizon at 245 degrees magnetic heading from the Guthrie Municipal Airport vicinity. According to the Dallas-Fort Worth Sectional Aeronautical Chart, the magnetic variation in the Guthrie, Oklahoma, area is approximately 7 degrees east which would have the sun setting at approximately 238 degrees true.

The pilot of N338CM received a weather briefing and filed a flight plan with Kankakee AFSS at approximately 0813 on January 31, 1997. He was given the Oklahoma City forecast for 1800 to 0000 UTC which was: winds 310 degrees for 11 knots, visibility 6 plus miles, and 25,000 feet scattered cloud condition. As N338CM approached Guthrie Municipal Airport, the pilot was given the 1656 CST weather observation for Oklahoma City which was: winds 290 degrees at 3 knots, visibility 10 miles, sky clear, and the barometric pressure at 29.82 inches.

COMMUNICATIONS

FAA Advisory Circular 90-42F (Traffic Advisory Practices at Airports Without Operating Control Towers) recommends that "all inbound traffic should continuously monitor and communicate, as appropriate, on the designated CTAF from a point 10 miles from the airport until clear of the movement area." It further recommends that "departing aircraft should continuously monitor/communicate on the appropriate frequency from startup, during taxi, and until 10 miles from the airport unless the Federal Aviation Regulations or local procedures require otherwise."

Advisory Circular 90-42F also recommends that inbound pilots contact the non towered

airport's UNICOM, if available, to request local weather information, the recommended runway, or any other necessary information. Pilots operating at non towered airports are also requested to make "self-announcements" that announce their position, intended flight activity or ground operation on the designated CTAF to notify other pilots operating at the same airport.

AERODROME INFORMATION

Guthrie Municipal Airport (elevation 1,068 feet) has one 4,102 x 75 foot concrete runway oriented 16-34 with VASI approach lighting on runway 16. The airport is a non-controlled field with a Common Traffic Advisory Frequency and UNICOM frequency of 122.8. The National Weather Service has installed an Automatic Surface Observation System (ASOS-1) on frequency 133.975 which has been operating for 5 years, but is still in the test mode. The airport is serviced by a Non Directional Beacon (NDB) navigation aid which is located on the field and has a frequency of 326.

The posted local traffic pattern is flown with left turns at a recommended altitude of 1,900 feet msl. The Airport/Facility Directory suggests a traffic pattern altitude of 1,894 feet msl and AOPA Aviation USA airport guide book indicates that "all aircraft" should fly their traffic pattern at 1,870 feet msl at Guthrie, Oklahoma. The FAA Aeronautical Information Manual (AIM) and Advisory Circular 90-66A recommends that airplanes observe a 1,000 foot above ground level (agl) traffic pattern altitude. The documents further recommend that "large and turbine powered airplanes should enter the traffic pattern at an altitude of 1,500 feet agl or 500 feet above the established pattern altitude." Refer to attachment AC 90-66A - Recommended Standard Traffic Patterns and Practices for Aeronautical Operations at Airports Without Operating Control Towers.

Advisory Circular 90-66A recommends that a pilot entering an uncontrolled traffic pattern:

should avoid the flow of traffic until established on the entry leg. For example, wind and landing direction indicators can be checked while at an altitude above the traffic pattern. When the proper traffic pattern direction has been determined, the pilot should then proceed to a point well clear of the pattern before descending to the pattern altitude.

Arriving aircraft should be at the appropriate traffic pattern altitude before entering the traffic pattern. Entry to the downwind leg should be at a 45 degree angle abeam the midpoint of the runway.

WRECKAGE AND IMPACT INFORMATION

The airplane came to rest inverted, approximately 10 feet northwest of the south bound lane of Interstate 35 (which is magnetically oriented 040-220 degrees at this location) near mile marker 154, with its longitudinal axis aligned approximately 050 degrees magnetic (see

enclosed wreckage diagram). The propeller was separated from the airplane at the initial ground impact point and partially buried in the ground. It displayed heavy chordwise scratches on the cambered surfaces of both blades. The propeller's spinner was crushed directly inward in a spiral shape opposite the direction of rotation (see photographs).

The engine was crushed aft into the cabin area and remained attached to the airplane by the upper right engine mount and control cables. The wings received only minor leading edge crushing in the aft direction. The fuselage was bent down approximately 30 degrees mid way between the baggage compartment and the empennage (see attached photographs). The nose gear was found separated from the airplane and laying approximately 6 feet west of the fuselage. The front surface of the nose wheel landing gear fork displayed a shiny fresh scrape mark (contact mark) with a herringbone sculptured surface. This scrape mark surface was covered with cadmium oxide power. A stainless steel wire (which was identified as a power line lightning strike protection cable) was located on the ground approximately 160 feet from the airplane. Examination of the stainless steel wire revealed that it was cadmium oxide coated and had several shiny fresh scrape marks near its broken end.

All structural components were accounted for. Continuity of the aileron control system was established, and, continuity of the elevator and the rudder control systems was established up to the back of the seats (impact damage forward of this point prevented continuity check of these controls forward of this location). The flaps were found in the up position.

