INTERNATIONAL NEWS AND REGULATORY UPDATES

FROM RIC PERI
VICE PRESIDENT OF GOVERNMENT & INDUSTRY AFFAIRS FOR AEA

The Aircraft Electronics Association's international membership continues to grow. Currently, the AEA represents avionics businesses in more than 35 countries throughout the world. To better serve the needs of the AEA's international membership, the "International News and Regulatory Updates" section of Avionics News *offers a greater focus on international regulatory activity, international industry news and an international "Frequently Asked Questions" column to help promote standardization. If you have comments about this section, send emails to avionicsnews@aea.net.*

UNITED STATES
News & Regulatory Updates

Part 145 – Repair Stations

The Federal Aviation Administration has added Sec. 145.160 to Part 145, which reads as follows:

Sec. 145.160 Employment of former FAA employees.

(a) Except as specified in paragraph (c) of this section, no holder of a repair station certificate may knowingly employ or make a contractual arrangement which permits an individual to act as an agent or representative of the certificate holder in any matter before the Federal Aviation Administration if the individual, in the preceding two years:

1. Served as, or was directly responsible for the oversight of, a Flight Standards Service aviation safety inspector; and

2. Had direct responsibility to inspect, or oversee the inspection of, the operations of the certificate holder.

(b) For the purpose of this section, an individual shall be considered to be acting as an agent or representative of a certificate holder in a matter before the agency if the individual makes any written or oral communication on behalf of the certificate holder to the agency (or any of its officers or employees) in connection with a particular matter, whether or not involving a specific party and without regard to whether the individual has participated in, or had responsibility for, the particular matter while serving as a Flight Standards Service aviation safety inspector.

(c) The provisions of this section do not prohibit a holder of a repair station certificate from knowingly employing or making a contractual arrangement which permits an individual to act as an agent or representative of the certificate holder in any matter before the Federal Aviation Administration if the individual was employed by the certificate holder before Oct. 21, 2011.

Part 147 – Aviation Maintenance Technician Schools

The Federal Aviation Administration has added Sec. 147.8 to Part 147 subpart A to read as follows:

Sec. 147.8 Employment of former FAA employees.

(a) Except as specified in paragraph (c) of this section, no holder of an aviation maintenance technician certificate may knowingly employ or make a contractual arrangement which permits an individual to act as an agent or representative of the certificate holder in any matter before the Federal Aviation Administration if the individual, in the preceding two years:

1. Served as, or was directly responsible for the oversight of, a Flight Standards Service aviation safety inspector; and

2. Had direct responsibility to inspect, or oversee the inspection of, the operations of the certificate holder.

(b) For the purpose of this section, an individual shall be considered to be acting as an agent or representative of a certificate holder in a matter before the agency if the individual makes any written or oral communication on behalf of the certificate holder to the agency (or any of its officers or employees) in connection with a particular matter, whether or not involving a specific party and without regard to whether the individual has participated in, or had responsibility for, the particular matter while serving as a Flight Standards Service aviation safety inspector.

(c) The provisions of this section do not prohibit a holder of an aviation maintenance technician school certificate from knowingly employing or making a contractual arrangement which permits an individual to act as an agent or representative of the certificate holder in any matter before the Federal Aviation Administration if the individual was employed by the certificate holder before Oct. 21, 2011.

Underwater Locating Devices (Acoustic) (Self-Powered)

The Federal Aviation Administration has published a notice of the planned revocation of the technical standard order authorizations for TSO-C121 and C121a, underwater locating devices, and request for public comment.

This notice announces the planned revocation of all technical standard order authorizations issued for the production of underwater locating devices (acoustic) (self-powered) manufactured to the TSO-C121 and TSO-C121a specifications. These actions are necessary because the planned issuance of TSO-C121b, underwater locating devices (acoustic) (self-powered), with a minimum performance standard that will increase the minimum operating life of underwater locating devices from 30 days to 90 days.

Comments must be received no later than Nov. 21, 2011.

FREQUENTLY ASKED QUESTIONS
United States

Repair Station Ratings

QUESTION:

Is a radio-rated repair station authorized to remove and reinstall radios in order to perform bench-level maintenance on the units?

