The View from Washington

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Convention Regulatory Round-up, or, "What You Missed Out On in Dallas"

The 2005 AEA Convention and Trade show has now wrapped up with an overwhelming participation from FAA personnel as well as those from Transport Canada. The regulatory sessions were well attended, the training sessions were standing room only, and the trade show floor was wall to wall people. If you missed this year's convention, you missed a lot.

First, a special thanks to Don Hawkins of J3 Aviation. While my work schedule precluded my participation, Don scheduled two "off-campus" motorcycle rides through the Texas countryside that was very much appreciated by those who are connoisseurs of two-wheel transportation. Well done and thanks!

The convention schedule is always fast-paced and this year was no exception. The regulatory sessions started with the Fast-Trak session which covered the regulatory elements of Flight Manual Supplements (FMS) and Instructions for Continued Airworthiness (ICA). Yes, there is real guidance out there on FMS and ICAs!

The first Rise and Shine Regulatory Session was an overview of recent regulatory issues from the FAA's current budget concerns, to FAA Orders and Policies on Avionics installations, to the FCC's recent position on GPS repeaters. The session gave a short overview of a number of Part 145 proposals including the Repair Station Training requirements (14 CFR Section 145.163). The effective date has now been extended until April 6, 2006. AFS-300 has promised the new AC to be out by June 2005. The upcoming Notice of Proposed Rulemaking on Repair Station Ratings and a second proposal addressing Repair Station Quality Assurance programs are both expected in late summer.

The FAA's budget was a topic of discussion in each of the regulatory sessions. The Aircraft Certification Service has publicly communicated the budget situation with their customers, and done a superb job of keeping the public informed. Although they should have communicated with the various Trade Associations of the General Aviation Coalition so that we could have been better informed before they started responding to STC applications with their 90-day delay letters.

The FAA's Flight Standards Service, in contrast to the Aircraft Certification Service, has been reasonably silent on the issue, relying instead on PowerPoint presentations given at industry meetings and internal conference calls. Although we are disappointed with the Flight Standards Service approach to communications, the Agency's budget woes and personnel shortages are real.

According to Linda Goodrich, FAA's Region IV vice president of the Professional Airways Systems Specialists (PASS), the Flight Standards Service has over 100 inspectors who have been recalled to military service in support of the war in Iraq. In addition, there is a hiring freeze in place for the Flight Standards Service, and the Agency recently offered an early retirement to some individuals, all intended to reduce the Flight Standards Service staffing levels to better align with their budget. What does this mean to industry? As personnel retire, or active personnel are out on sick leave, away at training, or simply on a well-earned vacation, available resources at the local FSDO may be strained from time to time. AEA encourages its members to work directly with the office manager to minimize the effect of the FAA's financial troubles on their businesses.

The second Rise and Shine Session brought a 3-hour regulatory session with two sets of panelists. The first panel focused on FAA policy and procedures. The second panel focused on technology.

Nancy Lane, the acting assistant manager of the Small Airplane Directorate, gave an overview of the process the Aircraft Certification Service is using to manage certification projects. In her presentation, Nancy clarified that the 90-day delay letters are actually letters informing the applicant that their project will be placed in a que based on a number of criterion (safety being the highest) but that the ACO will begin working on the project "within" 90 days.

In follow-up questions to Nancy, she clarified that the sequencing process were only for projects that are expected to take more than 40 FAA staff hours and that those requiring less than 40

staff hours are managed the same way as before. She also clarified that the Aircraft Certification Service management plan should have no effect on requests for assistance from the FSDOs for field approvals or for the review and approval of Flight Manual Supplements.

Linda Goodrich gave a very good presentation of how to work with the inspectors and what the public (their customers) should expect from the ASI's from their Union's perspective. AEA raised the issue of retaliation or perceived retaliation from a few ASIs towards their customers. Linda made it very clear that PASS does not condone retaliation at any level and asked to work with the Association to address these cases. AEA looks forward to highlighting some of the retaliation reports we have received with Linda and PASS to see if they are truly committed to eliminating this completely unacceptable behavior.

Mike Colin, the supervisory principal avionics inspector for the Southwest Airlines Certificate Management Office (SWA CMO), stood in at the last minute for the Southwest Regional Flight Standards Office and gave a very light-hearted welcome to the audience. Mike's background as the avionics manager for the FAA's Southwest Region gave him the background to give an overview of working with the region. Mike also set the tone for a true Texas welcome to every session that followed. Howdy Partners!

