



INTERNATIONAL NEWS AND REGULATORY UPDATES

FR O M R I C P E R I
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 e-mails to avionicsnews@aea.net.

AEA Continues Efforts in Europe, Canada, and South Pacific

As many of you know, the AEA has been working hard on safety management systems issues in the United States and Canada. We already have talked with CASA regarding SMS, and Europe has yet to introduce anything SMS-related.

In Europe, however, our final preparatory meeting for the industry's proposal for a general aviation avionics rating took place. The challenge we face is, the European Aviation Safety Agency's standard is based on the recommendations of the Joint Aviation Authorities, which recognized a focus on air-carrier operations. Prior to EASA, the local civil aviation authority established most of the general aviation standards.

EASA has recognized the value of general aviation and the need for more appropriate standards. Originally chartered to look at a B-4 license similar to the B-3 license for performing maintenance on very light aircraft, we thoroughly reviewed the concept and decided there was no value in a lesser standard but rather a progressive ap-

proach to the same standard. To this end, we proposed optional B-2.1 licensing, which essentially follows the same logic as the B-1.2 and B-1.4 license for general aviation piston aircraft maintenance.

Like the B-1.2 license, this isn't a "lesser" standard but rather a progressive approach to standard B-2 licensing. It allows an engineer to progress through general aviation with progressive training and authority while completing the requirements for a full B-2. This proposal was submitted to the Engineering and Maintenance Subcommittee of EASA's Safety Standards Consultative Committee last month.

The proposed concept of the B-2.1 is simple and straightforward. It holds the same basic aircraft size limitations as a B-1.2 and B-1.4 — non-complex piston-powered aircraft and helicopters.

A B-2.1 applicant would complete the entire standard B-2 training syllabus except Module 13. The proposal allows for Module 13 to be completed progressively in sub-modules 13.1 through

13.10. Once a sub-module is completed, the applicant could apply for a limited B-2.1 license with authority for the systems covered by the completed sub-module training — again, limited to piston aircraft and helicopters.

This proposal is important for a number of reasons. First, it is strictly optional. If an individual chooses this option, it is available but it is not a mandatory step. The value of this option would vary depending on the state's education program and the depth of general aviation. In some countries, this would provide a long-desired option; in other countries, it wouldn't be used at all.

Second, it is not a lesser standard but rather a progressive approach to the long established standard of B-2. It is important for the standards not to be lessened.

There isn't a differentiation between the avionics technology in piston aircraft compared to turbine aircraft, although there is a distinct difference in the aircraft system designs. The career path should allow for simple transi-

tion from piston-aircraft avionics to turbine-aircraft avionics.

Third, this is a pro general aviation and pro employment proposal. We need to promote aviation maintenance careers worldwide. Aviation maintenance competes with new and novel technical careers that offer the same excitement aviation provided 20 years ago. This proposal would allow an optional career path through general aviation, which encourages small business employment at least for the first step in an aviation maintenance career.

Finally, it fits in line with the proven approach of the B-1.1/B-1.2 philosophy. It was important for the general aviation avionics licensing to fit nicely within the existing licensing philosophy. The distinction between the B-1.1 and B-1.2 made for a nice distinction for the B-2 and B-2.1.

Originally, we considered replicating the B-1.1/B-1.2 structure by introducing a B-2.1/B-2.2 structure. After significant discussion, we opted to reject this for economic and logistics reasons. There are thousands of current B-2 engineers. We did not want to cause a complete reissuance of the existing licenses. Therefore, we opted to recommend a B-2 and a B-2.1 structure.

This is only a proposal. While it is an industry-wide proposal, your AEA Government and Industry Affairs European Working Group has taken an active role in developing this proposal.

I would like to thank the AEA European Working Group for the time and travel commitment it took to bring this proposal to fruition on behalf of the AEA worldwide membership as a whole.

UNITED STATES News & Regulatory Updates

Proposed AC Provides Guidance for Installation of Aircraft Cabin Systems

The Federal Aviation Administration announced the availability of and request for public comments regarding its proposed new Advisory Circular AC 20-XY, "Certification Guidance for Installation of Non-Essential, Non-Required Aircraft Cabin Systems & Equipment."

This advisory circular provides primary certification guidance on how to meet the airworthiness requirements for the installation of non-essential, non-required aircraft cabin systems and equipment.

