Aviation Investigation Final Report

Location:	CHICAGO, Illinois	**Accident Number:**	CHI97FA218
Date & Time:	July 19, 1997, 18:07 Local	**Registration:**	N5323K
Aircraft:	Cessna 172P	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	4 Fatal
Flight Conducted Under:	Part 91: General aviation		

Analysis

The pilot of a Cessna was cleared to pass southbound through Class D Airspace by the ATC controller. At 1802:09 CDT the controller advised the pilot to '...report abeam... .' At 1802:13 CDT The pilot acknowledged the controller, but did not report abeam the airport. The record shows that the controller did not ask the Cessna pilot if she was abeam the airport. The controller stated she was monitoring an airplane that was about 5-miles southeast of the airport during this period. The pilot of that airplane reported having difficulty with its landing gear. At 1803:35 CDT the pilot of a Beech A-36 Bonanza called the tower advising the controller the airplane was '...9-miles south ... inbound...' for landing. At 1803:41 CDT the controller told the pilot to '...report 4 south of the field plan on runway 36.' The pilot of the A-36 asked the controller about an airplane that reported 10-miles south of the airport at 1803:47 CDT. The controller said that the airplane was '...well clear of the Class Delta surface area sorry about that.' The A-36 pilot responded, 'No problem.' At 1804:06 the controller advised the pilot of the A-36 about the airplane she had been monitoring. The A-36's pilot acknowledged the controller s information. The A-36 pilot reported 4 miles south at 1805:53 CDT. The controller cleared the A-36's pilot to land on runway 36 at 1803:56 CDT. The A-36 pilot acknowledged the clearance. The record shows that the controller did not advise the Cessna and A-36 Bonanza pilot s of each others proximity to the other. The two airplanes collided with each other about 3-miles south of the airport.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilots not maintaining visual separation between their airplanes. A factor in this accident was the pilot of the southbound airplane not reporting her position abeam the airport as directed by the ATC controller.

Findings

Occurrence #1: MIDAIR COLLISION
Phase of Operation: CRUISE

Findings
1. (F) COMMUNICATIONS - NOT MAINTAINED - PILOT IN COMMAND
2. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On July 19, 1997, at 1807 central daylight time (cdt), a Cessna 172P, N5323K, was involved in a mid-air collision with a Beech A-36 Bonanza, N2071L, about 3 miles south of the Merrill C. Meigs Airport (Meigs), Chicago, Illinois. Cessna N5323K was operating under 14 CFR Part 91 as a sightseeing flight. Beech N2071L had a private and a commercial pilot on board. Beech N2071L was a personal flight operating under 14 CFR Part 91. N5323K and N2071L were not operating on flight plans. Visual meteorological conditions prevailed at the time of the accident. The commercial pilot, student pilot and two passengers in N5323K were fatally injured. The two pilots and passenger in N2071L were fatally injured. Both airplanes were destroyed. Cessna N5323K departed Lansing, Illinois, exact time unknown. Beech N2071L departed Michigan City, Indiana, exact time unknown.

Cessna N5323K was passing through Meigs Airport's Class D Airspace southbound. Beech N2071L had been cleared to land on runway 36 at the Meigs Airport and was about 3 miles south of the airport. Neither airplane had been assigned a specific transponder beacon code. Both airplanes were transmitting the visual flight rule's transponder code of 1200.

The pilot of N5323K contacted the Meigs air traffic control tower controller (controller) at 1750:38, advising the controller that N5323K was "...10 miles to the south inbound for transition up the lake shore... ." The pilot advised the controller that N5323K was level at 1,900-feet above mean sea level (msl). The controller approved the transition "...north bound..." and gave the altimeter setting of 30.08 inches of mercury.

