Technically Speaking

by TIM TIMMERMAN

Previous articles have mentioned the importance of Service Bulletins and the Aircraft Maintenance Manual (AMM). How are all these technical publications created and maintained? The Cirrus Technical Publications department is responsible for all the documents used by the owner/operator and maintainers. A small group of two technical writers and one illustrator establish and sustain all the SR2X product line technical publications and strive to provide the best in the industry.

What documents are part of this group's responsibility?

- CAPS Component Manual (SR20, SR22/T)
- Illustrated Parts Catalog (SR20, SR22/T)
- Aircraft Maintenance Manual (SR20, SR22/T)
- Wiring Manual (SR20, SR22/T)
- Pilot Operating Handbook (SR20, SR22, SR22T) and four countries (US, EASA, Brazil, Argentina)
- Supplements (SR20, SR22, SR22T)
- Abbreviated Checklists (SR20, SR22, SR22T)
- MFD Checklists (SR20, SR22, SR22T)
- Service Bulletins (many, applicable to all models)
- Service Advisories (many, applicable to all models)

The first step in creating and maintaining these documents is to gather information from various locations. The Technical Publications group monitors the multiple minor drawing changes that are made every week. They look for design changes that may alter maintenance manuals or parts catalogs. Those changes go into a que for the periodic updates that are made to the AMM and the Illustrated Parts Catalog (IPC).

During major projects, there are often significant changes that need to be made. Entire systems may have been modified or added. New inspection methods are developed and recorded. Aircraft or system operations may have changed, requiring updates to the POH. Vendors may provide operation and/or maintenance information for their systems, and Experimental Flight Test provides data resulting in new or updated procedures (checklists) for those changes.

With this information, the Technical Publications group will then write the text and create the illustrations for all the various manuals. During this process, they discuss details with the Cirrus Aircraft engineering staff, or if there are maintenance process questions, they work with the Factory Service Center to ensure that the procedure is correct.

Once the document is written, it is sent out for review and feedback from various groups. That feedback is then incorporated, and if necessary sent out for another review. Once all the feedback is included, and with the FAA's blessing on certain parts of the AMM and the POH, the documents are released to the field.

Service Bulletins and Service Advisories follow a similar path. Engineering drawings are created that document the inspections, part removal and replacement. Those drawings are incorporated into a Service Bulletin. The Service Bulletin references the proper sections of the AMM for access and removal of parts, and provides illustrations and directions for their inspection, repair or replacement.

Once the Service Bulletin is written, the Factory Service Center reviews it. They look for errors or omissions and document the amount of time it takes to accomplish the work. Once that and other reviews are completed, the document is released to the field.

With the SF50 nearing service, the group has been expanded to support the writing of all those same manuals, which need to be created from scratch as this is a brand new airframe. Like the SR2X publications, these will be continuously updated and improved as feedback from the field comes in about errors or omissions. The service centers all have access to a tech pubs feedback form on their web portal and their comments are greatly encouraged to ensure continuous improvement in all the technical publications.

These publications play a very important role for the pilot and those that maintain the airplane. Much care and effort goes into making these documents readable, easy to follow, and useful to everyone who needs them. ⊕