

National Transportation Safety Board

Washington, DC 20594



Response to Petition for Reconsideration

August 9, 2024

Mr. Bruce Mayes



In accordance with Title 49 *Code of Federal Regulations* Part 845.32, the National Transportation Safety Board (NTSB) has reviewed the petition for reconsideration and modification of probable cause of the aircraft accident involving a Meyers 200B airplane, N229RS, on July 19, 2016, near Huron, South Dakota (CEN16LA275). The petitioner has met the requirements for the NTSB's review of his petition; specifically, as the owner and pilot of the accident airplane, he has a direct interest in the investigation and has offered claims that our report was erroneous. Based on our review of the petition filed on September 3, 2017, the NTSB grants the petition in part.

On July 19, 2016, about 1900 central daylight time, a Meyers 200B airplane, N229RS, conducted a forced landing to a field near Huron, South Dakota. The airline transport-rated pilot was not injured, and a passenger received minor injuries. The airplane was substantially damaged during the landing. The airplane was registered to and operated by the pilot under the provisions of 14 *CFR* Part 91 as a cross-country flight. Visual meteorological conditions prevailed at the time.

The probable cause of the accident, which was adopted on September 6, 2017, was as follows:

the partial loss of engine power due to an unsecured throttle cable. Contributing to the unsecured throttle cable was the missing bolt and associated safety wire; the reason for the missing bolt and safety wire could not be determined.

The petitioner is Mr. Bruce Mayes, the owner and pilot of the airplane. His September 3, 2017, petition follows a June 28, 2017, letter, in which the pilot requested that the factual report be modified to correct "significant errors, omissions, and inconsistencies" and an August 29, 2017, response from the director of the Office of Aviation Safety (see the Background section for more information). The petition

requests that the NTSB modify the report on this accident because of "incorrect conclusions and inaccuracies."

Background

Two days before the accident flight, the pilot and passenger were on a cross-country personal flight when the pilot noticed oil on the airplane's windscreen; he landed in Casper, Wyoming, to have maintenance personnel inspect the airplane. Maintenance personnel reported in a postaccident interview that, while identified discrepancies were being repaired, it was noticed that the bolt holding the throttle cable bracket was loose, worn, and not safety wired. The maintenance facility did not have an exact replacement bolt, so the mechanic drilled a hole in the head of a similar bolt for the safety wire and installed the bolt. The mechanic installed the safety wire through the throttle cable bolt and then down to the mixture control bolt.

Photographic still images from the maintenance shop security camera show the pilot periodically observing the work as maintenance personnel finished the repairs on the airplane. The pilot also took a photograph showing that the safety wire was installed on the mixture control bolt (identified as photo 2 in the docket for this accident). The throttle cable bolt was not visible.

On the day of the accident, the pilot conducted a local test flight after the repairs were completed. No problems were noted, and the pilot and passenger continued their flight. After an en route fuel stop in Huron, the airplane departed and reached 2,300 ft, at which point the engine lost power. Although the engine remained at idle, it would not respond to the pilot's throttle inputs. Following the forced landing, the pilot re-entered the airplane to ensure that the electrical power and fuel were off and that there was no fire. He then removed the engine cowling and found the throttle linkage "disconnected or broken."

A postaccident examination of the airplane revealed that the bolt holding the throttle cable bracket was missing, which had allowed the throttle cable to "float," meaning that manipulating the throttle control from the cabin would not govern the engine's throttle position. The examination also revealed that the mixture control bolt was in place. However, the throttle cable bolt and associated safety wire were not found.

During an inspection by personnel at the salvage yard where the airplane was taken, a bolt was found lying in the bottom area of the cowling after the top cowling was removed. However, the origin of the bolt found in the cowling could not be determined.

