

Lindberg Joshua

From: Martin, Edward C (FAA) [REDACTED]
Sent: Tuesday, October 1, 2019 8:14 AM
To: Lindberg Joshua
Subject: N217M

Joshua,

I have revised the text to add a comment made by Mr., Bippes, thought it may be important to include.

During the investigation of N217JM crash the following issues were found, the tail boom was broken off, including the "H" frame support, reference NTSB Report 19-041, and the CG was found to be aft of the CG envelope.

The tail boom section was sent to the NTSB for further analysis and a report was generated that stated that the tail boom broke off after the impact with the ground.

The CG limits were calculated utilizing a hand drawn picture with the datum indicated forward of the aircraft and not at the wing leading edge as used by the manufacture. The data in the picture equate to the CG being aft of the CG envelope. The CG limits from the drawing indicate the CG window at 88" FWD and 96" AFT, again this does not coincide with the manufactures Weight and Balance Chart. Some of the data used was incorrect for example the fuel weight used was 70 Lbs. the issue being the aircraft only has a five gallon fuel tank. The pilot stated that he added 10 Lbs. to the tail of the aircraft which made the CG even further aft.

The manufacture weight and balance state that an aft CG can be expected with a lighter pilot, calculations indicate that a 150 Lb. pilot would need approximately 40Lbs. 36 inches forward of the wing leading edge datum for the aircraft to be in the correct CG envelope.

In the interview Mr. Bippes stated he was "Adjusting" his CG airborne, he placed a bag of bird seed in the passenger seat to assist in the airborne test, the problem is that the seed in the passenger seat is aft of the datum per the manufacture drawings. Mr. Bippes was asked if he had any flare authority if he would have been coming down into trees and he stated "no". The impact was confined to a very small area, consistent with minimal forward airspeed.

[REDACTED]



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