The crankshaft flange was rotated and continuity was confirmed to the accessory drive gears and all valves with the exception of the number 3 intake valve. Satisfactory thumb compression checks were performed on the number 1, 2, and 4 cylinders. The number 3 cylinder intake housing was crushed. The number 3 cylinder intake valve was found stuck open by debris (a copper spark plug gasket and a piece of the #3 intake tube flange attachment casting). After removal of this debris, the number 3 cylinder demonstrated satisfactory thumb compression. Both magnetos sparked at all terminals when rotated by hand. All the spark plugs were accounted for; the bottom spark plugs for the number 1 and 3 cylinders were broken off flush with their respective cylinders.

The recovery team reported to the IIC that fuel drained from the airplane during the recovery process. Four to five gallons of fuel were found in the fuel tanks the day after the accident. Two pair of headsets were found in the airplane; the flight instructor's headset was found with its plug-in jack broken (see attached photograph).

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were not performed on the pilots. Toxicological tests were ordered and performed on both pilots. Toxicological test results were negative.

RESEARCH

According to the Oklahoma Gas and Electric Company, the static wire that N5366B impacted was 1,062.6 feet msl and the ground below the wire was 1,015.8 feet msl which makes the wire 46.8 feet above the ground. The United States Geological Service topographic map gives an approximate elevation of the house in witness area three as 1,045 feet msl and the elevation of the valley below the house as 980 feet msl. The large sign at the end of the valley next to Interstate 35 is approximately 38 feet tall (see photographs).

ADDITIONAL DATA

The senior flight instructor at the flight school reported to the IIC that presolo traffic pattern training at the school is "very consistent in airspeeds flown, altitudes to maintain or turn at, and radio communication procedures, to prepare the student for their first solo flight." Training in short-field and soft-field takeoff and landing is not done until after the student has soloed. He stated that the standard pattern is to takeoff and climb out at 67 knots (Vy) on the runway heading until you reach 1600 feet msl before turning crosswind. "Normally, in a no wind situation, in N5366B that was about one mile and a quarter, or, over Interstate 35 (which is about 7,500 feet, or approximately 500 feet/minute rate of climb at 70 knots)." They would fly the downwind at 70 knots, and your base turn would be about a quarter of a mile away from the end of the runway. He stated that this standard traffic pattern generally took approximately 6 minutes to fly.

The pilot of the other airplane reported to the IIC that he flies his traffic patterns at 1,500 feet agl with the downwind approximately one mile away from the runway and parallel to it. He reported that he maintains an airspeed, on downwind, of 140 knots while lowering the flaps to 5 degrees and then he extends the landing gear. He further reported that he flies base at 130 knots and lowers flaps to full down position. The pilot stated that he flies final at 120 knots with wings level at approximately one NM and slows to Vref or approximately 105 knots over the runway threshold.

The airplane was released to the owner's representative.

ADDITIONAL INFORMATION

Additional information regarding this accident was reviewed by NTSB staff in Washington, D.C. and is included in this section.

There were 10 witnesses either on or in the vicinity of the interstate highway who observed the Cessna collide with the powerlines. One of these witnesses had a cellular telephone and placed a call to "911" to report the accident. The time of the call was recorded by Southwestern Bell Mobile Systems at 1749.

The Cessna's collision with the powerlines resulted in an electrical power outage. The time of the power outage was recorded by the Oklahoma Gas & Electric Company at 1750.

In order to establish the position of the MU-2 at the time of the Cessna's collision with the powerlines, Safety Board staff examined national track analysis program (NTAP) radar data from the FAA Kansas City Air Route Traffic Control Center. A review of NTAP data revealed that at 1750:03 the MU-2 was approximately 3 NM northeast of Guthrie Municipal Airport at 3,400 feet msl and was on a southwest heading.

Radar data indicated that the MU-2 maintained a southwest heading and crossed over the approach end of runway 16. The aircraft then appeared to enter the left downwind leg of the traffic pattern for runway 34. At 1751:51, the MU-2 was 2 NM southwest of the airport at 2,200 feet msl. At 1752:27, the MU-2 appeared to be on a left base leg for runway 34 at an altitude of 1,700 feet msl. At 1753:04, the MU-2 appeared to be on final approach to runway 34, at which time it passed the vicinity of the accident site at 1,400 feet msl.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	37, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 16, 1996
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2683 hours (Total, all aircraft), 1500 hours (Total, this make and model), 2400 hours (Pilot In Command, all aircraft), 144 hours (Last 90 days, all aircraft), 52 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5366B
Model/Series:	152 152	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	15283849
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	December 6, 1996 100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	97 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	12130 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-235-L2C
Registered Owner:	SEWARD LEASING, INC.	Rated Power:	110 Horsepower
Operator:	CRABTREE AIRCRAFT CO., INC.	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:	OKC ,1295 ft msl	Distance from Accident Site:	29 Nautical Miles
Observation Time:	17:56 Local	Direction from Accident Site:	200°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	13°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(GOK)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	35.839668,-97.41912(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	CARY E WILCOX; OKLAHOMA CITY , OK ANDREW L HALL; WICHITA , KS GREGORY A ERIKSON; WAYNE , IL GLENN E CRABTREE; GUTHRIE , OK
Original Publish Date:	August 14, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=18638

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](#).