At 1754:07, the controller advised the pilot of N5323K that a Beech Bonanza was going to hold over the water intake crib southeast of Meigs Airport. N5323K's pilot acknowledged by saying, "two three kilo we'll be advised." At 1756:33, the pilot of N5323K called the controller and asked if she could do a low approach over runway 36. The pilot advised the controller her airplane was about 1-mile southeast of Meigs Airport. About 2 minutes later N5323K's pilot advised the controller she was "...turning final for a low approach for [runway] 36." The controller cleared the pilot for the low approach. Between 1759:57 and 1800:00, the controller called the pilot of N5323K and asked her if she was going to continue flying northbound. The pilot responded by saying, "...we would like to go on the other side of [the] Navy Pier and do a one eighty [and] come back south." The controller asked N5323K's pilot to, "...advise me prior to making that 180 back south."

At 1801:47, the pilot of N5323K advised the controller that "...Cessna five three two three kilo is starting our 180 back around to the south." The controller asked who was calling her and the pilot of N5323K said, "5323K starting our turn around to the south." The controller said, "Roger,

make that 180 back south bound, report abeam." The pilot of N5323K responded, "23K." The controller called N5323K's pilot at 1803:12, and advised her of inbound traffic north of the airport heading southbound. At 1803:17 N5323K's pilot responded, "two three kilo we'll be advised, thank you." There were no further radio transmissions from N5323K.

At 1803:35, the pilot of N2071L said, "Hello tower, Bonanza two zero seven one lima nine miles south, two thousand six hundred, inbound with [ATIS information} xray." The tower controller told N2071L's pilot to, "...report 4 [miles] south of the field, plan on runway three six." The pilot of N2071L responded, "4 south, what's the altitude of the 10-mile south traffic?" The controller called another airplane, N5099K, and asked, "And nine nine kilo say altitude." Five seconds later the controller called the pilot of N2071L and said, "Sorry, he already changed frequencies, he's well clear of Class Delta surface area... ." At 1804:00, the pilot of N2071L responded, "No problem."

The pilot of another Bonanza, N305MM, called the controller at 1804:01 and said, "five mike mike is circling on the south crib at uh one thousand seven hundred." A few moments later the controller advised the pilot of N2071L that there was "...additional traffic uh Bonanza seven one lima is another Bonanza, he's holding over the south crib with an emergency at one point seven." The pilot of N2071L said he was "...unfamiliar." The controller told N2071L's pilot that N305MM was "...about 4 miles south of the field." N2071L's pilot responded, "seven one lima, roger." The controller then said, "Little more southeast than south." N2071L's pilot responded, "seven one lima." At this time, the controller advised N305MM that "...traffic is a Bonanza inbound from the south, landing [runway] three six." N305MM's pilot responded by saying, "five mike mike." The controller said, "and he's looking for you sir." The pilot N305MM said, "o.k. I'm lit up like a Christmas tree."

At 1805:53, the pilot of N2071L advised the controller that the airplane was about 4 miles south of the airport. At 1805:56, the controller said, "Bonanza seven one lima cleared to land runway three six, wind zero two zero at one five." The pilot of N2071L responded, "Cleared to land three six, seven one lima, still no joy on that uh crib traffic." At 1807:18, the controller asked the pilot of N2071L to "...say your position now sir." There was no further response from the pilot of N2071L.

There were many witnesses who observed the two airplanes collide. One witness, a military pilot, said he "...noticed [a] Cessna 172 at 300-feet less than a mile off [the] beach." He said it "Looked straight and level... moving south bound." He said a Learjet type aircraft was at 800-feet above the lake's surface heading north. This airplane was in "...full landing configuration..." in a 300 to 400-foot per minute descent toward the airport. He said it looked as though the Cessna 172's left wing hit the right side of the inbound airplane.

A second witness, a civilian pilot, said he "...observed a single-engine, low wing, aircraft that appeared to be heading north collide with what appeared to be a single engine high wing aircraft that appeared to be heading south." He continued by saying, "It did not appear to me that any of the two aircraft took any evasive action, although I only viewed the two aircraft

shortly before the collision occurred. Both aircraft appeared to be flying normally, with no control problems. I would estimate the collision occurred at an altitude of between 500 and 1,000- feet AGL."

