



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	SILICA, KS	<b>Accident Number:</b>	CHI91FA235B
<b>Date &amp; Time:</b>	07/31/1991, 0759 CDT	<b>Registration:</b>	N702CA
<b>Aircraft:</b>	AERO COMMANDER 500B	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

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## Analysis

BOTH AIRCRAFT DEPARTED WICHITA ON IFR FLIGHT PLANS IN VFR WEATHER CONDITIONS. THEY FLEW NORTHWEST TOWARD THEIR RESPECTIVE DESTINATIONS, AND CANCELLED IFR ABOUT 20 MINUTES BEFORE THE ACCIDENT. ATC OBSERVED THE AIRPLANES ON RADAR, AND STATED THEY WERE 'DOGFIGHTING BACK AND FORTH' PRIOR TO THE COLLISION. ONE PILOT'S ROOMMATE REPORTED THE TWO PILOTS, WHO WERE CLOSE FRIENDS AS WELL AS CO-WORKERS, OFTEN CANCELLED IFR AND FLEW IN FORMATION IF THE WEATHER WAS VFR. HE REPORTED THE PILOTS OFTEN VIDEOTAPED EACH OTHER, AND HE HAD WATCHED SOME OF THE TAPES. HE STATED 'IT WAS HARD TO TELL FROM THE VIDEOTAPE HOW CLOSE THEY WERE BECAUSE THEY COULD USE THE ZOOM FEATURE, ETC. YOU COULD READ THE N NUMBERS.' INVESTIGATION REVEALED BROWN PAINT TRANSFER ON THE BOTTOM OF THE RIGHT WING OF THE BLUE AND WHITE AIRPLANE, WHICH HAD SEPARATED AND WAS LOCATED 1.5 MILES FROM THE MAIN WRECKAGE. THERE WERE LIGHT COLORED SCUFF MARKS ON THE TOP OF THE LEFT ENGINE NACELLE OF THE BROWN AND WHITE AIRPLANE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF BOTH PILOTS TO MAINTAIN ADEQUATE SEPARATION DURING FORMATION FLIGHT. RELATED FACTORS ARE OVERCONFIDENCE IN PERSONAL ABILITY AND POOR PLANNING/DECISION.

## Findings

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Occurrence #1: MIDAIR COLLISION  
Phase of Operation: MANEUVERING

### Findings

1. (F) PLANNING/DECISION - POOR - PILOT IN COMMAND
2. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
3. (F) PLANNING/DECISION - POOR - PILOT OF OTHER AIRCRAFT
4. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT OF OTHER AIRCRAFT
5. FORMATION FLYING
6. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT IN COMMAND
7. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	26, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	10/19/1990
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	1590 hours (Total, all aircraft), 322 hours (Total, this make and model), 1590 hours (Pilot In Command, all aircraft), 73 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AERO COMMANDER	<b>Registration:</b>	N702CA
<b>Model/Series:</b>	500B 500B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1298-113
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	07/12/1991, AAIP	<b>Certified Max Gross Wt.:</b>	6750 lbs
<b>Time Since Last Inspection:</b>	14 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	12747 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-540-E1A5
<b>Registered Owner:</b>		<b>Rated Power:</b>	290 hp
<b>Operator:</b>	DEWEY E. TOWER	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)
<b>Operator Does Business As:</b>	CENTRAL AIR SOUTHWEST	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 15000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	26 °C
Precipitation and Obscuration:			
Departure Point:	WICHITA, KS (ICT)	Type of Flight Plan Filed:	Unknown
Destination:	GREAT BEND, KS (GBD)	Type of Clearance:	
Departure Time:	0719 CDT	Type of Airspace:	Class G

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	Jodi L Reeves	Report Date:	03/31/1993
Additional Participating Persons:	K. PERSON; WICHITA, KS J. ESTRELLA; WICHITA, KS E. LARSEN; KANSAS CITY, KS		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).