Aviation Investigation Preliminary Report

Location:	Minot, ND	**Occurrence Number:**	OPS25LA052
Date & Time:	July 19, 2025, 00:48 UTC	**Registration:**	N604CZ (A1); UNK (A2); N41349 (A3)
Aircraft:	EMBRAER-EMPRESA BRASILEIRA DE ERJ 170-200 LR (A1); Boeing B-52 (A2); Piper PA-28-151 (A3)	**Injuries:**	80 None (A1)
Flight Conducted Under:	Part 121: Air carrier - Scheduled (A1); Armed Forces (A2); Part 91: General aviation - Personal (A3)		

On July 19, 2025, about 1948 central daylight time (CDT), WarBird03 (WBD03), a US Air Force (USAF) B-52H, enroute to conduct an aerial flyby at the North Dakota Fairgrounds, was involved with a loss of separation event approximately two miles south of Minot International Airport (MOT) with SkyWest (SKW) Airlines flight 3788 (SKW3788), an ERJ-170-200, N604CZ, arriving runway 31 at MOT from Minneapolis-St. Paul International/Wold-Chamberlain Airport (MSP). Subsequently, WBD03 was involved in another loss of separation event approximately one mile west-southwest of MOT with N41349, a Piper PA-28-151. WBD03 was operating as a title 14 *Code of Federal Regulations (CFR)* Part 91 military flight, SKW3788 was operating under title 14 *CFR* Part 121 scheduled passenger flight, and N41349 was operating as a title 14 *CFR* Part 91 general aviation flight, conducting local pattern operations at MOT.

The Minot International Airport Traffic Control Tower (MOT ATCT) Air Traffic Manager (ATM) stated that at the time of the incident the traffic volume was normal with normal complexity for that time of day. Visual meteorological conditions prevailed at the time of the incident. The weather at the time of the incident was visual flight rules (VFR) with the following conditions reported: Wind from 030 at 5 knots, visibility 10 miles with clear skies.

MOT ATCT was providing air traffic services to WBD03, SKW3788 and N41349 when the losses of separation occurred.

At the time of the event there was one controller staffing the MOT ATCT.

The Dakota Radar Approach Control (RAPCON) Minot radar sector, located in Rapid City, SD, was providing air traffic services prior to handing off WBD03 and SKW3788 to MOT ATCT.

This information is preliminary and subject to change.

A review of air traffic control (ATC) audio recordings provided by the USAF and the Federal Aviation Administration (FAA) indicated that at about 1943:45, WBD03 checked in with MOT ATCT, 15 miles east, to conduct their flyby. The flyby had been coordinated in advance with MOT ATCT and Dakota RAPCON.

At about 1941 CDT, the Dakota RAPCON Minot radar sector controller (MIB sector controller) coordinated via shout line (a dedicated, direct voice communication link) with MOT ATCT LC (local control) controller requesting an opposite direction arrival for SKW3788 to runway 31, and an approach to runway 8 for another uninvolved aircraft, N717BL. The MOT LC controller approved the request.

At about 1942 CDT, the MIB sector controller coordinated via shout line with MOT LC controller requesting an opposite arrival to runway 31 for N717BL. The MOT LC controller approved this request.

Also, about this time the MOT LC controller cleared N41349 for the option (a pilot option to conduct a full stop landing, a low approach, or a touch and go) to runway 8 then provided instructions to enter a right base for runway 31.

At about 1943 CDT. WBD03 checked in with the MOT LC controller 15 miles east to conduct the flyby. Simultaneously the MIB sector controller called the MOT LC controller on the shout line to coordinate WBD03 to conduct the flyby, then do a right turn out to proceed back to Minot Air Force Base (MIB).

At about 1944 CDT, the MOT LC controller asked WBD03 to say their position. WBD03 responded “two thousand seven hundred feet, fifteen miles east turning inbound in two minutes to a two seven zero heading to your south”. The MOT LC controller instructed WBD03 to proceed as requested and to not start their northbound turn until at least two miles west of the airport. WBD03 acknowledged the instruction.

At about 1947 CDT, SKW3788 checked in with MOT LC controller on the RNAV runway 31 approach and the MOT LC controller instructed SKW3788 to report FONAD (the final approach fix 5.2 miles from runway 31), with a good read back.

Also, about this time, the MOT LC controller instructed N41349 to make a left turn and enter a left downwind for runway 31, with a good read back.

At about 1948 CDT, the MOT LC controller visually observed WBD03.

Also, about this time, SKW3788 reported one mile from FONAD. The MOT LC controller called the MIB sector controller on the shout line to request to “spin” (fly a 360-degree circle) SKW3788 due to WBD03 conducting the flyby. The MIB sector controller approved the request.

At about 1949 CDT, the MOT LC controller instructed SKW3788 to make a right 360 degree turn at FONAD and said, “traffic is a heavy B-52 a few miles to the southeast of the field going east to west”. SKW3788 responded they had the traffic off to the right and said they didn’t

This information is preliminary and subject to change.

know if they wanted to do that right 360-degree turn. The MOT LC controller offered a left 360-degree turn. SKW3788 requested to break off the approach.