These witness statements and others obtained by the City of Chicago Police Department are appended to this report.

PERSONNEL INFORMATION

According to Federal Aviation records, the two pilots in N2071L possessed private and commercial pilot certificates. The private pilot certificate was issued on October 21, 1985. According to the FAA medical records, this pilot possessed a total flight time of 1,375-hours when his third class medical certificate was issued on February 7, 1996. The commercial pilot certificate was issued on August 24, 1988. According to the FAA medical records, this pilot possessed a total flight time of 2,423-hours when his second class medical was issued on June 4, 1997. According to the medical records for this pilot, he possessed an FAA Statement of Demonstrated Ability for color blindness.

According to FAA records, the pilot of N5323K possessed a commercial pilot certificate with flight instructor ratings. The commercial pilot certificate was issued on February 17, 1996. According to the FAA records, this pilot obtained a first class medical certificate on April 18, 1997. According to her pilot logbook, she had a total time of 773.1-hours as of July 11, 1997.

AERODROME INFORMATION

Merrill C. Meigs Airport (Meigs) is owned and operated by the City of Chicago. The airport was closed on September 30, 1996, in anticipation of the development of a park for city residents. It was reopened with a Federal Aviation Administration contract tower on February 4, 1997.

The Meigs control tower is classified as a Level I visual flight rule's tower that operates from 0600 to 2200 hours. When the control tower is operating, the airspace surrounding it is known as Class D. Class D airspace extends from the airport's surface to 2,500 feet above it and has a 4.2-mile radius from the airport's geographical center. Whenever the control tower is not operating, the airspace is classified as class G. Unless otherwise authorized, each person operating an aircraft within the class D airspace must establish, and maintain, two-way radio communications with the ATC facility providing air traffic services for the class D airspace. FAA regulations and ATC procedures say that no separation services are provided to aircraft operating under visual flight rules. The control tower cab was not equipped with the radar repeating D-Brite system at the time of the accident.

WRECKAGE AND IMPACT INFORMATION

Most of the wreckage for both airplanes was located in Lake Michigan about 1/2 to 3/4-mile off-shore approximately 4-miles south of the airport. There were some small pieces of

wreckage scattered along the ground next to the water's edge. The salvage operation for the wreckage required about four days to complete.

Beechcraft A-36, N2071L

N2071L's top fuselage from the cockpit aft to the dorsal fin was crushed inward and to the right. Random positioned and sized white and blue paint transfer marks were found along this section. The entire fuselage top section had separated from the fuselage sides and bottom.

N2071L's lower fuselage half, from the engine compartment to the aft bulkhead and right wing was intact at the time of the recovery. The area above this section was found separated from it. The left wing was fragmented in various sized pieces. Reconstruction of the left wing spar showed it was bent aft about 15 degrees, and rotated aft about 20 degrees at the spar's top. The engine and firewall had separated from the fuselage. The propeller blades were twisted and had a spanwise wavy appearance. The tip of one blade had a gouge about 1-inch into the blade that was about 3/4-inch wide.

The left side of the horizontal stabilizer and elevator were separated from the airframe. The vertical stabilizer and rudder had separated from the airframe.

The right wing was attached to the section of the fuselage making up the cabin area. A crush area about 3-feet long and 12-inches into the wing was at its midspan point. The fuselage's cabin top had separated from the remainder of the fuselage. This section of wreckage had white and a light blue paint transfer marks on it.

N2071L's fuselage and left wing were reassembled. The fuselage showed rightward crushing of the entire fuselage. The right side of the airplane's fuselage, about midway between the wing's trailing edge and horizontal stabilizer's leading edge, was buckled outward. The front and rear facing passenger seats were examined. The left front seat and left rear facing passenger seat backs' were crushed toward the right side of the fuselage. The right side, rear facing seat, was still attached to its track. The remainder of the seats had separated from their mounting rails. Sections of the seat rails were placed into relative position on the fuselage floor. These rails were bent toward the right side of the fuselage.