ANSWER: Yes. In the Aug. 6, 2001, *Federal Register*, the Federal Aviation Administration withdrew a proposed change to the ratings system and stated that "the final rule retains the rating system found in current § 145.31." Therefore, the language and authority discussed in pre-2001 Appendix A is still valid today.

Appendix A to Part 145

Note: When an asterisk (*) is shown after any job function listed in this appendix it indicates that the applicant need not have the equipment and material on his premises for performing this job function, provided he contracts that particular type work to an outside agency having such equipment and material.

(d) (4) For all classes of radio ratings, the equipment and materials necessary for efficiently performing the following job functions:

- Perform physical inspection of radio systems and components by visual and mechanical methods.
- Perform electrical inspection of radio systems and components by means of appropriate electrical and/or electronic test instruments.
- Check aircraft wiring, antennas, connectors, relays and other associated radio components to detect installation faults.
- Check engine ignition systems and aircraft accessories to determine sources of electrical interference.
- Check aircraft power supplies for adequacy and proper functioning.
- Test radio instruments.*
- Overhaul, test and check dynamotors, inverters and other radio electrical apparatus.*
- Paint and refinish equipment containers.*
- Accomplish appropriate methods of marking calibrations, or other information on radio control panels and other components, as required.*
- Make and reproduce drawings, wiring diagrams and other similar material required to record alterations and/or modifications to radio (photographs may be used in lieu of drawings when they will serve as an equivalent or better means of recording).*
- Fabricate tuning shaft assemblies, brackets, cable assemblies and other similar components used in radios or aircraft radio installations.*
- Align tuned circuits (RF and IF).
- Install and repair aircraft antennas.
- Install complete radio systems in aircraft and prepare weight and balance reports (That phase of radio installation requiring alterations to the aircraft structure must be performed, supervised and inspected by qualified personnel).*
- Measure modulation values, noise and distortion in radios.
- Measure audio and radio frequencies to appropriate tolerances and perform calibration necessary for the proper operation of radios.
- Measure radio component values (inductance, capacitance, resistance, etc.).
- Measure radio frequency transmission line attenuation.
- Determine wave forms and phase-in radios when applicable.

Continued on following page

Continued from page 17

- Determine proper aircraft radio antenna, lead-in and transmission line characteristics and locations for type of radio equipment to which connected.
- Determine operational condition of radio equipment installed in aircraft by using appropriate portable test apparatus.
- Determine proper location for radio antennas on aircraft.
- Test all types of electronic tubes, transistors or similar devices in equipment appropriate to the rating.

Appendix A was not only a listing of the "equipment and materials necessary for efficiently performing the following job functions," but also the basis of defining the authority of a radio rating. For those who argue that it doesn't define the scope of work a radio-rated repair station may perform, note the parenthetical "(That phase of radio installation requiring alterations to the aircraft structure must be performed, supervised and inspected by qualified personnel)." This statement fully supports the requirement for an avionics shop to have either an airframe rating or a contract to a properly rated facility to address the alteration to the aircraft. And, it also supports the listed tasks are all within the normal scope and authority of a radio-rated repair station.

For more information on this topic, Jason Dickstein wrote an excellent article in the April 2008 *Avionics News* available online at www.aea.net/AvionicsNews/ANArchives/LegalEaseApr08.pdf.

CANADA
News & Regulatory Updates

TCCA Issues Advisory for Upcoming TAWS Regulations

Transport Canada Civil Aviation has issued AC 600-003 to advise industry of the upcoming Canadian aviation regulations for equipage of aircraft with a terrain awareness warning system. The regulations will apply to commercial air taxi, commuter and airline operations (subparts 703, 704 and 705 of the CARs) and certain private operators (subpart 604 of the CARs).

TCCA anticipates publication in the *Canada Gazette*, part I by fall 2011. A 75-day comment period will follow, and, following consideration of comments received, the regulatory amendment will be processed in anticipation of approval for publication in the *Canada Gazette*, part II by the end of 2011. The TAWS regulations will be effective immediately upon publication in *Canada Gazette*, part II for airplanes manufactured on or after the date the regulations are promulgated. This also applies to newly manufactured aircraft that enter Canada on a lease-back arrangement. Affected airplanes manufactured before the TAWS regulations are promulgated will be required to be in compliance within two years after the date the regulations are promulgated. Additionally, those airplanes required to have TAWS will have to be in compliance with the TAWS enhanced altitude accuracy requirements five years after the date the regulations are promulgated.

