# The View from Washington

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With the introduction of the "new" Part 145 Advisory Circular comes the burden of rewriting the repair station's manuals but it also comes with opportunities. As I travel to each of the AEA-sponsored FAA training seminars on Part 145 and Field Approvals, I have had the opportunity to discuss these opportunities with a solid cross-section of the membership. Not everyone chooses to take advantage of these opportunities, and not everyone has the same expectations. I thought this month I might review some of the new Part 145 opportunities.

The old adage that "one size doesn't fit all" is certainly appropriate to repair stations as well, "one solution doesn't fit all repair stations either." Industry fought for and won a better definition of "accepted" when it comes to the repair station manuals. Although the current regulations do not require explicit approval of the Inspection Procedures Manual (IPM), many repair stations have included language in their IPM so that they will not implement a revision until the revision has been reviewed and "accepted" by their PMI. This phrase is technically "accepted by" the Administrator. The new Part 145 requires only that the repair station manual and the quality control manuals are "acceptable to" the FAA.

"Accepted by" has essentially the same meaning as approved by, while "acceptable to" means that the manual meets some standard, in this case, the repair station manuals and quality control manuals are "acceptable to" the FAA when they conform to the Federal Aviation Regulations (FARs).

Not everybody is looking forward to this new definition. Many of the small repair stations like the assurance provided by their FAA Principle Maintenance Inspector (PMI) when they review revisions to the repair station's IPM. The new Part 145 does not prohibit the review it just doesn't make it necessary. It is assumed that revisions to the Repair Station Manual (RSM) and Quality Control Manual (QCM) will be implemented at the same time they are submitted to the FAA, however, the repair station actually has multiple options with regards to implementing revisions and the repair station RSM and QCM need to declare which option or combination of options they are choosing to follow.

**Option 1.** Implement the revision immediately when written. This option means that when a revision is written, the repair station will implement the changes and submit a file copy to the FAA. The advantage of this option is that changes to the repair station procedures can be immediate. The disadvantage is that should the revision violate the FARs, then all work that was accomplished under this revised procedure may have to be recalled and the repair station could face sanctions if the FARs were violated. (Note: The PMI review of the proposed revision does not eliminate the risk of violating the regulations, the PMI could be wrong also, in which case the responsibility to follow the regulations still resides with the repair station.)

**Option 2.** Implement the revision only after receiving confirmation of review from the FAA inspector. This option means that when a revision is written, the repair station will not implement the revision until their PMI reviews the proposed revision and confirms that it does conform to the FARs. The advantage of this option is that a "technical expert" on the FARs has reviewed the proposed revision and provided added assurance that it is "acceptable to" the FAA; that is, it conforms to the FARs. The disadvantage of this option is that implementing the revision must be delayed until the repair station's PMI finds the time to review the proposed revision and notifies the repair station of his or her findings.

**Option 3.** Delay implementation of the revision for a fixed time. This option means that the repair station may elect to delay implementation of a revision for a fixed amount of time (as an example: two weeks), to allow a reasonable amount of time for the repair station's PMI to review the revision before it is implemented without providing an unlimited review. The advantage of this option is that the repair station retains the comfort of having revisions reviewed before they are implemented without compromising the ability to implement revisions in a reasonable timeframe. The disadvantage of this option is that the revision may still contain information or procedures that are contrary to the FARs. And if the revision were implemented, the repair station could be violated for operating outside of the FARs.

**Option 4.** Some combination of the above options. The implementation of

manual revisions should be based on what works best for the repair station and there is no restriction to defining how the manual or sections of the manuals will be implemented, as long as the manuals conform to the Federal Aviation Regulations. As an example, a repair station may elect to generally implement revisions only after a review and confirmation from the repair station's PMI, however, the repair station may elect to implement revisions to specific sections of their manual, such as their organizational chart, contractor/vendor list, and capability lists, immediately without review.

The advantage of this option is that those sections of the manual most likely to generate a violation of the regulations can receive a review by a "technical expert" before they are implemented but the sections of the manuals that need to be dynamic in order for the repair station to operate properly can be readily changed and implemented without a delay. The disadvantage of this option is that it requires a higher level of revision management. The repair station personnel must first identify which section of the manual will receive a review before implementing and which section of the manuals will be implemented before outside review. Then the repair station must assure that each manual section and each revision to that section is managed properly.

Regardless of the option the repair station elected to follow, there are some specific changes in the new Part 145 criteria. During the review process, the FAA inspector should never "word-smith" the manuals. The inspector's review of the repair station manual and the quality assurance manual is to ensure that the content of the manual conforms to the FARs. In fact, following submittal of the RSM and QCM to the FAA, the FAA inspectors are to provide in writing to the repair station, any concerns that the inspector might have that the manuals do not conform to the regulation.

