



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Central Region

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Examination Summary

CEN18FA227

This document contains 11 embedded photos.

(2 Pages)

1.0 PARTICIPANTS:

Name: John M Brannen II
Title: Senior Air Safety Investigator
National Transportation Safety Board
4760 Oakland Street
Suite 500
Denver, CO 80239

Name: Peter Basile
Title: Air Safety Investigator
Textron Aviation
Building W2, Dept. 175
One Cessna Blvd
Wichita, KS 67215

John Butler
Title: Air Safety Investigator
Lycoming Engines
652 Oliver St.
Williamsport, PA 17701

2.0 SUMMARY

On June 15, 2018, at 1538 central daylight time, a Cessna 172N, N734BS, was destroyed when it impacted a powerline and terrain near Rotan, Texas. The pilot and passenger were fatally injured. The aircraft was registered to and operated by Aero Photo under the provisions of 14 *Code of Federal Regulations* Part 91 as a business flight. Visual meteorological conditions existed at the time of the accident. The flight was not on a flight plan. The flight originated from the Midland Airpark (MDD), Midland, Texas, about 1331, and the Spicewood Airport (88R), Spicewood, Texas was the intended destination.

3.0 DETAILS OF THE INVESTIGATION



The airplane had departed 88R earlier in the day to perform aerial photography missions. After completing several missions the airplane landed at MDD, reportedly to refuel. After departing MDD on the accident flight, the airplane flew photography missions near Midland, Texas, Odessa, Texas, and Lubbock, Texas. After completing the missions near Lubbock the airplane traveled southeast to return to 88R.



The airplane impacted a powerline that crossed a canyon near Rotan, Texas. The powerline that was struck was suspended from wooden poles about 20 ft tall that were on the peaks of the adjacent ridges forming the canyon. The powerline was estimated to be about 130 ft above the floor of the canyon. The photo above was taken from the wreckage site toward the powerline that was struck and depicts the locations of the poles with red arrows.



The airplane came to rest on the side of a hill at coordinates as depicted in the above picture.



The airplane came to rest inverted. The aft fuselage was broken near the baggage compartment and the entire aft fuselage and tail were bent over the inverted fuselage.



The left wing appeared intact and still attached to the fuselage and wing struts. The ailerons and flaps remained attached to the wing.



The right wing appeared intact and still attached to the fuselage and wing struts. The ailerons and flaps remained attached to the wing.

