

# more letters from readers about the Regs



BY NORM CHALMERS  
Pacific Airworthiness Consulting

In my last column, I made a last-minute

addition referring to approval of major repairs and modifications for importing of aircraft from the USA. After reading FAA documents including 8110.37E, 8300.10, 8300.14, the Canada/USA Bilateral Agreement with its related documents and some of the numerous advisory and guidance documents available, I can only add a few notes.

The FAA seems to have removed some of the designated engineering representative (DER) authorities and added others. They have implemented a new delegation called a Repair Specification DER (RS-DER) and a new level of approval document called a Repair Specification Title and Signature Page. At the same time, they seem to have reduced the level of repair approval that an 8110-3 form may be used for. Now, this form has a myriad of guidance documents that bounces it back and forth amongst the FAA Aircraft Certification Office (ACO), DERs and RS-DERs. They have also added in the term “Critical Parts” to the mix of factors of “Major Repairs” and “Major Alterations” to be considered before approval. After talking to a couple of DERs, I am wondering if anyone out there in readerland is capable of providing a definitive explanation of how this FAA system works.

**Do you know where Niverville is? Well neither did I until we received a letter from “semi-retired” Roger Beebe, a long-serving executive with Transport Canada saying “hello”. “Hello” to**



you Roger and all of the other Aircraft Maintenance Engineers (AME) residing along the historical Red River. He goes on to state, “After all these years, I still have a great interest in the future of AMEs.” Unfortunately there are too few of us who are interested in the future and are willing to work to improve things.

**I received a follow up letter from Norm Paterson (ref. AMU April/May 2012) stating: “I am still a little fuzzy on replacement times for equipment such as oil cooler hoses not listed in 625 App C.” He refers to manufacturers’ manual and bulletins that seem to mandate replacement.**

That’s the way it was before the CARs. You were required to follow the “manufacturer’s recommendations”. The oddest situation I had was with an AME

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who took manufacturer X's "time expired" cooler and put it on manufacturer Y's aircraft – one which had no life limit on the cooler. The same applied to hoses. Appendix C changed that.

For outright replacement of parts, Appendix C of Standard 625 only addresses transmitter batteries. All documents that mandate replacement of parts are regulatory documents and include Airworthiness Directives, Type Certificate Data Sheets and other documents mandated in those Data Sheets. These parts are normally referred to as life limited parts.

For non-replacement maintenance tasks such as calibration, inspection and overhaul, you must consult the individual aircraft Maintenance Schedule Approval (MSA) as approved by TC or extracted from Standard 625 Appendix B. I have seen some TC Inspectors require some stuff to be added, but many times it was not supported in regulation or by TC official policy. That ought to be challenged if you see it as a local requirement and an unnecessary burden. That's all there is on that part of the topic.

For your actual work, the manufacturer's instructions come into the picture. CAR 571.02 mandates compliance with manufacturer's recommendations for techniques, practices, parts, materials, tools, equipment and test apparatuses (or equivalent). Replacement or overhaul times specified in documents issued by the manufacturer such as "Mandatory Service Bulletins" are not mandatory per the CARs but once again I urge due diligence.

**Further to this subject, Norm asks about liability implications. He states that "the list of continuing airworthiness tasks and replacements is very large."**

He's right on with that. If you are working on one type of aircraft, the pile of documents to consider is large. If you're working on three types of aircraft, your pile of documents will be about three times as big. I'll repeat myself here and state that legal requirements are a different world from liability. Requirements are what I write about. For liability, nothing is for certain until the Supreme Court has made a ruling on the matter. On that, all I will tell you is

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to maintain your highest standard and use your best judgment to exercise DUE DILIGENCE. For more on that, refer to AMU's April/May 2012 issue.

To the above, I'll add the "requirement" to have insurance coverage. We are all always open to lawsuits in civil court. A friend of mine suffered incredibly and, metaphorically speaking, lost the farm because of a lack of complete insurance coverage extending to the area of "Errors & Omissions" coverage. Using your "best judgment" and "highest standards" regarding due diligence is very important but also get insurance that addresses all of your needs. For this, find an insurance company that specializes in aviation. This area of insurance is like every other topic under the sun: there is a plethora of "experts" out there but few who know what they are talking about. Ask around the industry to find a knowledgeable person with the product to suit your needs.

Regarding civil liability, I'll use a metaphor of the advice to hikers for protection against grizzly bears. Always wear bells on your person to signal to

the bears that you are near and give them plenty of time to run away. Carry a can of pepper spray to chase them off if they still bother you. Further to this, autopsies on fat bears can find stomach contents of bells flavoured with pepper.