Following a much needed break, the second panel gave us a view of the future. Wes Ryan, avionics safety engineer with the Programs & Procedures Branch at the Small Airplane Directorate, gave an overview of the projects the Directorate is working on to streamline, simplify and improve the installation criteria for future avionics systems. Wes began his presentation with a grim reminder that GA averages about one fatal accident a day, which totaled together, equates to

one major air disaster a year! And this is just not acceptable. Of those accidents, two main categories still persist; Controlled Flight Into Terrain and, loss of control in IFR—situational awareness. The Small Airplane Directorate is still working to reduce the accident rate.

The presentation highlighted that the public perception is changing. The old adage that the "FAA won't like it" is slowly changing as they actively embrace new technology. It has been widely understood that the FAA's culture which, historically has been resistant to change, conflicts with industry's modernization efforts. The management of the Small Airplane Directorate has recognized that streamlining approaches to product certification such as the use of AML STCs, where appropriate, brings great rewards to both the Agency and industry. This "new" philosophy shows a clear advantage in that it allows for greater freedom to make rapid, cost-effective changes within the GA industry along with promoting the development and installation of safety-enhancing technology in the cockpit of GA aircraft.

Steve VanTrees, manager of the Avionic Systems Branch of the Aircraft Certification Service at FAA headquaters, gave a well received presentation looking forward to what technology is out on the radar screen for our customers to demand over the coming years. With a systematic focus on Communication, Navigation, Surveillance (CNS), and Human Factors associated with display technology, this presentation covered many of the topics that the shops deal with on a daily basis including RNP/RNAV Programs, GPS AC 20-138A and FAA policies. Steve's presentations are always well received and an insightful look at those technologies that the FAA is looking at in the future, this year was no exception.

Bill Fromme from the FAA's Safe Flight 21 Program gave us an update on

their ADS-B Service Delivery initiative. The presentation began by reviewing the basics of ADS-B. It is Automatic, in that no pilot input is required and no interrogation by external system is required. Dependent, such that the position is dependent on own ship's navigation, typically from Global Positioning System (GPS). Surveillance, the system provides aircraft call sign, position, type, heading, altitude, velocity vector, plus other information. And Broadcast, that is the data is transmitted to all ground and airborne receivers, nominally once per second.

Bill also reviewed the history of ADS-B beginning with the Alaska Capstone project in the mid-1990s, resulting in a 40 percent accident reduction, followed in the late-1990s with Federal Express and UPS performing operational evaluations of the systems and UPS equipping over 100 freighters. Embry Riddle Aeronautical University's use of ADS-B and the East Coast deployment of the systems began in early 2000. And today, all new Boeing and Airbus aircraft are now ADS-B equipped.

The final day brought around another Rise and Shine Regulatory Session where we focused on the upcoming repair station training program. This session dissected the draft Advisory Circular for repair station training and looked at the impact of this draft criterion on the repair stations. The session focused on interpretation of the guidance material, the best methods and a timeline of compliance and the overall impact to business.

Mike Adamson, AEA's director of training, reviewed the tools the Association offers to keep its shops on the leading edge of repair station training with an eye towards the upcoming training requirements.

AEA will be offering a full review and implementation strategy for the repair station training program for all AEA members at the 2005 Regional meetings.

Regulatory Update

United States

Advisory Circular (AC) 23-17B, Systems and Equipment Guide for Certification of Part 23 Airplanes and Airships

On May 6, 2005 the Federal Aviation Administration, published a Notice of Issuance of Advisory Circular in the Federal Register.

This Advisory Circular (AC) sets forth an acceptable means, but not the only means, of showing compliance with Title 14 Code of Federal Regulations (14 CFR), part 23, for the certification of systems and equipment in normal, utility, acrobatic, and commuter category airplanes and airships. The policy in this AC is considered applicable for airship projects; however, the certifying office should only use specific applicability and requirements if they are determined to be reasonable, applicable and relevant to the airship project. This AC applies to Subpart D from Sec. 23.671 and Subpart F. This AC both consolidates existing policy documents, and certain ACs that cover specific paragraphs of the regulations, into a single document and adds new guidance. This revision has added preamble material, in italics, under the applicable rule and amendment level. Material in this AC is neither mandatory nor regulatory in nature and does not constitute a regulation.

A copy of AC 23-17B may be available at http://www.airweb.faa.gov/AC.

Classification of Pilot/ Passenger Seats

The FAA has published Flight Standards Information Bulletin for Airworthiness (FSAW) 05-04 titled: Classification of Pilot/Passenger Seats Within a Seating Configuration

The bulletin describes the criteria aviation safety inspectors (ASI) should use to determine the number of passenger seats in a seating configuration of an aircraft.

