



# National Transportation Safety Board Aviation Incident Data Summary

<b>Location:</b>	CASPER, WY	<b>Incident Number:</b>	DEN87IA145B
<b>Date &amp; Time:</b>	06/02/1987, 1012 MDT	<b>Registration:</b>	USAF
<b>Aircraft:</b>	Boeing EC-135	<b>Injuries:</b>	12 None
<b>Flight Conducted Under:</b>	Armed Forces		

## Analysis

BOEING 727 (NORTHWEST FLT 354) & USAF EC-135 (SLUM 51) WERE INVOLVED IN A NR COLLISION AT FL 330. THE MISHAP OCCURRED AS FLT 354 WAS ENROUTE ON J-158 & SLUM 51 WAS FLYING ON A RADIAL-DISTANCE (R/D) FLT PLN, FLYING BTN R/D PTS SOUTH OF J-158. AS SLUM 51 APPROACHED ITS MOST WESTERN PT, THE CREW REQUESTED A RIGHT TURN TO A R/D PT THAT WAS NOT THE NEXT LISTED PT ON THEIR FLT PLN. THE TRAINEE CONTROLLER (T/C) DIDN'T REALIZE SLUM 51 WAS REQUESTING A ROUTE CHG, BUT THOUGHT THE FLT WANTED TO TURN BACK EAST TO THE NEXT FILED R/D PT WITH A RIGHT TURN (INSTEAD OF A LEFT TURN AS PREVIOUSLY DONE). THE T/C REPLIED, 'UNABLE RIGHT TURN, MAKE A LEFT TURN.' THE INSTRUCTOR HEARD THE REQ, BUT THOUGHT THE T/C'S REPLY WAS DISAPPROVAL OF A ROUTE CHG. AS THE CONTROLLERS TURNED THEIR ATTENTION TO OTR (HVVY/COMPLEX) TRAFFIC, SLUM 51 CONTINUED A 270 DEGREE LEFT TURN (TO NORTH) & CONVERGED WITH FLT 354. THE 9020 (PRIMARY) COMPUTER WAS INOPERATIVE; THE DARC (BACKUP) COMPUTER HAD NO CAPABILITY OF DISPLAYING PROJECTED ROUTES OR PROVIDING CONFLICT ALERT. NO FLOW CONTROL RESTRICTIONS WERE IN EFFECT TO REDUCE THE AMOUNT OF TRAFFIC.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be:

## Findings

Occurrence #1: NEAR COLLISION BETWEEN AIRCRAFT  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (F) RADAR, ENROUTE - FAILURE, PARTIAL
2. ARTCC SERVICE
3. (F) EXCESSIVE WORKLOAD (TASK OVERLOAD) - ATC PERSONNEL (ARTCC)
4. (F) IMPROPER DECISION - FAA (OTHER/ORGANIZATION)
5. (C) RADIO COMMUNICATIONS - NOT UNDERSTOOD - ATC PERSONNEL (ARTCC)
6. (C) ATC CLEARANCE - INACCURATE - ATC PERSONNEL (ARTCC)
7. COMMUNICATIONS/INFORMATION/ATC - NOT UNDERSTOOD - PILOT IN COMMAND
8. (F) RADAR, CONFLICT ALERT - INOPERATIVE
9. (C) IFR SEPARATION STANDARDS - NOT MAINTAINED

## Pilot Information

<b>Certificate:</b>	Commercial; Military	<b>Age:</b>	39
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	6000 hours (Total, all aircraft), 3300 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Boeing	<b>Registration:</b>	USAF
<b>Model/Series:</b>	EC-135 EC-135	<b>Engines:</b>	4 Turbo Jet
<b>Operator:</b>	UNITED STATES AIR FORCE	<b>Engine Manufacturer:</b>	P&W
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	J-57
<b>Flight Conducted Under:</b>	Armed Forces		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	, 0 ft msl	<b>Weather Information Source:</b>	Pilot
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	/ ,
<b>Temperature:</b>		<b>Visibility</b>	0 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	RAPID CITY, SD (RCA)	<b>Destination:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	4 None	<b>Aircraft Damage:</b>	None
<b>Passenger Injuries:</b>	8 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	ROBERT D JOHNSON	<b>Adopted Date:</b>	10/17/1988
<b>Investigation Docket:</b>	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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