U.S. Department
of Transportation
Federal Aviation
Administration

Aircraft Maintenance Division

800 Independence Ave., SW.
Washington, DC 20591

APR 9 1999

Mr. Rodney D. Farlee
417 N. Lynn Drive
Wilmington, DE 19809

Dear Mr. Farlee:

First I would like to apologize to you for taking so long getting back to you to answer your question on "interior confusion."

From the last week of January to the end of March, I traveled extensively representing the Federal Aviation Administration Washington DC Headquarters at Inspection Authorization renewal meetings nation-wide. Since January, I did 19 presentations in 14 cities, (mostly on Saturdays) talking to over 6,000 mechanics. When you figure that each presentation requires two days for travel, plus 1 or two days giving presentations, I spent a little more than 45 days on the road since January 26. I do not mind telling you that all that traveling on an aircraft's jump seat when you are 56 years of age is a little exhausting. I do not snap back as fast as I did when I was 55. However, this tongue in cheek explanation should not be taken as a poor attempt to excuse my lack of response, but simply as one reason why I am late with my reply to you.

As you stated in your letter your aircraft, a Cessna 177RG, has been certificated under Title 14 of U.S. Code, Part 23. Section 32.853 (a), which states that the materials used for passenger and crew compartment interiors must be at least flame-resistant. Part 1 Definitions states that the term "flame resistant" means not susceptible to combustion to the point of propagation of a flame, *beyond safe limits*, after the ignition source is removed.

Part 23. 853(d)(ii) requires the materials and fabrics used in crew and cabin interiors on commuter category airplanes to be *self extinguishing*, which means when a direct flame is applied to the material, then removed, the material will not support combustion.

So, you are right. Since your Part 23 Type Designed aircraft is not in commuter category or in a Part 135 operation, you do not have to install "self extinguishing" materials in your interior. The material for your aircraft must be "flame resistant." However, since the FAA has not established a test to determine what is or what is not flame resistant, you will still have to have an acceptable industry certification stating that the new fabric and material you are using in your aircraft's interior is flame resistant.

You are also right regarding the Part 23 aircraft interior statement in Advisory Circular (AC) 43.13-1b that require all materials to meet the Appendix F burn test. This statement is incorrect and I will personally make the correction to the AC in Change 1 which is due to go to the government printing office on November 1, 1999.

In an attempt to salvage what is left of my professional reputation when I wrote the article "interior confusion" the intended audience were repair stations that were installing interiors and were ordering fabrics and materials in bulk. Since new interiors are put into large twin reciprocating engine aircraft and small jets that are used for Part 135 operations, that became my second focal point of the article. With that in mind, I suggested in the article that repair stations could avoid mucking around with the flash/flame requirements in CAR 3 and FAR 23 and 25, and at the same time it would be easier to satisfy the regulations if all material they bought in bulk would meet Appendix F burn test in both Part 23 and Part 25.

But while you were right in both cases, I still believe it would be cheaper and safer in the long run for all new interior fabrics and materials to meet the burn tests in Appendix F of Part 23.

In reference to your note on the bottom of the letter about the address on AFS-300's web page, I will bring this to the attention of the web-masters.

Thanks again for the "heads up.

Sincerely,

Bill O'Brien
National Resource Specialists