The MOT LC controller called the MIB sector controller on the shout line to request SKW3788 to break off the approach. The MIB sector controller told the MOT LC controller to issue a 250 heading and altitude of 4,200 feet, with a good read back.

The MOT LC controller instructed SKW3788 to fly heading 250 and maintain an altitude of 3,700 feet, with a good read back.

The MOT LC controller instructed N41349 to make a right 360 in the downwind, with a good read back.

At about 1950 CDT, the MOT LC controller called the MIB sector controller to verify the assigned heading and altitude for SKW3788. The MIB sector controller issued 220 heading and an altitude of 4,200 feet.

The MOT LC controller inadvertently instructed WBD03 to fly heading 220 and maintain 4,200 feet, then told WBD03 to disregard. The MOT LC controller asked SKW3788 if they copied. SKW3788 responded “standby, two thousand three hundred, heading three four zero”. The MOT LC controller responded with “heading two two zero and up to four thousand two hundred”. SKW3788 requested if they could fly present heading and climb to 4,200 feet. The MOT LC controller coordinated on the shout line with MIB sector controller and requested present heading and 4,200 feet. The MIB sector controller replied, “all right and that’s for Warbird that broke out and not SkyWest”. The MOT LC controller responded in the negative and said it’s for SkyWest.

At about 1951 CDT, WBD03 reported to MOT LC controller that they were in a right hand turn back to MIB and they’ll contact MIB air traffic control tower. The MOT LC controller instructed WBD03 to contact MIB tower.

The MOT LC controller, still on the shout line, again requested present heading and 4,200 feet for SKW4788. The MIB sector controller approved the request.

At about 1951 CDT, the MOT LC controller instructed SKW3788 to maintain 4,200 feet, current heading was approved and to contact the MIB sector controller, with a good read back.

The MOT LC controller asked N41349 to say their position. N41349 responded they were in a left downwind for runway 31. The MOT LC controller advised they were in sight and issued an option clearance for runway 31. N41349 responded with a good read back.

After the event, SKW3788 was vectored to runway 31 and landed uneventfully.

Figures 1 and 2 are overhead views of the incident flight tracks overlaid onto satellite imagery in Google Earth. The SKW3788 flight track is illustrated in blue and labeled, the WBD03 flight

This information is preliminary and subject to change.

track is illustrated in green and labeled, and the N41349 flight track is illustrated in yellow and labeled.