Federal Aviation Administration (FAA) ASIs and industry sources have reported the potential for different and conflicting determinations of the number of passenger seats in an aircraft seating configuration. The phrase, "configured with X or more passenger seats, excluding any pilot seat," appears in Title 14 of the Code of Federal Regulations (14 CFR). The applicability of sections such as 14 CFR part 91, section 91.223 and part 135, section 135.154, both titled Terrain Awareness and Warning System, depends on seat count. This bulletin provides the criteria to establish the number of pilot and passenger seats for determining applicability within 14 CFR.

The FSAW states that a pilot seat may be occupied or has the potential to be occupied by a person other than a pilot, however a pilot seat remains a pilot seat and is not counted as a passenger seat, even if it is occupied by or has the potential to be occupied by a passenger.

Clarification of Approval/ Acceptance

The FAA issued Flight Standards Handbook Bulletin for Airworthiness (HBAW) 05-02 titled: Clarification of Approval/Acceptance Procedures in FAA Order 8300.10, Volume 1, Chapter 3; and Volume 2, Chapters 161, 163, and 164 on May 4, 2005.

The bulletin advises aviation safety inspectors (ASI) of the interpretation and application of approval and acceptance procedures as defined in FAA Order 8300.10, Airworthiness Inspector's Handbook, volume 2, chapters 161, 163, and 164; and Volume 1, Chapter 3, The General Process for Approval or Acceptance.

The 14 CFR part 145 rule uses the terminology "acceptable to" the FAA, for the submittal of certain documents to the FAA. The HBAW restates that a document submitted to the FAA is deemed "acceptable to" the FAA, and the repair station can employ the document content, unless otherwise notified by the FAA of the document's "unacceptability." When the document is deemed "unacceptable," the submitter must be notified with an explanation of the deficiencies.

[Editor's note: The explanation should always be in writing to ensure that the submitter fully understands the reason that the document is unacceptable]

Europe

EASA: FEES AND CHARGES REGULATION

The European Aviation Safety Agency (EASA) has published their long awaited fees and charges schedule which will become effective for its certification activities beginning June 1, 2005.

The fees are detailed in the 'Fees and Charges' Regulation (EC No 488/2005) which was adopted by the European Commission in the week of March 21, 2005 and published in the EU Official Journal on March 30, 2005. The Agency's charging system has been designed to be clear and transparent, taking into account the views of industry and other interested parties. It will be reviewed, and, if necessary, revised annually.

The Fee and Charges apply to all EASA activities. EASA fees and charges can be viewed on EASA's website at: http://www.easa.eu.int/home/regul_fees_charges_en.html

A few cost examples for certain approval and organization types can be seen below:

Supplement Type Certificates: (In Euros)

CS-25/CS-29/CS-23 commuter Level 2 (avionics changes):
€ 2720 plus € 99/hour of work.
CS-23 between 2000 and 5670 kg

MTOW:
€ 1360 plus € 99/hour.
CS-22/Balloons/Airships/CS-23
below 2000kg:
€ 680 or less
CS-27: € 340 plus € 99/hour.

Annual fee for holders of ETSOs:
Value of equipment above € 20.000
Design of EU Member state: € 1000
Design of third country state: € 333

Value of equipment between € 2000 and € 20000:
Design of EU Member state: € 500
Design of third country state: € 167

Value of equipment below € 2000:
Design of EU Member state: € 250
Design of third country state: € 100

For subsequent ETSOs within the same category a reduction of the annual fee is applied.

Design Organization – Subpart J
The Application fee is dependent on value of activities (sample for company of 5 or [10] engineers involved in the design):

€ 2400/[€12000] plus € 99/hour if more then one Level 1 or more then three Level 2 comments.

The Surveillance fee is the same as the application fee except it is payable every three years in the form of three equal annual installments.

Production Organization – Subpart G
The Application fee is dependent on value of activities (sample for company of 5 or [10] engineers involved in the design):

€ 3000/[€ 6000] plus € 99/hour if more then one Level 1 or more then three Level 2 comments.

The Surveillance fee is the same as the application fee except it is payable every two years in the form of two equal annual installments.

Maintenance Organization – Part 145
The Application fee is dependent on value of activities (sample for company of 5 or [15] engineers involved in the design):

€ 3000/[€15000] plus € 99/hour if more then one Level 1 or more then three Level 2 comments.

The Surveillance fee is the same as the application fee except it is payable every two years in the form of two equal annual installments.

