

Aviation Investigation Preliminary Report

Location:	Truckee, CA	Accident Number:	WPR24FA119
Date & Time:	March 30, 2024, 18:37 Local	Registration :	N960LP
Aircraft:	Daher TBM700	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

On March 30, 2024, at 1837 Pacific daylight time, a Daher TBM 700 (960), N960LP, was substantially damaged when it was involved in an accident in Truckee, California. The pilot and passenger were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* (CFR) Part 91 personal flight.

The pilot and pilot-rated passenger had flown from Truckee to Denver on March 27 to visit their family. The accident flight was the return flight back to their home airport. The pilot purchased the airplane in November 2022 and had amassed over 250 hours flying it.

The Federal Aviation Administration (FAA) provided automatic dependent surveillancebroadcast (ADS-B) information disclosed that the airplane departed from Centennial Airport in Denver, Colorado about 1525. Following departure, the airplane turned to a westerly heading and eventually climbed to a cruise altitude of about 30,000 feet mean sea level (msl). The airplane continued on that course until reaching about 120 nautical miles (nm) from the Truckee-Tahoe Airport (TRK), Truckee, California. The airplane then made a right turn to the north and gradual descent to about 15,000 ft as it passed over Lake Tahoe (see Figure 1 below). The track then turned to the northeast directed to the Initial Approach Fix (IAF), WUDPA, for the RNAV (GPS) RWY 20 instrument approach.



Figure 1: ADS-B Flight Track

The airplane passed over the Final Approach Fix (FAF), LUMO, at 1832:37 and the ADS-B data showed that immediately thereafter the Approach Mode (APP Mode) was turned on and the Altitude Hold (ALT Hold) was turned off. The airplane continued along the approach path and continued to descend. The flight track then passed over the Visual Descent Point (VDP) at 1835:43 at about 121 kts and an approximate altitude of 6,475 ft msl (see Figure 2 below). Approximately 20 seconds later, the track passed over the Missed Approach Point at an altitude of 6,200 ft msl and at 100 kts (total inertial speed) and continued between that altitude and 6,100 ft until abeam the runway identifier numbers (about 1,300 ft east).

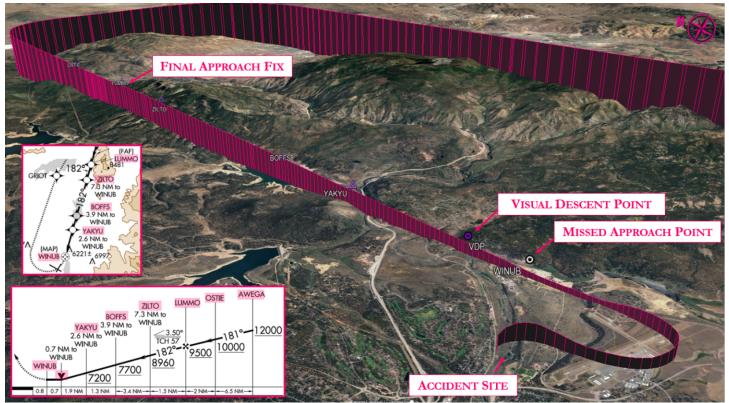


Figure 2: ADS-B Flight Track Referencing the Approach Procedure

The Autopilot mode was turned off and the altitude increased as the airplane began a gradual 180° turn to the right. The airplane climbed to about 6,750 ft at the base of the turn During the turn, the following selections were made ALT Hold on, ALT Hold off, Lateral Navigation Mode (LNAV) on, Autopilot on, LNAV off, a series of altitude selections (ending with 9,300 ft), and lastly, the Autopilot was turned off at 1837:20 as the airplane passed over runway 11 (see Figure 3 below).

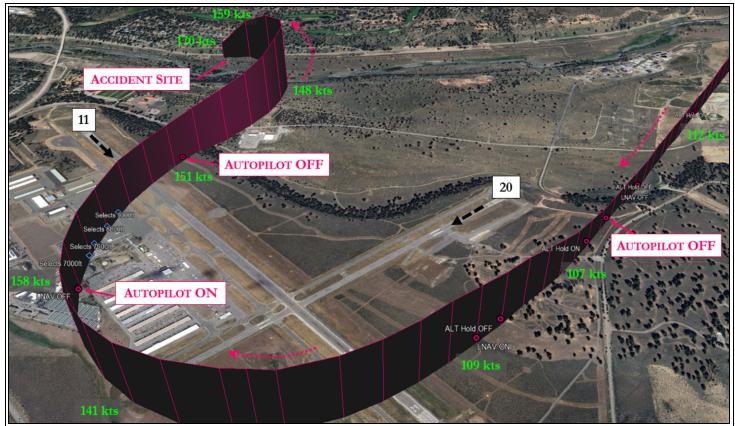


Figure 3: Flight Track Showing Speeds and Airplane Modes Selected

The airplane then momentarily climbed to about 6,850 ft (about 1,075 ft above ground level) while making a left turn. The turn tightened and the last three ADS-B returns, which showed a rapid decrease in altitude and an increase in speed. The last ADS-B return was at 1837:40 and indicated the airplane was at an altitude of about 280 ft above the ground and a speed of 170 kts; the return was about 200 ft northeast of the first identified impact point.