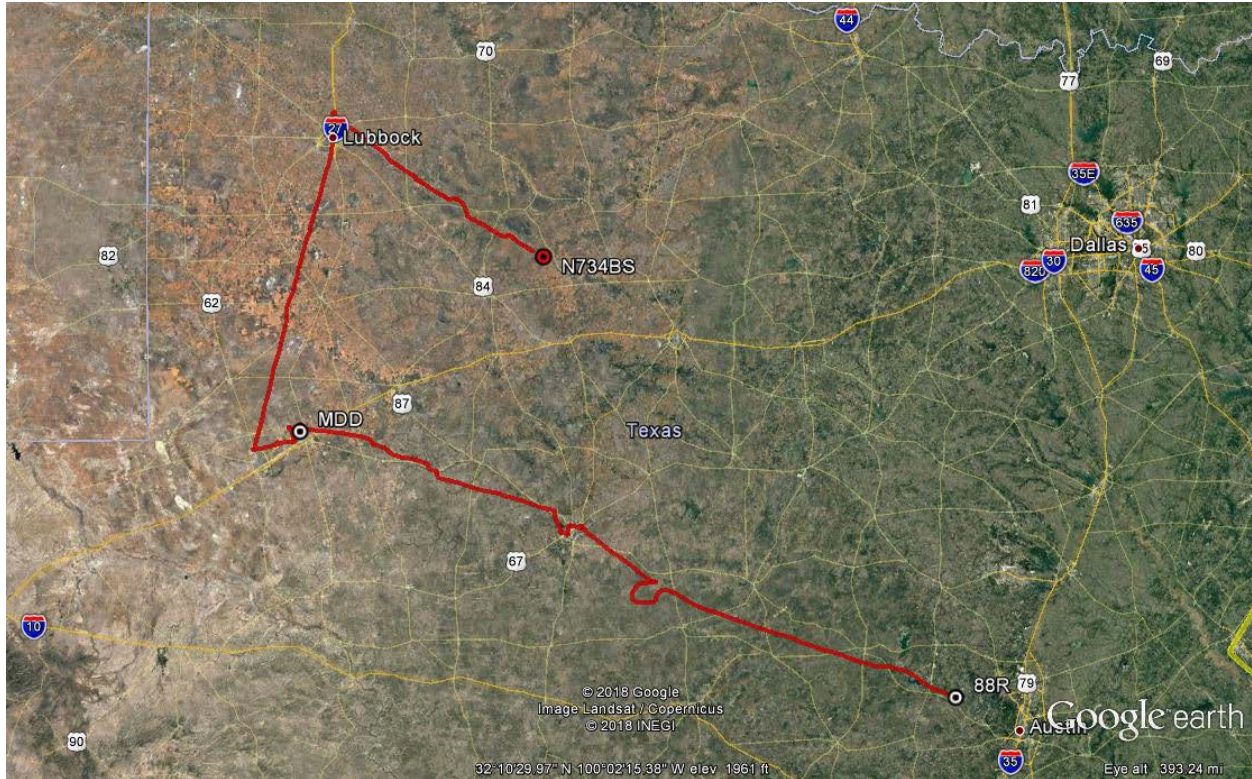


The tail surfaces were intact and the rudder and elevator remained attached.

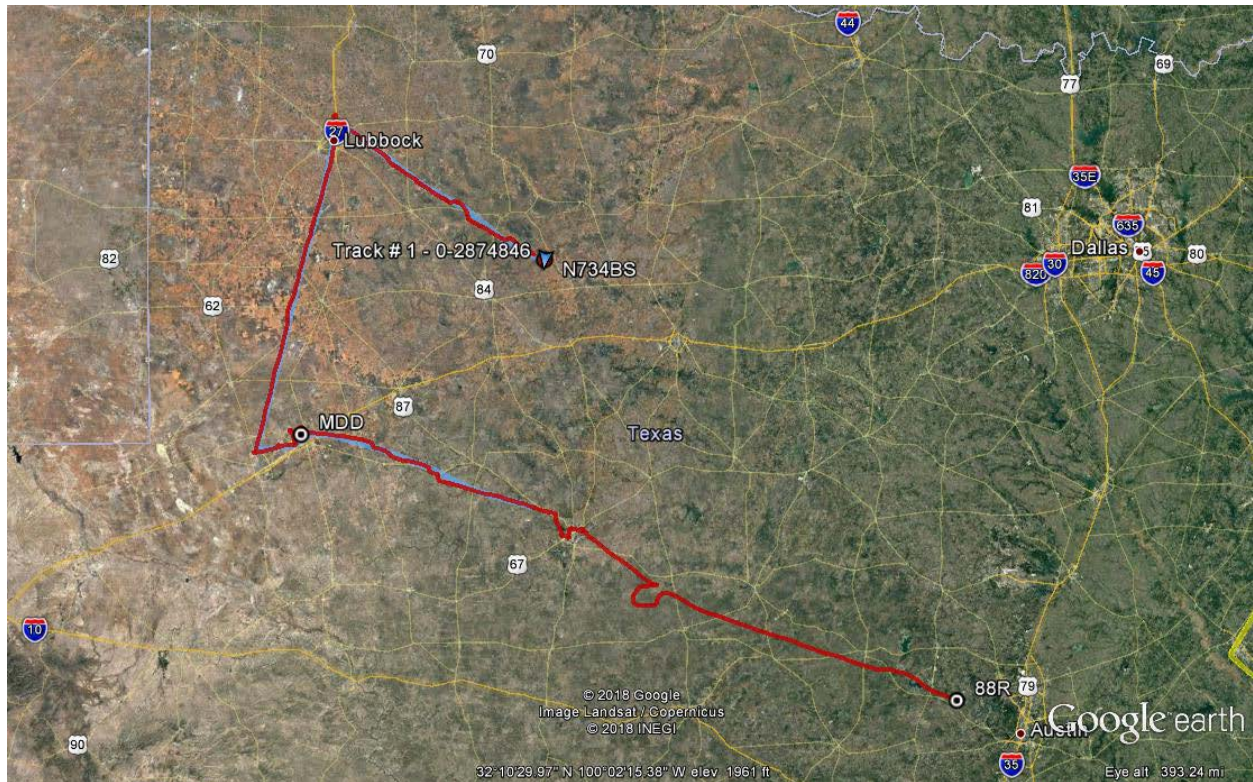


The engine was separated with the prop still attached to the engine. A portion of powerline cable was wrapped around the crankshaft an estimated 15 turns

