



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	BARTLESVILLE, OK	<b>Accident Number:</b>	FTW96FA234A
<b>Date &amp; Time:</b>	06/01/1996, 1412 CDT	<b>Registration:</b>	N7780
<b>Aircraft:</b>	Fairchild KR-31	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

Both the Fairchild KR-31, N7780, and the Waco QCF, N12428, were occupied by a PIC and a pilot-rated passenger. Witnesses observed both biplanes collide at the downwind/base position and descend uncontrolled to the ground. Left wing portions from each biplane were found at the initial impact site. The lower left wing outboard section of the Waco was found between the left wings of the Fairchild. The Fairchild did not have an electrical system. The Waco was equipped with navigation lights and an electrical system; however, the type and status of avionics equipment could not be determined due to the postimpact fire damage. A light gun was available in the temporary control tower; however, it was not being used at the time of the collision, and neither biplane was in communication with the tower in Class D airspace. An ATC letter to the airport indicated that ATC would separate arriving and departing traffic, with ground movement by airport management, operators and pilots, with safety items/factors brought to the attention of ATC prior to the operation of the tower. The biplane association and the airport representatives stated that the tower was a 'control tower' and applicable control airspace procedures were expected by ATC and the pilots. Neither the NBA nor the airport had established rigid communication, routing and altitude procedures for the fly-by period, and pilot briefings were not conducted. In tension with the Federal Aviation Act of 1958, the Federal Aviation Administration did not offer and/or provide the NBA and airport authorities with clearly delineated insight and guidance that fostered the safest use of the airspace during the fly-in.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of each pilot-in-command to maintain visual lookout. Factors were: the lack of each pilot-in-command obtaining/maintaining communication with the control tower, and inadequate lookout by each pilot-rated passenger, the inadequate procedures/directives by the biplane association management and the airport management, and inadequate supervision by the Federal Aviation Administration.

## Findings

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

### Findings

1. (C) VISUAL LOOKOUT - NOT MAINTAINED - PILOT IN COMMAND
2. (C) VISUAL LOOKOUT - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT
3. (F) VISUAL LOOKOUT - INADEQUATE - PILOT PASSENGER
4. (F) COMMUNICATIONS - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND

- 5. (F) COMMUNICATIONS - NOT OBTAINED/MAINTAINED - PILOT OF OTHER AIRCRAFT
  - 6. (F) SUPERVISION - INADEQUATE - FAA(OTHER/ORGANIZATION)
  - 7. (F) CONDITION(S)/STEP(S) INSUFFICIENTLY DEFINED - FAA(OTHER/ORGANIZATION)
  - 8. (F) PROCEDURES/DIRECTIVES - INADEQUATE - COMPANY/OPERATOR MANAGEMENT
- 

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

### Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	71
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	Glider; Helicopter	<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Glider; Instrument Airplane
<b>Flight Time:</b>	19660 hours (Total, all aircraft), 283 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Fairchild	<b>Registration:</b>	N7780
<b>Model/Series:</b>	KR-31 KR-31	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	WILLIAM F. WATSON	<b>Engine Manufacturer:</b>	Curtis Wright
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	OX-5
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	BVO, 713 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Broken / 25000 ft agl	<b>Wind Speed/Gusts, Direction:</b>	7 knots / , 340°
<b>Temperature:</b>	23° C	<b>Visibility</b>	15 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	(BVO)	<b>Destination:</b>	

### Airport Information

<b>Airport:</b>	BARTLESVILLE MUNICIPAL (BVO)	<b>Runway Surface Type:</b>	Concrete
<b>Runway Used:</b>	35	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	6200 ft / 100 ft		

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	JOYCE M SMITH	Adopted Date:	02/02/1998
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> .		

---

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.