Pieces of green glass that matched beer bottles retrieved among the wreckage were found in the area of the passenger compartment. These pieces were found during retrieval and reconstruction process. An unopened champagne and beer bottle was found among the wreckage.

Cessna 172, N5323K

N5323K's left wing had separated from the fuselage at the wing root mount. This wing section was separated into 2-sections at the aileron/flap junction. The wing's outboard half had metal that was crushed aft and down. Miscellaneous white and gray paint transfer marks of various

sizes were found on the crushed areas. The empennage had separated from the fuselage at the horizontal stabilizer's leading edge. Gray tinted brown stains were observed on the fuselage side panels, top, and bottom sections of N5323K. The fuselage was buckled at the baggage compartment area. The buckling formed an approximate 45-degree downward angle on either side of the baggage compartment area.

N5323K's right wing was crushed aft from the tip inboard to the area where its wing strut is attached to the wing. The section of the wing between the wing strut attach point and wing root was crushed aft and twisted downward.

A dark colored gray material covered the top and bottom of the wing. Part of the right wing's inboard upper wing skin had reddish-brown marks that looked like paint transfer onto the wing's white surface. These marks were underneath the gray-black shading that looked like soot. The marks were in line with the same colored material that had transferred onto the outboard top section of right horizontal stabilizer and elevator balance tab leading edge and upper surface. Small marks of a turquoise-green material were inter-mixed with the reddish-brown marks.

N5323K's engine was attached to the fuselage. Both blades of the propeller had various sized gouge marks in them and scarring on both sides of the blades. One blade was bent aft about 2 to 3 degrees at its midspan point. The second blade was bent aft about 85-degrees about 18-inches from the hub's center. This blade had a spanwise twist from the bend to the tip.

Examination of the airplanes during the reconstruction phase revealed that N5323K's right front fuselage had been crushed down about 20-degrees and aft at the rear of the front pilot seating area.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were conducted on the pilots by the Office of The Medical Examiner, County of Cook, Illinois, on July 20, 1997.

The toxicological examination related to the pilots was conducted by the FAA s Civil Aeromedical Institute in Oklahoma City, Oklahoma. The report on the commercial pilot in N2071L was negative for carbon monoxide, cyanide, volatiles and drugs. The report on the private pilot in N2071L showed no carbon monoxide, cyanide or drugs. This report showed 10.0 (mg/dL, mg/hg) ethanol was detected in vitreous fluid, 18.0 (mg/dL, mg/hg) ethanol detected in the muscle fluid, 25.0 (mg/dL, mg/hg) ethanol detected in the brain fluid, 3.0 (mg/dL, mg/hg) acetaldehyde detected in the muscle fluid, and 6.0 (mg/dL, mg/hg) acetaldehyde detected in the brain fluid.

The toxicological report on the pilot of N5323K was negative for carbon monoxide, cyanide, and drugs. The report showed 36.0 (mg/dL, mg/hg) ethanol detected in the kidney fluid and 2.0 (mg/dL, mg/hg) acetaldehyde was detected in the kidney fluid. The report said that the

"...ethanol found in this case may be the result of postmortem ethanol production."

TESTS AND RESEARCH

Reddish-brown and turquoise-green colored marks were found on N5323K's wing skin, horizontal stabilizer and elevator balance tab. These marks were examined at McCrone Associates, Inc., of Westmont, Illinois, on October 27, 1997.

According to the McCrone report, the reddish-brown colored material's composition was consistent "...with a paint material." The white paint transfers were "...a fairly good match... with a urethane-based automotive paint... ." The turquoise-green color had the "...elemental composition..." very similar to that of the white paint. The gray colored transfer marks found on other parts of N5323K were found to have characteristics similar "...to a urethane based material... that is similar to paint."

Samples of N5323K's tan colored paint were examined by the laboratory. These samples' were examined to see if they were of the same composition as the reddish-brown transfer marks. The tan colored sample was not of the same composition as the reddish-brown color.

