

From: Andy Mills
To: Struhsaker Jim;
cc: Haueter Tom; Julius Chris;
Combs Robert;
Subject: RE: Three NTSB requests from CHI
Date: Tuesday, October 26, 2010 11:13:25 AM
Attachments: 019.JPG
Picture1.jpg

Hello Jim,

I have been in and out of the office quite a bit in the last two weeks. Herewith a reply to your requests:

- 1) Thank you for your clarification of 13 October regarding the Martin Baker seat installation excerpts. Caron Helicopters has no objection to inclusion of the attached excerpts from Mr. McClenahan's work in the public docket. We would ask that you consider inclusion of the following clarification regarding the installation of the MB seats in any section that addresses the seats:

The Martin Baker Seat STC was developed to provide an alternate seating configuration to the Sikorsky S-61 aircraft to allow increased versatility in utility operations and increase seat availability. To engineer the installation to current standards would not be a viable option as it would require such extensive modification to the aircraft that a new Type Certification would be required. This is the economic burden purpose indicated by FAR 21.101(a) "Changed Product Rule" developed by the FAA. Although the engineering data for the installation of the seats was done to the original TC standard, this installation did increase the level of safety to some degree compared with the original seats as follows:

- Incorporates a four point restraint harness thus restrains the upper torso where the Sikorsky seat only has a lap belt and folding seat backs which do not meet CAR 7.355(b)(i) requirements.
- Provides safe, engineered installation and removal procedures which the OEM seat does not incorporate.
- The seat itself is a Part 29 certificated seat mounted to CAR 7 requirements. Even in the S61 configuration the "crash attenuation" of the seats would have some degree of operation.
- Increased the aisle width for emergency egress to a much safer dimension.
- Confirms seat structure and mounting meets and/or exceeds original CAR 7.355 requirements.

- Provides a more readily available seat as the original seat is difficult to locate and most have been repaired at some point.
- Provides a mounting rail with linear dispersal of occupant transfer loads instead of a point mount in the cabin floor.

In conclusion it is fair to mention that this STC was pointed out to NTSB not as a viable safety option to be considered but as an alternative to the OEM seat. Carson Helicopters has developed numerous STCs to advance the safety and versatility of the Sikorsky S-61 airframe and continues to do so.

2) I have been informed by Mr. Carson that the hover test report as prepared by Mr. Curtiss has been completed and submitted to the FAA for their comment in a proprietary report for the FAA. Mr. Carson has no issue with the NTSB receiving a copy of the report and in fact it should probably be in the public docket. He asks that you request a copy of the report directly from the FAA New York ACO office, which is reviewing the document. My understanding is that it confirms the FAA-approved improved performance charts of the aircraft with composite blades.

3) We have searched our database and I asked Perkasio to also look for better pictures of N612AZ. Unfortunately, we have two problems there; We only had the aircraft for about a year, so we do not have as many pictures of it as some of the other aircraft, and nearly all of the pictures we have found are low resolution or have the snorkel attached. I have attached one photo here that is a pretty good shot of the aircraft at 1.5 MgB, but it has the snorkel attached. The others we have are either already in your possession or they are less than 500 Kb in resolution, which is well below what you asked for (similar to the Pic1 attachment here). I have asked the mechanics (who no longer work here) that worked with the aircraft if they have any better quality pictures, but thus far have not seen any that were of very good quality. I will keep searching.

Best regards,

Andrew Mills

General Manager

Carson Helicopter Services, Inc.