TAWS will be required for airplanes conducting the following types of operations:

- CAR 604 – Private turbine-powered airplanes configured with six or more seats, excluding pilot seats.
  - Class B TAWS minimum, Class A TAWS acceptable.
- CAR 703 – Airplanes configured with six or more seats, excluding pilot seats.
  - Class B TAWS minimum, Class A TAWS acceptable.
- CAR 704 – Airplanes configured with six to nine passenger seats excluding pilot seats.
  - Class B TAWS minimum, Class A TAWS acceptable.
- CAR 704 – Airplanes configured with 10 or more passenger seats, excluding pilot seats.
  - Class A TAWS required, with display.
- CAR 705 – All airplanes.
  - Class A TAWS required, with display.

For all operations except CAR 705, there will be a provision for relief from TAWS for day VFR operations. Equipage of airplanes with a ground proximity warning system will no longer be acceptable two years after promulgation of the TAWS regulations.

AC 600-003 may be viewed at:
www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-acs-600-600-003-1347.htm.

Transport Canada Issues New Advisory Circular for Electronic Flight Bags

Transport Canada Civil Aviation has issued AC 700-002 to provide guidance for installation and operation of electronic flight bags that is specific to TCCA certification and operational procedures.

Previously, TCCA had based the Canadian approval of EFBs on Federal Aviation Administration AC 120-76A, which was given as a primary reference in two TCCA documents. These two documents were CBAAC No. 0231, which addressed operations considerations, and Transport Canada Aircraft Certification PL 500-017, which addressed certification considerations. The FAA AC 120-76A was not directly applicable in Canada, as the specified approval processes are particular to the FAA organization and much of the approval task is assigned to the FAA aircraft evaluation group. TCCA does not have a group that is functionally equivalent to the FAA AEG, and it is not equipped to perform these approval processes. Furthermore, some of the processes described in FAA AC 120-76A have been superseded by Opspec/Mspec A061 contained in FAA Order 8900.1.

Additionally, there was a need to combine the two TCCA documents to meet new TCCA document protocols. Therefore, it was decided that, rather than continuing to reference FAA AC 120-76A with its known applicability issues, it would be preferable to produce a new TCCA AC based as closely as possible on the text of FAA AC 120-76A, but clarifying some aspects of the certification and operational approval processes. Thus, there would be a single document that would apply to Canadian regulations. Included in the AC are appendices for installation evaluation checklists and operational evaluation checklists.

Installers of EFBs are advised to review AC 700-002 for specific TCCA requirements for approval of Class 2 and 3 EFB installations.

AC 700-002 may be viewed at:
www.tc.gc.ca/eng/civilaviation/opssvs/managementservices-referencecentre-acs-700-700-020-1348.htm#1.0.

EUROPE
News & Regulatory Updates

EASA

Design organization approval holders look forward to the next DOA implementation workshop planned for Nov. 29-30, 2011. In this workshop, authority staff involved in DO tasks and industry representatives will be briefed on updates on EASA DO section internal working procedures and several other subjects of significance in a DO environment. For registration, see the EASA event website.

Another interesting event is being planned for the fifth time. It is the EASA Rotorcraft Symposium on Dec. 7-8, 2011, in Cologne. This symposium has become a forum for the worldwide rotorcraft community where topics of common interest in the rotary wing world are presented and discussed. The topics for presentation span from operational experience, special mission operation and technical issues, such as certification and maintenance topics.

If you are interested, consult the EASA event website for registration.

In EASA's effort to systematically review and transpose existing FAA TSO standards into EASA ETSOs, a new NPA 2011-02 has been issued containing a proposal of transposed TSOs into technically similar ETSOs. Among them were the following ETSOs:

- C126a – 406 MHz ELT.
- C154c – UAT and ADS-B Equipment.
- C157 – FIS-B Data Link Systems and Equipment.
- C158 – HF Datalink (HFDL) Equipment.
- C159a – Next Generation Satellite Systems Iridium Phone.
- C161a – Ground Based Augmentation System Positioning and Navigation.
- C162a – Ground Based Augmentation System VHF Data Broadcast Equipment.
- C170 – HF Transceiver Equipment for frequency of 1.5 to 30 MHz.
- C179 – Rechargeable Lithium Cells and Lithium Batteries.
- C194 – Heli TAWS.
- C195 – Avionics supporting ADS-B.
- C196 – Supplemental Navigation Sensors for GPS using Aircraft-Based Augmentation.
- 2C197 Information Collecting and Monitoring Systems (cockpit audio/video).