In a June 28, 2017, letter, the pilot identified eight items for correction in the factual report: departure point, destination point, scope of repair, pilot inspection/photo identification, photo of safety wire, cowling removal, safety wire and

bolt, and the pilot's age; pertinent to this petition, the pilot's June 28 letter contended that the bolt found at the salvage yard was the original engine throttle bolt and that the maintenance facility didn't install a new bolt. In an August 29, 2017, response to the pilot, the director of the Office of Aviation Safety provided evaluations of the points raised by the pilot and identified which items would be corrected or modified (departure and destination points, photo of safety wire, and the pilot's age) and which would remain unchanged in the final factual report (scope of repair, pilot inspection/photo identification, cowling removal, and safety wire and bolt).

Petitioner's Claims

In his September 3, 2017, petition, the petitioner states that the e-mail he sent to the Federal Aviation Administration (FAA) aviation safety inspector incorrectly identifies a picture as showing the repaired throttle linkage. Instead, he states that it is a picture taken during the repair process and depicts the fuel mixture cable and bolt.

Further, the petitioner claims that the factual report is "severely lacking important and relevant information" concerning his account of removing the top cowl as reported to the FAA aviation safety inspector during a telephone conversation. The petitioner states:

We evacuated the airplane and I returned to the cockpit to turn off the fuel, battery and [emergency locator transmitter]. I then removed the top cowl to disconnect the battery just as three first responders arrived. After placing the top cowl on the grass, I saw the disconnected throttle linkage and made the three Fire Rescue personnel come and view the situation. I asked them to notice that I did not touch anything nor should they and that the throttle cable was lying on the engine compartment floor. ... I offered to [the FAA aviation safety inspector] that I disconnected the battery in the presence of the collected group and did not touch anything else.

The petitioner also disputes the finding that the bolt found at the salvage yard was not the bolt missing from the throttle linkage. He states that because the bolt that was found "fits the throttle linkage mounting hole and retains all the markings of the throttle linkage bolt," it is the original bolt. As evidence, he provides a September 22, 2016, e-mail from the assigned insurance claims manager and an October 1, 2016, report from a third-party consultant hired by the insurer. He also provides the invoice from the maintenance facility that performed the repairs pointing out that the invoice does not include a bolt in its list of charges. The petitioner also highlights that the invoice indicates the airplane's previous owner and engine model as evidence that maintenance was performed referencing incorrect information.

NTSB's Response

As stated in the August 29, 2017, letter to the pilot/petitioner, the factual report's description of the pilot's reported actions on scene following the forced landing is factually accurate. The additional details provided by the petitioner have no bearing on the findings or probable cause. We do not dispute the pilot's description of the events at that time and do not believe further discussions with rescue personnel are necessary.

The NTSB notes the petitioner's contention that the photograph he provided shows the fuel mixture cable and bolt rather than the throttle linkage. The photograph's perspective does not provide a clear view of the throttle cable bolt; therefore, the bolt's presence cannot be verified based only on the photograph as characterized in the original report.

Concerning the petitioner's claim that the bolt found at the salvage yard was the original bolt and that the maintenance facility did not install a replacement bolt, the NTSB notes that the bolt that was found has no manufacturer markings or documentation that identify it as the original bolt. However, we also acknowledge that, although the mechanic stated that he installed a new bolt, the invoice provided with the petition does not include a charge for a new bolt or for maintenance on the throttle cable. Thus, based on available evidence, the NTSB maintains that it cannot be determined whether the bolt found in the cowling was the original bolt or a replacement bolt.

We also acknowledge the maintenance recordkeeping discrepancies noted in the petition, including that the mechanic's invoice for the work performed indicates the wrong owner and engine model. However, without having examined the engine immediately after the maintenance was performed, we cannot assess whether the bolt was installed correctly with safety wire. Given the contradictory information, the final report has been revised to better represent the inconclusive nature of the available evidence.

Disposition

After review of the evidence, the petition for reconsideration of the NTSB's findings and probable cause in connection with the aircraft accident involving a Meyers 200B airplane, N229RS, on July 19, 2016, near Huron, South Dakota, is granted in part. The analysis and factual information have been modified as shown in the attachment.

Chair HOMENDY and Members GRAHAM, CHAPMAN, BROWN, and INMAN concurred in the disposition of this petition for reconsideration.

Attachments

1. Revised final report with changes tracked
2. Revised final report (clean)