Fees for acceptance of approvals equivalent to Part 145:
New approvals: € 1500
Renewal fee (every two years): € 1200
Changes to the organization are included in the related surveillance fees if they don't exceed a level where further investigation is found necessary.

The definition for the "value of activities," "value of equipment," and "value of financial turnover" necessary to find the correct coefficient of the base fixed fee can be found in the explanatory note of the annex to the regulation.

NPAs:
EASA is planning to issue an NPA containing rules and guidance intended to set the standards for mitigating the risks of aging electrical cables by appropriate design and maintenance measures. The draft NPA should be ready for consultation by the second half of 2005.

EASA is working on the harmonization of flight test crew qualifications also applicable for the flight tests performed to complete an STC. The issue of the NPA is planned within 2005.

RTCA:
DO-286A Minimum Aviation System Performance Standards (MASPS) for Traffic Information Service—Broadcast (TIS-B).

This update adds requirements to better conform to the ASA MASPS (DO-289), and adds the Rebroadcast Service to enable interoperability among users equipped with different ADS-B data links. The document, initially issued in April 2003, continues to support the TIS-B Fundamental Service.

DO-258A Interoperability Requirements for ATS Applications Using ARINC 622 Data Communications.

This update aligns the scope of interoperability for the FANS 1/A technology with the Continental SPR Standard (DO-290) to include interoperability for interface with HF Data Link (HFDL). The document, initially issued in September 2000, defines interoperability requirements for communication services and Air Traffic Services (ATS) applications and allocates these requirements to stakeholders. It covers: the ATS Facilities Notification (ATN) application, the Automatic Dependent Surveillance (ADS) application, the Controller Pilot Data Link Communication (CPDLC) application and the ARINC data communication.

DO-246C GNSS Based Precision Approach Local Area Augmentation System (LAAS)—Signal-in-Space Interface Control Document (ICD)

This update includes changes to harmonize the document with the LAAS MASPS—DO-245A. The three primary areas of change are:

Definition of additional data for supporting Cat. II/III precision approach operations [Additional data blocks 3 and 4 for Message Type 2].

Definition of LAAS uplinked Terminal Area Paths (TAP) data for supporting additional Terminal Area Procedures [Provisions for TAP data to be included in Message Type 4].

All references to pseudolites/Ground Based Ranging Sources have been

removed.

CERTIFICATION

In the "certification" section of the EASA website a list of all EU and non-EU products transferred to EASA has been incorporated.

The contained information is important to justify the STC application for a type not registered in the EU.

Unfortunately the list does not contain the information which authority can be contacted to request a copy of the European type certificate. In case of troubles contact EASA or the applicable lead authority for the type.

In the "certification" section another set of interesting information for organizations planning to apply or who are in the process of showing compliance to the approval requirements for Production, Design or Maintenance Organizations were issued.

The documents are EASA internal working procedures explaining how EASA carries out its certification tasks internally. They also include some helpful information about acceptable ways to show compliance to the requirements.

EASA's website is: http://www.easa.eu.int ❑

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Frequently Asked Questions

The following information is from the European Aviation Safety Agency web page.

TOPIC: EASA.

QUESTION: What is, or who is, EASA?

ANSWER: EASA is the acronym for the European Aviation Safety Agency.

The European Aviation Safety Agency is an agency of the European Union which has been given specific regulatory and executive tasks in the field of aviation safety and environmental protection. The Agency, therefore, constitutes a key part of the European Union's strategy to establish and maintain a high uniform level of civil aviation safety and environmental protection in Europe.

The EASA was established by Council Regulation (EC) No 1592/2002 of the European Parliament and of the Council of 15 July 2002 (OJ L 240, 7.9.2002).

The Agency's mission is threefold:

First, it shall provide technical expertise to the European Commission in the preparation of EU legislation on civil aviation safety and environmental compatibility, as well as in the negotiation and conclusion of international agreements.

Second, the Agency has been given the power to carry out certain executive tasks related to aviation safety, such as the certification of aeronautical products and organizations involved in design, production and maintenance. These certification activities help to ensure compliance with airworthiness and environmental protection standards. EASA certifies products relating to all aspects of civil aviation altogether, including general and business aviation. It is important to note that its remit does not cover aviation security (prevention of illegal actions against civil aviation such as hijacking), which falls under the Community law applied by the Member States.

Third, the Agency assists the Commission in developing and maintaining EU rules and standards on aviation safety and monitors their efficient application across the EU.

It is expected that their competencies will progressively be expanded to cover the regulation of air operations, the licensing of flight crew and the oversight of third country aircraft flying in the territory of Member States. In the longer term the Agency's scope is also expected to extend to airport operation and air traffic management.