Research into the airplanes that were in the same Class D Airspace as N5323K revealed no aircraft with colors that were similar to those found on N5323K. An examination of the radar data showed no airplanes near N5323K during its flight until it collided with N2071L. A copy of the McCrone report is appended to this report.

ADDITIONAL INFORMATION

FAA technicians conducted a technical performance evaluation of Meigs tower's main transmitter and receiver for the local control frequency (121.3), the ATIS transmitter (127.35) and the multi-channel recorder. All certification parameters were found within prescribed tolerances.

Radar tracking data from the FAA's Chicago Air Route Traffic Control Center (ARTCC) showed two radar transponder beacon 1200 codes. The two transponder codes were "...assumed to be the C172, N5323K... [and]..the A-36, N2071L. Neither aircraft was assigned a specific beacon code, hence both were squawking 1200." The report continues, "N2071L flew in the direction of runway 36 and descended from 2,600 to 1,600 feet (ft) above mean sea level (msl). The altitude returns, taken from the tracking data, indicate the N5323K ascended from 1,500 ft msl to 1,800 ft msl before again descending to 1600 ft msl. The two aircraft converged toward each other. The last two primary hits (18:06:14, 18:06:25) cannot positively be identified as aircraft. The return at 23:06:25 probably occurred after the two aircraft collided. No radar returns in the near vicinity were recorded after this time." The NTSB radar specialist's factual report is appended to this report.

A cockpit visibility study on both aircraft was conducted by the NTSB to decide the locations

and sizes of the two aircraft in their respective cockpit's available field of vision. The specialist's report states, "FAA Advisory Circular 90-48C... [indicates] that it takes 12.5 seconds for a pilot to see an object, recognize the threat of a collision and execute an evasive maneuver. Additional studies indicate that reasonably accurate recognition in ideal conditions is only assured if the target is, at a minimum, .2-degree arc angle. Less than ideal circumstances may increase this value by a factor of two or three. The C172 wing target size would not have reached the minimum .2-degree arc angle until... 27-seconds before the supposed collision time and the A-36, not until 25-seconds before the supposed collision time."

During an interview with the controller on July 20, 1997, a number of questions were asked regarding the two accident airplanes. She was asked if there was any specific spot where she would expect an airplane to report abeam. She said between the runway numbers. She said she had visual contact with N2071L and didn't believe she had visual contact with N5323K when it was heading south. The controller said she considered the air traffic load light about the time of the accident, except the reported emergency involving the Bonanza with the landing gear problem.

The controller said she asked N5323K to report abeam the airport. She said she did this so she could call out other traffic to the airplane's pilot. The controller said there was no particular offshore distance she would expect an airplane to fly by so that it would maintain clearance with the airport. The controller said that the atmospheric conditions over the lake were hazy about the time the accident occurred.

The controller said she could not always trust a pilot to report where they were told to report. She said she would ask the pilot for a position report if she felt it necesary. She said she did have a feeling for when the pilot was supposed to report at an assigned position. The controller said the feeling for when the pilot of N5323K was to report did not occur when the pilot did not report abeam the airport. She said she looked out of the tower cab window and saw something wrong with an airplane and thought it was N5099K that had transitioned through the area. She said she had a gut feeling that something was amiss when she observed the smoke south of the airport.