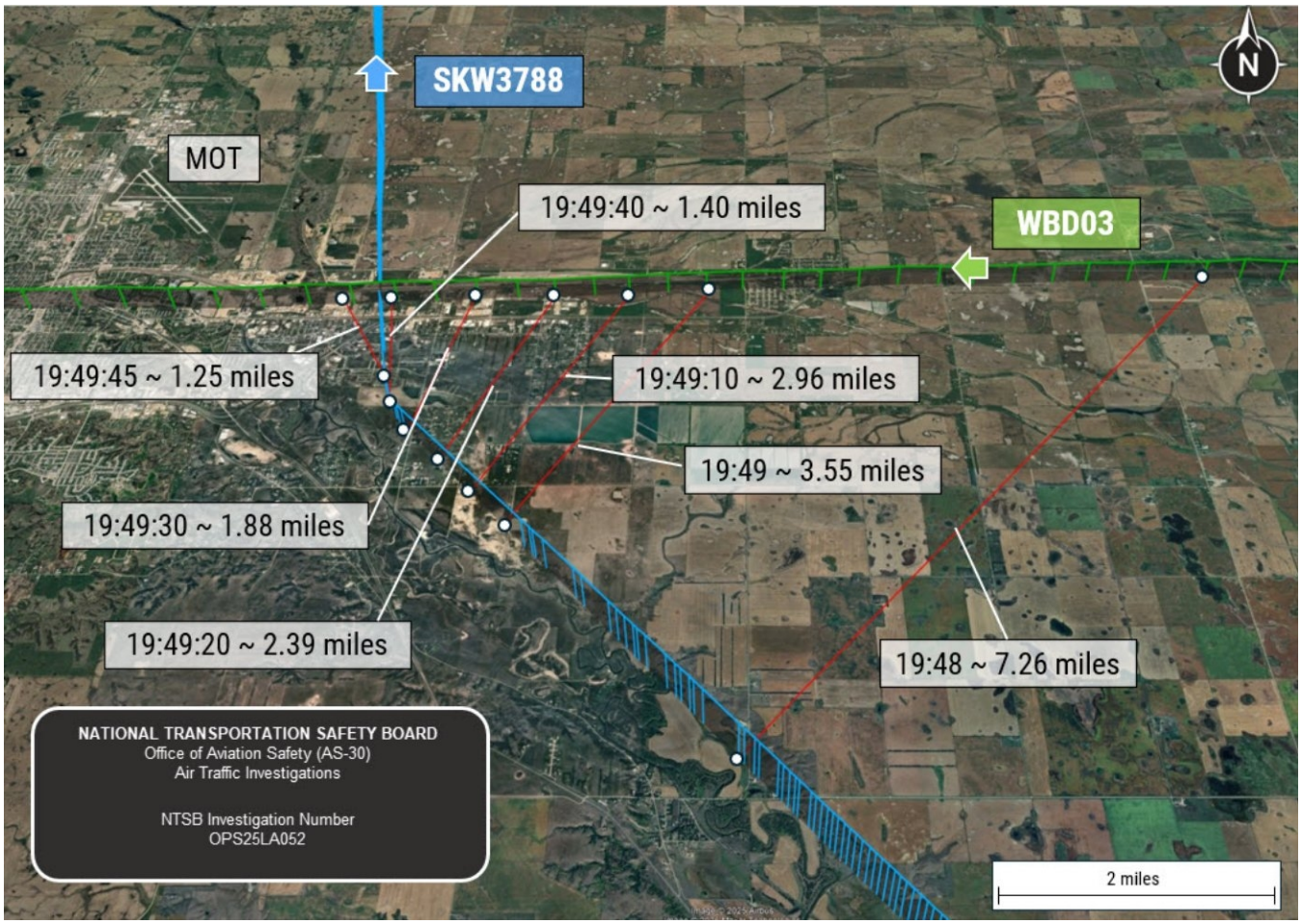

Figure 1. Overhead view of the flight tracks for SKW3788 and WBD03 – Closest proximity 1.25 miles.

This information is preliminary and subject to change.

Figure 2. Overhead view of the flight tracks for WBD03 and N41349 – Closest proximity .33 miles.

Upon notification of the event, the NTSB formed an ATC investigative group and parties to the investigation include the FAA, the National Air Traffic Controllers Association (NATCA), and the USAF.

Automatic Dependent Surveillance – Broadcast (ADS-B) data, plot play back (.ppb) data, audio recordings and other pertinent data and documentation were obtained from the FAA and USAF. These data are currently being analyzed by the NTSB.

During the week of July 28, 2025, the ATC investigative group conducted an on-site investigation and interviewed personnel at both Dakota RAPCON and MOT ATCT, the ATC facilities that were providing services to WBD03 and SKW3788. In addition, MOT ATCT provided services to N41349 at the time of the incident.

This information is preliminary and subject to change.

Aircraft and Owner/Operator Information (A1)

Aircraft Make:	EMBRAER-EMPRESA BRASILEIRA DE	**Registration:**	N604CZ
Model/Series:	ERJ 170-200 LR	**Aircraft Category:**	Airplane
Amateur Built:			
Operator:	SKYWEST AIRLINES INC	**Operating Certificate(s) Held:**	Flag carrier (121)
Operator Designator Code:	SKW		

Aircraft and Owner/Operator Information (A2)

Aircraft Make:	Boeing	**Registration:**	UNK
Model/Series:	B-52	**Aircraft Category:**	Unknown
Amateur Built:			
Operator:	Military	**Operating Certificate(s) Held:**	None
Operator Designator Code:			

Aircraft and Owner/Operator Information (A3)

Aircraft Make:	Piper	**Registration:**	N41349
Model/Series:	PA-28-151	**Aircraft Category:**	Airplane
Amateur Built:			
Operator:	MINOT AERO CENTER	**Operating Certificate(s) Held:**	Pilot school (141)
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	**Condition of Light:**	
Observation Facility, Elevation:	KMOT,1714 ft msl	**Observation Time:**	16:54 Local
Distance from Accident Site:	2 Nautical Miles	**Temperature/Dew Point:**	24°C /11°C
Lowest Cloud Condition:	Clear	**Wind Speed/Gusts, Direction:**	11 knots / 21 knots, 90°
Lowest Ceiling:	None	**Visibility:**	10 miles
Altimeter Setting:	29.99 inches Hg	**Type of Flight Plan Filed:**	IFR (A1); MVFR (A2); VFR (A3)
Departure Point:	Minneapolis, MN (MSP) (A1); Minot, ND (MIB) (A2); Minot, ND (MOT) (A3)	**Destination:**	Minot, ND (A1); Minot, ND (A2); Minot, ND (A3)

This information is preliminary and subject to change.

Wreckage and Impact Information (A1)

Crew Injuries:	4 None	**Aircraft Damage:**	None
Passenger Injuries:	76 None	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	80 None	**Latitude, Longitude:**	48.225091,-101.2442 (est)

Wreckage and Impact Information (A2)

Crew Injuries:	N/A	**Aircraft Damage:**	None
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	N/A	**Latitude, Longitude:**	48.225091,-101.2442 (est)

Wreckage and Impact Information (A3)

Crew Injuries:	N/A	**Aircraft Damage:**	None
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	N/A	**Latitude, Longitude:**	48.225091,-101.2442 (est)

Administrative Information

Investigator In Charge (IIC):	Brown, Michael
Additional Participating Persons:	Benjamin Nutter; NATCA; Bedford, MA Travis Arnold; NATCA; Omaha, NE Christopher Thompson; FAA; Minneapolis, MN Randolf Rushworth; USAF; AZ Charles Wright; USAF; Minot, ND
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this occurrence.

This information is preliminary and subject to change.