Any of our members holding an EASA 145 approved maintenance organization may be interested in the outcome of NPA 2010-08 documented in the comment response document 2010-08. The proposal offered by EASA specifically addresses the lack of control and standard in qualification of contracted personnel (versus employed) involved in any maintenance or management tasks and/or quality audits. The proposal identifies specific needs to initially asses for competence of any personnel and the control of the competence on a continuous basis. The guidance material, which is part of the CRD, further includes a specific competence assessment procedure applicable to both contracted and employed personnel. The proposed change to Part 145 further includes a template for recording experience and training of individuals assessed.

Continued on page 84

Continued from page 19

FREQUENTLY ASKED QUESTIONS
Europe

FAA TSO to EASA ETSO Validation

The following information was recently found on the European Aviation Safety Agency frequently asked questions website in regards to TSO – ETSO validations.

QUESTION:

How do U.S. manufacturers apply for an ETSO approval?

ANSWER:

The technical standard order approval holder must make the application via the Federal Aviation Administration Aircraft Certification Office that issued the original TSO approval. The ACO must provide a concurrence letter endorsing the compliance with the requested ETSO standard and forward it to EASA. The required technical documents, as well as the application form, are the same as for EASA member state manufacturers.

QUESTION:

How do EASA member state organizations apply for a validation of ETSO approval in a third country?

ANSWER:

An ETSO authorization can be validated in a third country provided there is a bilateral agreement or working arrangement in place. Applications should be made through form 41. Based on the bilateral agreement, EASA will carry out the technical investigation on behalf of the foreign authority. EASA will provide you with a quote on how many hours would be needed to perform this technical investigation.

Please note that some foreign authorities have special policies regarding validation. For instance, the FAA gives lowest priority to validation requests unless the applicant provides an evidence of import or need to the U.S. market.

Note: The AEA offers "Frequently Asked Questions" to foster greater understanding of the aviation regulations and the rules governing the industry. The AEA strives to ensure FAQs are as accurate as possible at the time of publication; however, rules change. Therefore information received from an AEA FAQ should be verified before being relied upon. This information is not meant to serve as legal advice. If you have particular legal questions, they should be directed to an attorney. The AEA disclaims any warranty for the accuracy of the information provided.

AUSTRALIA
News & Regulatory Updates

CASA Proposes Update

CASA has proposed to update CAAP 42ZC-1 approved pilot maintenance for Class B aircraft. The current guidance within the CAAP has, in some cases, been incorrectly interpreted. The objective of the project is to amend the CAAP to reduce the possibility of misinterpretation and align the content with the regulatory requirements. This project was approved on Sept. 2, 2011.

CASA has published discussion paper 1102AS - revised plan for aircraft communication, navigation and surveillance equipage in this decade for public comment.

CASA published DP 1006AS "proposed strategy and regulatory plan in support of the Australian government's aviation white paper" as the first step in response to the government's national aviation policy white paper published in December 2009. DP 1006AS outlined the modern technologies supporting future ATM and proposed a phased implementation of aircraft equipage upgrades for CNS.

CASA received 35 formal responses to DP 1006AS; 18 from key industry organizations, four from airlines and 13 from individuals. In its review of those responses, CASA observed there was strong support for most of the proposals from the airline and commercial sectors of the industry, but not from the visual flight rules general aviation, sport aviation and recreational aviation sectors.

The main area of concern from the VFR GA, sport aviation and recreational aviation sectors was with the proposals for all aircraft to be equipped with a mode S transponder having automatic dependent surveillance (ADS-B Out) capability in all classes of airspace up to 2020. Those proposals have now been further examined and revised as outlined in this second DP.

Forward your response to CASA by Oct. 31, 2011. ❑