The proposed AC 20-XY incorporates the guidance in RTCA Document RTCA/DO-313, "Certification Guidance for Installation of Non-Essential, Non-Required Aircraft Cabin Systems & Equipment," dated Oct. 2, 2008. This AC will cancel AC 25-10, "Guidance for Installation of Miscellaneous, Non-Required Electrical Equipment," dated March 6, 1987.

An electronic copy of the AC can be found at www.faa.gov/aircraft/draft_docs.

FAA Amending Certification Procedure for Aeronautical Products

The FAA is amending its certification procedures and identification requirements for aeronautical products and articles.

The amendments update and standardize those requirements for production approval holders; revise export

airworthiness approval requirements to facilitate global manufacturing; move all part marking requirements from Part 21 to Part 45; and amend the identification requirements for products and articles.

While the majority of the new rules apply to parts manufacturing, there is at least one new section with a direct impact on avionics:

- Section 21.9, "Replacement and Modification Articles:"

First, if a person knows, or should know, that a replacement or modification article is reasonably likely to be installed on a type-certificated product, the person may not produce that article unless it is—

- 1) Produced under a type certificate.
- 2) Produced under an FAA production approval.
- 3) A standard part (such as a nut or bolt) manufactured in compliance with a government or established industry specification.
- 4) A commercial part as defined in Section 21.1 of this part.
- 5) Produced by an owner or operator for maintaining or altering that owner or operator's product.
- 6) Fabricated by an appropriately rated certificate holder with a quality system and consumed in the repair or alteration of a product or article in accordance with Part 43 of this chapter.

In addition, with the exception of military surplus parts, no person may sell or represent an article as suitable for installation on a type-certificated aircraft.

This rule is effective April 14, 2010.

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New AC Consolidates Existing Policy Documents

FAA Advisory Circular AC 23-17C, "Systems and Equipment Guide for Certification of Part 23 Airplanes and Airships," sets forth an acceptable means of showing compliance with 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 advisory circular 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 rel-

evant to the airship project. This AC applies to Subpart D from Section 23.671 and Subpart F. It consolidates existing policy documents and certain ACs covering specific paragraphs of the regulations into a single document and adds new guidance.

The draft AC can be viewed at www.faa.gov/aircraft/draft_docs/media/Draft_AC-23-17C.doc.

FREQUENTLY ASKED QUESTIONS

United States

Small Airplanes

The following information is from the Federal Aviation Administration website.

QUESTION:

What is a "small airplane?"

ANSWER:

14 CFR Part 1 defines a small aircraft as an aircraft of 12,500 pounds or less maximum certificated takeoff weight. Therefore, any airplane, including transport category airplanes, could be considered small by the Part 1 definition if the airplane is less than 12,500 pounds.

However, as commonly used and in

the most basic sense, fixed-wing aircraft that are not transport category airplanes (fixed-wing airplanes type-certificated to standards other than 14 CFR Part 25 are considered "small airplanes." Therefore, small airplanes are fixed-wing airplanes that are not transport category. Depending on the category, small airplanes can reach up to 19,000 pounds maximum takeoff weight.

QUESTION:

Is a small airplane the same as a general aviation aircraft?

ANSWER:

No. General aviation aircraft are aircraft operated under 14 CFR Part 91 rules, which could be any category of airplane, including transport category and rotorcraft. Additionally, airplanes operated under 14 CFR Part 121 and Part 135, which can include small air-

planes, are not considered general aviation aircraft when operated under these rules.

QUESTION:

My airplane meets 14 CFR Part 25 (transport category) requirements. Does this mean I can assume it will meet small airplane (14 CFR Part 23) requirements?

ANSWER:

No. The applicable design standards are based on the type and operation of the airplane. For example, differences in items such as pilot training and minimum aircrew requirements might result in more stringent flight-deck design standards in 14 CFR Part 23 airplanes than Part 25. Therefore, the applicable requirements for each category of airplane should be reviewed separately.

CANADA News & Regulatory Updates

Transport Canada Issues New Regulations for Type-Certification Processes

Transport Canada Civil Aviation has promulgated a new Canadian Aviation Regulation, CAR 521, to replace the existing CAR/STD 511

and 513 for the type-certification processes applicable to aircraft, appliances, parts and modifications. CAR 521 reflects the structure of both the FAA FAR 21 and EASA IR 21.

CAR 521 is structured with 11 divisions, including general; type certificates; Canadian technical standard orders; changes to a type design; supplemental type certificates; repair design approvals; part

design approvals; responsibilities of a design approval document holder; service difficulty reporting; airworthiness directives; and foreign aeronautical products.