The days of submitting a revision to the repair station's manual only to have it returned with yellow notes stuck to it should be over. A recommendation from the PMI that the repair station "y'-aught-a" include this or that in the manual should be over. The days of the endless cycle of submitting a revision, having it returned with yellow notes, making those changes and resubmitting the manual only to have it returned again with a new batch of yellow notes should be over.

The FAA raised the bar for repair stations on the quality control aspect of repair station management and the repair stations can rest assured that the FAA will hold the repair stations accountable to these new provisions. At the same time, it is the repair station's responsibility to hold the FAA accountable to the changes that industry gained in the revision to Part 145. A major area of gain was the management of the required manuals; it is up to the industry to hold the individual FAA inspector's accountable to the proper oversight of these manuals and to eliminate wherever possible the Principle Inspector's Personal Preferences (PIPP) of repair station manual content.

The best way to eliminate PIPPis to know the regulations, to assure your manual conforms to the regulations and to minimize the delegation of repair station quality functions to the repair station's principle inspector. The PMI's responsibility is to oversee the repair station's policies and procedures to ensure that they conform to the FARs. As helpful as the PMIs have been, it is still the repair station's responsibility to know and understand the regulations and to develop policies and procedures that conform to the regulations. While delegating these responsibilities to the PMIs may be an easy way to add assurance (and comfort) that the manuals conform to the regulations, it also allows the FAA PMI to include their PIPP into your manuals. (Note: no two PIPPs are alike, each new principle inspector has their own PIPP, and there are no assurances that PIPP conforms to the FARs.)

Remember, the repair station manual and the quality control manual must be acceptable to the FAA. And acceptable to the FAAis defined as conforming to the FARs. When a principle inspector determines that your manual or a revision to your manual is not acceptable to the FAA they must provide in writing where the manual does not conform to the regulations.

Professionalism means that the FAA will not offer less and that the industry will not accept less. q

# Regulatory Update

### FAA Publishes Inspector Guidance on Part 145

AIRWORTHINESS HANDBOOK BULLETINS (HBAW) 03-04, Introduction to Revised Chapters 161, 162, 163, 164 and 165: Implementation of 14 CFR Part 145 Repair Station Procedures has been published by FAAheadquarters to provide inspector workforce with interim guidance in implementing Part 145 during the transition period before the rule's October 3, 2003 effective date.

Policy Statement on Standardization of Application Regarding Hazardous Misleading Heading Information for Attitude-Heading Reference Systems (AHRS); PS-ACE100-2002-003.

### The Federal Aviation Administration announces the issuance of PS-ACE100-2002-003.

The purpose of this policy statement is to clarify Federal Aviation Administration certification policy on the application of AC 23.1309-1C, Equipment, Systems, and Installations in Part 23 Airplanes, regarding hazardous misleading heading information.

PS-ACE100-2002-003 was issued by the Manager, Small Airplane Directorate on May 30, 2003. A paper copy of PS-ACE100-2002-003 may be obtained by contacting Mr. Erv Dvorak, Standards Office, Small Airplane Directorate, Aircraft Certification Service, Kansas City, Mo. 64106, telephone (816) 329-4123, fax (816) 329-4090. The policy will also be available on the Internet at www.airweb.faa.gov/policy.

### TSO for Electronic Map Display Equipment for Graphical Depiction of Aircraft Position

The FAAannounces the availability of and requests comments on a proposed Technical Standard Order (TSO)-C165, Electronic Map Display Equipment for Graphical Depiction of Aircraft Position. This proposed TSO tells persons seeking a TSO authorization or letter of design approval what minimum performance standards (MPS) their Electronic Map Displays must first meet in order to obtain approval and be identified with the applicable TSO marking.

The FAA has developed a new Technical Standard Order, TSO-C165, Electronic Map Display Equipment for Graphical Depiction of Aircraft Position. This proposed TSO prescribes the MPS for moving map equipment set forth in section 2 of RTCA Document No. (RTCA/DO)-257A, "Minimum Operational Performance Standards for the Depiction of Navigational Information on Electronic Maps," dated June 25, 2003. The standards of this TSO apply to equipment intended to provide graphical depiction of navigation information on electronic moving map displays for use as an aid to other approved means of navigation. For portable devices, this TSO may be used in combination with Advisory Circular (AC) 120-76A, "Guidelines for the Certification, Airworthiness, and Operational Approval of Electronic Flight Bag Computing Devices," to obtain a TSO authorization or letter of design approval for an Electronic Map Display for use on the airport surface.

For further information or to receive a copy of the proposed TSO, contact:

Brad Miller, Federal Aviation Administration (FAA), Aircraft Certification Service, Aircraft Engineering Division, Avionics Systems Branch, AIR-130, 800 Independence Avenue, SW., Washington, DC 20591. Telephone: (202) 385-4628, Fax: (202) 385-4651.

You may also get a copy of the proposed TSO from the internet at: www.faa.gov/certification/aircraft/TSOA.htm.