The air traffic control tower was closed at TRK. The airport's NOTAMs reported that the Visual Approach Slope Indicator (VASI) lights were not operational for runway 21. A review of the recorded audio for the Common Traffic Frequency (CTAF) revealed that when the airplane was about 2.4 nm from the runway surface, clicks can be heard consistent with the pilot attempting to activate the runway lights.

The accident site was located in snow-covered terrain adjacent to railroad tracks about 3,200 ft north from the approach end of runway 11. In character, the terrain was dense thick brush and mature trees. The initial impact area was across four rails with the north area embedded with left-wing tip fragments and the south area had a severed tree with right-wing pieces see Figure 4 below). The initial impact was upslope from the main wreckage, which was located about 100 ft on a heading of 200°. The wreckage was found distributed over 300 ft with the nose wheel tire being one of the farthest pieces of recognizable debris, consistent with the airplane impacting with the landing gear in the extended position. The main wreckage included

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the fuselage, inboard wings, empennage, and engine. The fuselage and main cockpit area were severely fragmented and partially consumed by fire, consistent with impact. The Light Data Recorder (LDR) was not located in the wreckage and is presumed to be in the vicinity of the accident site.



Figure 4: Debris Field and Initial Impact in Reference to the Accident Site

A routine aviation weather report (METAR) for TRK was issued about 2 minutes before the accident. It stated: wind calm, visibility 3/4 mile in light snow, ceiling overcast at 900 ft agl, temperature 30° Fahrenheit, dew point temperature 30° Fahrenheit, altimeter 29.66 inches of mercury (inHg). A review of video camera footage at the airport and near the accident site revealed that the visibility at the time of the accident was under 0.34 statute miles (see Figure 5 below).

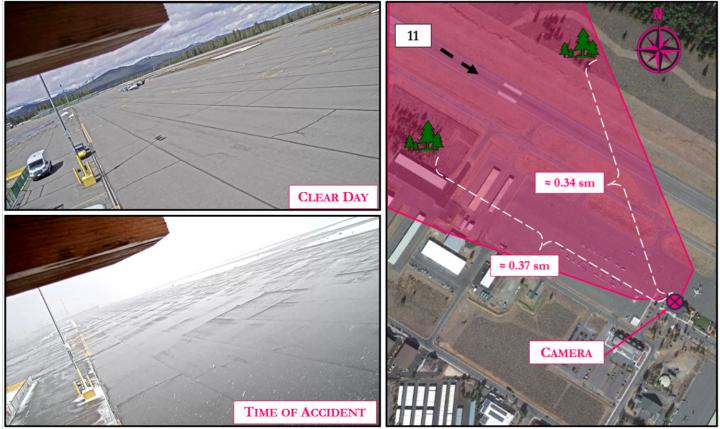


Figure 5: Weather at the Airport

The High-Resolution Rapid Refresh (HRRR) numerical model was obtained from the NOAA Air Resources Laboratory and provided a sounding for the accident airport location. The sounding at 1900 was consistent with nimbostratus-type clouds in the area producing light snow with cloud tops near 17,000 ft. The sounding was also consistent with the possibility of light to moderate icing below 17,000 ft.

Aircraft and Owner/Operator Information

Aircraft Make:	Daher	Registration:	N960LP
Model/Series:	TBM700 960	Aircraft Category:	Airplane
Amateur Built:			
Operator:	AVRAM ENTERPRISES LLC	Operating Certificate(s) Held:	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	IMC	Condition of Light:	Day
Observation Facility, Elevation:	KTRK	Observation Time:	18:35 Local
Distance from Accident Site:	1 Nautical Miles	Temperature/Dew Point:	-1°C /-1°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	
Lowest Ceiling:	Overcast / 900 ft AGL	Visibility:	
Altimeter Setting:	29.66 inches Hg	Type of Flight Plan Filed:	IFR
Departure Point:	Denver, CA (APA)	Destination:	Truckee, CA

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	39.333665,-120.15256

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Lana Boler; FAA; Reno, NV
Investigation Class:	Class 3
Note:	