



Hawker Beechcraft Corporation
P.O. Box 85
Wichita, Kansas
67201-0085 USA

In Reply, Refer to: 940201100076/TH-1905

January 10, 2011

National Transportation Safety Board
Mr. Brian C. Rayner
Northeast Region
45065 Riverside Parkway
Ashburn, Virginia 20147

Subject: Hawker Beechcraft Corporation Model 58 Baron, Serial Number TH-1905, Registration N167TB, accident in Teterboro, New Jersey on August 21, 2009 at 0314 EDT (0714 UTC).

Reference: Email sent on Monday, January 03, 2011 11:31:58 EST labeled: Quest Pics

Dear Mr. Rayner:

This letter will supersede letter reference number 940201005281/TH-1905 dated December 22, 2010 which was emailed to you on December 23, 2010 08:41 CST.

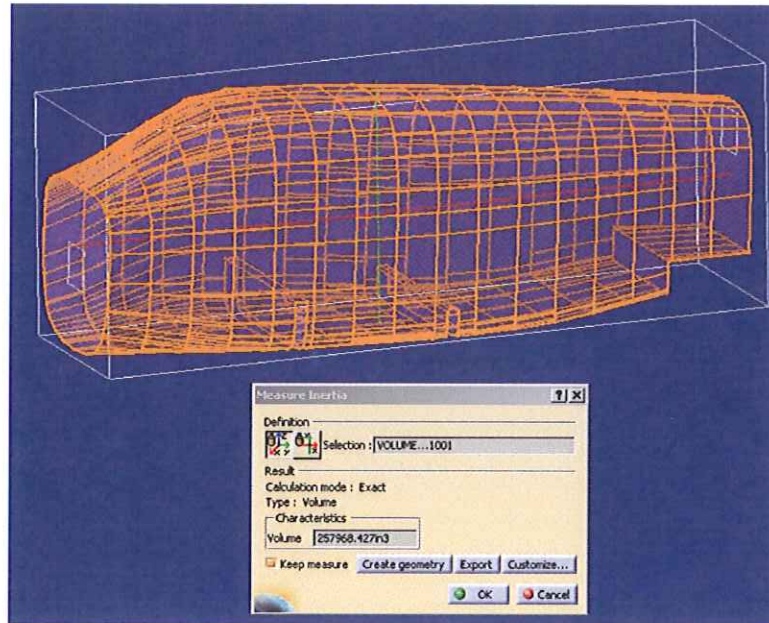
The operator referencing data from Hawker Beechcraft Corporation (HBC) web site in regards of the cabin volume of a G58 Baron is correct. When accessed to HBC web site, http://www.hawkerbeechcraft.com/beechcraft/baron_g58/interior.aspx, and click on Interior, the following statement is stated:

The Baron G58's cabin is your sanctuary from the outside world, complete with all the comforts you'd expect for an inviting retreat. Enter through the large double utility doors and see the 137-cubic-foot cabin features four leather seats in a club configuration, complete with lumber support and headrests.

Reference to the 59 cu ft, this data is for the approximate total volume for cabin baggage as stated in the Baron 58 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual, part number 58-590000-39, Revision B2, Section I – General, Page 1-15, Paragraph: CABIN BAGGAGE VOLUMES.

The subject airplane referenced above was a Model 58 Baron. The dimension of the G58 Baron, current production, has not changed from the Model 58 Baron. With that, below is an approximate interior volume calculation of a Model 58 Baron:

Model 58 Interior Volume Approximation



The fuselage outside mold line surfaces were offset inboard 1.75" to approximate the inside mold line surfaces.

The resulting volume inside the aircraft is 257,968 in³ (as shown in figure above).

The combined volume of the instrument panel, the center pedestal and the volume below the rudder pedal floor is analyzed to be approx. 15,320 in³.

The volume of each front seat is approx. 2,894 in³.

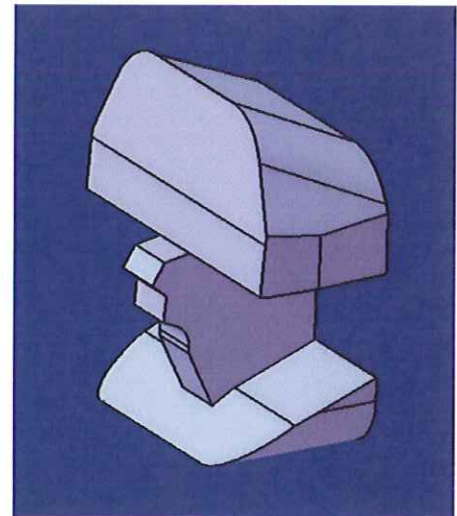
The volume of a 50th percentile North American male is approx. 5,086 in³.

Subtracting these items, and assuming 2 pilots, the remaining interior volume is 226,688 in³, or 131 ft³.

A specimen bag has dimensions of 12 x 17 x 20 in, which is a volume of 4,080 in³.

10 specimen bags have a volume of 40,800 in³.

17 specimen bags have a volume of 69,360 in³.



Assuming 10 specimen bags onboard, the remaining interior volume is approximately 185,888 in³ or 108 ft³.

Assuming 17 specimen bags onboard, the remaining interior volume is approximately 157,328 in³ or 91 ft³.

An unpressurized Model 58 Baron is not equipped with an outflow valve system as one would find in an airplane that is pressurized. The subject airplane model was an unpressurized airplane and was not designed to be as air tight as a pressurized airplane. The air exchange rate inside the cabin

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can not be determined. There is no analysis nor test data that exist for the fresh air exchange rate in a Model 58 Baron.

Should you have any questions, please call me at [REDACTED]

Sincerely,

HAWKER BEECHCRAFT CORPORATION



Ernest C. Hall
Air Safety Investigation