## Regulatory Update Europe

### European Aviation Safety Agency

Europe regulations keep changing. The newly created European Aviation Safety Agency (EASA) is proposing a series of aircraft certification and maintenance regulations which will replace the existing individual national authority regulations (many of them are standardized JAA requirements) with a European aviation regulation. EASA is planning to implement and put in force the rule for the most common certification and maintenance regulations on the September 28, 2003. In the past several weeks AEA has collected and submitted comments on the proposed regulations on your behalf to EASA. Comments can be viewed at www.aea.net.

European airspace users also have to be aware of newly implemented or extensions to existing requirements.

8.33 kHz frequency requirement will be extended down to above FL 195 in all ECAC states in 2006 which necessitates having most of the commuter aircrafts and turboprop aircrafts not presently equipped to be fitted with new radios by this time.

According to a position paper issued by the Association of European Airlines a major part of their members will not meet the elementary surveillance transponder requirement of some national authorities such as the ones from France, Germany and the UK which is presently set to be complied by 2005. Generally speaking the change from presently used Mode S transponders to the ones meeting elementary surveillance is a pilot selectable flight identification mode which will be transmitted in addition to the aircraft identification. The Association argued that the necessary equipment and the service bulletins to fit this equipment will not available on time. If this is the case, business aviation

compliance will also be shifted. The envisioned time to be compliant according their position paper would be in 2007.

**P-RNAV is approaching European airspace and operators.**

Eurocontrol is going forward and will change the requirements for the necessary equipment to fly so called FMS transition and FMS approach procedures. The equipment installed and the operator must be compliant to the JAA Temporary Guidance Leaflet TGL 10 – P-RNAV in November 2004 for major airports and in April 2005 on smaller airport. This will only effect existing FMS procedures which are in place at the time. Standard SID and STARs are not effected.

# Regulatory Update Australia

The Civil Avaition Safety Agency (CASA) has intorduced an on-line aviation maintenance quiz that every maintenance technician is encouraged to take. The quiz is well put together, thought provoking and quite enjoyable. AEA encouraged its membership to view the maintenance quiz at: www.casa.gov.au/avreg/fsa/quiz/index.htm

CASA has issued a Notice of Proposed Rule Making (NPRM), NPRM 0307OS - Air Transport Operations - Small Aeroplanes, Proposed Part 121B of the CASRs published July 30, 2003, comments close September 30, 2003.

CASR Part 121B will specify the requirements for the operation of small aeroplanes engaged in air transport operations that apply in addition to, or substitution for, the general rules prescribed in Part 91. It will not apply to domestic operations involving cargo only.

This Part sets in place a common level of safety for both Charter and Regular Transport Operators (RPT) operators. The safety level applies irrespective of whether an operation is scheduled or non-scheduled in accord with International Civil Aviation Organisation (ICAO) Annex 6, Part I.

This common level of safety will particularly affect charter operators in areas such as; flight crew training; proficiency checks and experience; over-water operations; take-off and landing performance and load sheets.

The split between Part 121A and 121B is now based on 5,700 kg maximum take-off weight only, rather than dual break points of 5,700 kg and nine passengers as originally proposed.

Subpart M - Airworthiness and maintenance control is covered on a separate page. q

# Frequently Asked Questions

## TOPIC: Repair Station Manuals

**QUESTION:**

**Does the FAA approve the repair station contractor/vendor list?**

**ANSWER:**

No, Part 145 requires the FAA to approve only what maintenance function the repair station may elect to outsource; it does not require the FAA to approve who the repair station chooses to provide the maintenance.

Section 145.217 allows a repair station to contract a maintenance function to an outside source provided the FAA approves the maintenance function.

AC 145-9 defines a maintenance function as a step or series of steps in the process of performing maintenance, preventative maintenance or alterations, which result in approving an article for return to service.

FAA headquarters has defined the applicability of 145.217 to apply to a specific article. That is, the repair station sends a specific article out for maintenance and receives that specific article back. It does not apply to exchanged articles.

For the repair station that elects to outsource a maintenance function, section 145.217 also requires the repair station to maintain a contractor list with the name of each outside facility to whom the repair station contracts maintenance functions, the type of certificate and ratings, if any, held by each facility, and which maintenance functions are contracted to each facility. The contractor list should be available to the FAA and in an acceptable format but it does not need explicit FAA approval.

For an avionics repair station sending a radio out for warranty work, the maintenance function needing FAA approval would be the repair of a radio. On a separate document, not needing FAA approval, the maintenance contractor list would include the name of the OEM facility performing the warranty work and any rating that the OEM facility holds.

*Note: AEA offers these Frequently Asked Questions (FAQs) in order to foster greater understanding of the rules that govern our industry. AEA strives to make them as accurate as possible at the time they are written, but rules change so you should verify any information you receive from an AEA FAQ before you rely on it. AEA DISCLAIMS ANY WARRANTY FOR THE ACCURACY OF THE INFORMATION PROVIDED. This information is NOTmeant to serve as legal advice – if you have particular legal questions, you should contact an attorney.*

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