**A letter from Dennis Lyons of Fast Air takes us back to the AMU June/July issue and asks for some corrections or clarifications.**

His first point is regarding some confusion that arises from my usage of the Small Operator Maintenance Control Manual (SOMCM) as an example. I did state that "For AMOs this is not any help" which was not correct in all cases. The SOMCM training requirement regarding elementary work and servicing might be used as an example for Approved Maintenance Organizations (AMO) that want to delegate these tasks to unlicensed personnel.

The second half of that paragraph clarifies my point somewhat but here is some expansion on that. Many years ago (for the young readers, after the dinosaurs but before SMS) all approved companies had "Maintenance Control

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Manuals” or MCMs. With evolution to the “new” Canadian Aviation Regulations, Transport Canada (TC) wisely termed the manual applicable to AMOs as a Maintenance Policy Manual (MPM) to limit confusion. The term Maintenance Control Manual was retained in CAR 706 for air operators operating commercial air services. These are commonly referred to as AOCs for a commercial Air Operator Certificates issued under the 700 series of the CARs. To this mix of MCMs for AOCs and MPMs for AMOs, we add the SOMCM for SOA-

OCs (say that fast). The SOMCM was produced by TC to help small and start up AOCs produce an MCM. Up there in the thin atmosphere of Ottawa, airlines get the most attention and AMOs are put on the back burner to languish without similar assistance. As a further note, the initialisms used, such as MCM, are used in the regulations as a convenience to reduce text. You can give your manual any name you want, for example, Quality System, Quality Management, etc.

In the event that some servant of the Minister is reading this, (don't get caught), please consider extending a helping hand to AMOs by publishing a generic MPM for small AMOs or a SAMOMPM.



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... The policies in the TC-approved manual must be clear enough to guide the development of the referenced documents which, in turn, must be complied with. These documents must not be allowed to contradict each other.

The second point Dennis raises is regarding the Standard 573.06(5) “three year requirement” for update training as a “fixed period”. He mentions with a “robust QA system (which all mature companies should have) you can move from a fixed period of time to a competency-based system of update training”. This three year period is not a fixed period that must be adhered to but is a maximum period of time allowed for a minimum amount of training. Before this requirement, most companies did little or no training given the choice. Now you must not exceed three years without update training. If you want to do more training or have a shorter cycle then go ahead

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and do training that exceeds this. As I stated previously, 24 hours in a year seems to be widely accepted as a minimum for personnel with aircraft certification authority (ACA). If you want to do less, submit a manual amendment to TC.

**Now for something completely different.** This is on the topic of MPM and MCM composition. Many people are still in the mode of the old Engineering & Inspection Manual (E&I Manual), when approved manuals were huge. TC inspectors required all manner of requirements to be written into the old MCMs because that was the only place that airworthiness requirement could be mandated. The Air Regulations and the Air Navigation Orders (ANOs) contained almost nothing. What was required was that the manuals be approved. That was how requirements like stores, documentation and quality control were mandated. We required companies to list these items under the duties of various personnel in the company, primarily the Chief Engineer and the Chief Inspector.

Nowadays I see similar things going on in modern MPMs and MCMs, including long and drawn-out job descriptions. Under current regulations, job descriptions and numerous other examples are not required. What is now required is specified in the standards: for specifics, AMOs refer to Standard 573.10(1) and for AOCs refer to Standard 706.08(1). Following those two referenced areas are instructions for the implementation of "documents incorporated by reference". These are the procedures, process specifications and forms that companies need in order to provide detailed control of their day-to-day operations. These additional documents are approved by the company PRM, or a delegate, and can be revised when needed but always in conformance with the policies of the TC approved manual. This is not an easy way to escape requirements. The policies in the TC-approved manual must be clear enough to guide the development of the referenced documents which, in turn, must be complied with. These documents must not be allowed to contradict each other.

I seem to be running out of time this month, so here I'll leave you. Be good and remember Due Diligence.

*Please be aware that I am not a lawyer or legal expert. What I write in my column is not legal advice nor legal opinion. If you face a legal issue, you must get specific legal advice from a lawyer, and preferably one with experience in the aviation matters in your own country.*

**NORM CHALMERS** worked with Transport Canada as an Airworthiness Inspector for 25 years. Before this, from 1967 to 1983, he worked in the aircraft maintenance industry in and around Western Canada and in the Arctic. His industry experience includes the operational maintenance of normal and commuter category aircraft and smaller transport category aircraft in the corporate sector as well as several years working in major repairs in the helicopter sector. As an Airworthiness Inspector, he has been responsible for most duties related to the position, including the approval of all aspects of maintenance, manufacturing, training, and responsibilities related to distribution organizations. Norm now operates Pacific Airworthiness Consulting; [www.pacificairworthiness.ca](http://www.pacificairworthiness.ca). ■



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