Pilot Information

Certificate:	Commercial	**Age:**	22,Female
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	**Toxicology Performed:**	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	April 6, 1996
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	773 hours (Total, all aircraft), 112 hours (Total, this make and model), 567 hours (Pilot In Command, all aircraft), 172 hours (Last 90 days, all aircraft), 53 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N5323K
Model/Series:	172P 172P	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal; Utility	**Serial Number:**	17274064
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	May 21, 1997 100 hour	**Certified Max Gross Wt.:**	2300 lbs
Time Since Last Inspection:	60 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	8384 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-320
Registered Owner:	AVIATION MANAGEMENT CORP.	**Rated Power:**	150 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:**	Day
Observation Facility, Elevation:	CGX ,593 ft msl	**Distance from Accident Site:**	3 Nautical Miles
Observation Time:	18:18 Local	**Direction from Accident Site:**	360°
Lowest Cloud Condition:	Scattered / 15000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	21°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LANSING (3HA)	**Type of Flight Plan Filed:**	None
Destination:	(CGX)	**Type of Clearance:**	VFR
Departure Time:	00:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	3 Fatal	**Aircraft Fire:**	In-flight
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 Fatal	**Latitude, Longitude:**	41.869556,-87.620201(est)

Administrative Information

Investigator In Charge (IIC):	GATTOLIN, FRANK
Additional Participating Persons:	GERALD WYATT; W. CHICAGO , IL ANDREW HALL; WICHITA , KS JOHN Z WARD; WICHITA , KS
Original Publish Date:	April 15, 1999
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10433

Aviation Investigation Final Report

Location:	CHICAGO, Illinois	**Accident Number:**	CHI97FA218
Date & Time:	July 19, 1997, 18:07 Local	**Registration:**	N2071L
Aircraft:	Beech A-36	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of a Cessna was cleared to pass southbound through Class D Airspace by the ATC controller. At 1802:09 CDT the controller advised the pilot to '...report abeam... .' At 1802:13 CDT The pilot acknowledged the controller, but did not report abeam the airport. The record shows that the controller did not ask the Cessna pilot if she was abeam the airport. The controller stated she was monitoring an airplane that was about 5-miles southeast of the airport during this period. The pilot of that airplane reported having difficulty with its landing gear. At 1803:35 CDT the pilot of a Beech A-36 Bonanza called the tower advising the controller the airplane was '...9-miles south ... inbound...' for landing. At 1803:41 CDT the controller told the pilot to '...report 4 south of the field plan on runway 36.' The pilot of the A-36 asked the controller about an airplane that reported 10-miles south of the airport at 1803:47 CDT. The controller said that the airplane was '...well clear of the Class Delta surface area sorry about that.' The A-36 pilot responded, 'No problem.' At 1804:06 the controller advised the pilot of the A-36 about the airplane she had been monitoring. The A-36's pilot acknowledged the controller s information. The A-36 pilot reported 4 miles south at 1805:53 CDT. The controller cleared the A-36's pilot to land on runway 36 at 1803:56 CDT. The A-36 pilot acknowledged the clearance. The record shows that the controller did not advise the Cessna and A-36 Bonanza pilot's of each others proximity to the other. The two airplanes collided about 3-miles south of the airport.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilots not maintaining visual separation between their airplanes. A factor in this accident was the pilot of the southbound airplane not reporting her position abeam the airport as directed by the ATC controller.

Findings

Occurrence #1: MIDAIR COLLISION
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
1. (F) COMMUNICATIONS - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT
2. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

See narrative on CHI-97-F-A218A

Pilot Information

Certificate:	Private	**Age:**	41,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Unknown
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	February 7, 1996
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	1375 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N2071L
Model/Series:	A-36 A-36	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal; Utility	**Serial Number:**	E966
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2049 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO-520-BB(R)
Registered Owner:	YUNKER AIR LTD	**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:**	Day
Observation Facility, Elevation:	CGX ,593 ft msl	**Distance from Accident Site:**	3 Nautical Miles
Observation Time:	18:18 Local	**Direction from Accident Site:**	360°
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Lowest Ceiling:	None	**Visibility (RVR):**	
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Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	21°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MICHIGAN CITY (MGC)	**Type of Flight Plan Filed:**	None
Destination:	(CGX)	**Type of Clearance:**	None
Departure Time:	00:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	2 Fatal	**Aircraft Damage:**	Destroyed
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Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 Fatal	**Latitude, Longitude:**	41.869556,-87.620201(est)

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Original Publish Date:	April 15, 1999
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Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10433