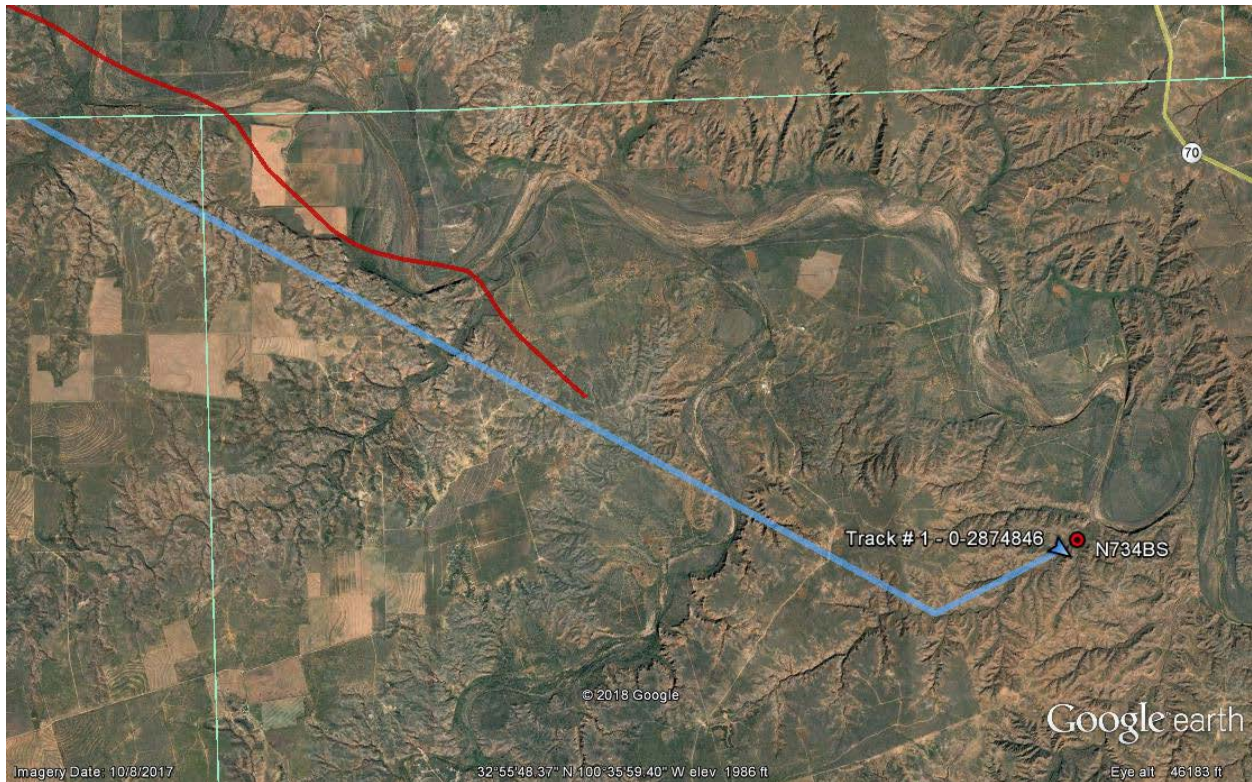
Access to the site was limited and the position of the wreckage was not suitable for a detailed on-scene examination. For these reasons, the on-scene portion of the work was limited. Additional examination will be conducted after recovery of the airplane from the scene.



A hand-held Garmin Aera 560 GPS receiver was found within the airplane. The track data from the unit was downloaded using a mini-USB cable to connect it to a laptop computer. The data included track data for the day of the accident which is plotted below. The unit was given to the insurance adjuster for return to the operator.



In addition, the airplane owner provided GPS track data from a handheld SPOT GPS receiver that she had employees carry on missions. The SPOT unit sent position information that the company used to remotely track the airplane. The spot data was overlaid on the previous plot as shown here.



The close up of the final portion of the flight showing the end of the Garmin track in red and the spot track in blue.

It was discovered that the Texas DPS had retained some of the personal effects from the airplane. The NTSB IIC went to the state patrol station in Sweetwater Texas and retrieved the following items:

1. Go-pro camera (Camera intact but case damaged)
2. Apple MacBook Pro laptop (Appears undamaged)
3. Apple Iphone (believed to be passenger's)
4. Canon Digital SLR Camera and lens (Body appears undamaged, but lens is damaged)
5. DJI OSMO (?) stabilized digital video camera in soft case (camera and gimbal damaged)
6. Miscellaneous camera accessories
7. Miscellaneous personal effects
8. Backpack

All of the items listed above with the exception of the go-pro and iPhone were placed in the custody of the insurance adjuster on 6-18-2018 for return to the appropriate parties. The go-pro and iPhone were retained for examination by the NTSB recorder lab. The NTSB IIC took pictures of the items retained and returned that can be referenced if needed.

Submitted by: John M. Brannen II