CAR 521 was published as a CARs amendment, and the in-force date was Dec. 1, 2009.

The current LSTC process will be discontinued, which is of specific interest to the AEA's Canadian members. Applications for STCs on

single aircraft or a specific fleet of aircraft will be defined as “Serial Number” STCs. The current reduced application fee for an LSTC will be applicable to such “Serial Number” STCs.

The CAN-TSO process will mirror the FAA TSO process and adopts by reference FAA TSOs as CAN-TSO standards. A Canadian manufacturer will apply for a CAN-TSO design approval in the first instance; subsequently, if a FAA TSO is required, TCCA will make application to the FAA on behalf of the applicant using the data submitted for the CAN-TSO.

Under the terms of the soon-to-be-released bilateral airwor-

thiness treaty between EASA and Canada, EASA will be recognized a CAN-TSO without need for issuance of a corresponding E-TSO, where the CAN-TSO standard is equivalent to the E-TSO standard.

The document numbering will match the CAR division number. For example, the STC material will be in SI/AC 521-005. These documents will replace all existing 511 and 513 guidance and advisory material.

All AEA member AMOs in Canada involved in any of the type-certification processes identified within the 11 divisions should review CAR 521 to deter-

mine where their company processes will need to be changed to meet the requirements of CAR 521. TCCA’s regional engineers will be trained on the provisions of CAR 521 prior to the end of this year, and they should be able to assist companies in implementing the necessary process revisions.

CAR 521 is available on the TCCA CARs website at www.tc.gc.ca/civilaviation/regserv/affairs/cars/part5/menu.htm.

CAR 521 ACs and SIs are available through TCCA’s online reference center at www.tc.gc.ca/civilaviation/management/services/referencecentre/menu.htm.

EUROPE

News & Regulatory Updates

EASA Hosting Rotorcraft Symposium, Workshop for Part 21 DOA Implementation

EASA is hosting its third EASA Rotorcraft Symposium from Dec. 2-3, in Cologne, Germany. The meeting serves the rotorcraft community with a forum to discuss initiatives and problems in the field of rotorcraft safety.

Topics will range from rotorcraft design and continuing airworthiness to regulatory and operational matters.

Another interesting meeting occurs from Dec. 3-4, in Cologne. EASA’s workshop for Part 21 design organization approval implementation will give participants an update regarding EASA Design Organization Section’s internal working procedures.

The workshop will focus specifically on several subjects of

significance to be shared equally between authorities staff and industry representatives working in a design organization environment. Industry representatives will be given the opportunity to express their views and provide feedbacks during the workshop.

EASA Issues Two Comment Response Documents Regarding AML Holders

In October, EASA issued two comment response documents (CRD) to an important topic related to the Part 66/147 workshop, which has been widely debated in the past months.

CRD 2007-07 discusses the outcome of the debates regarding privileges of B-1 and/or B-2 aircraft maintenance license holders. The CRD indicates some changes to the privileges of B-2 AML holders in regards to maintenance on electrical and avionics parts within powerplant mechanical systems as well as air conditioning, fire warning, ice and rain protection, and

fuel indication systems. These new privileges will not need to be re-examined for the current privilege holders. It will, however, amend the syllabus for the initial training requirement (basic course) from the current 2,000 hours to 2,400 hours in the future. Further changes discussed in the CRD are amendments to the privileges of Category A and B-1 AML holders.

Next to the “heavy” aircraft AML, the newly issued CRD 2008-03 provides guidance for the training, experience and privileges of the so-called Category L (light) and B-3 license. The category L license is applicable European light aircraft (ELA1) models. However, the final definition of ELA1 is still under review — in particular, the limits related to the maximum takeoff mass.

Both CRDs can be downloaded from the EASA website at www.easa.europa.eu.

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Transition from Joint Aviation Authorities to EASA Continues

The past few months have been busy ones for the civil aviation authorities of non-European Union

member states during the transition of the Joint Aviation Authorities.

Since JAA was dissolved in June, the JAA and ECAC member states that are not part of the European Union had to come to a working arrangement with EASA, which took over JAA's tasks. Each individual

authority had to individually sign an agreement with EASA on the application of EASA and still existing JAA rules. This regulatory framework will be amended if needed.

To date, 14 members of JAA have signed a working arrangement with EASA.

FREQUENTLY ASKED QUESTIONS

International

EASA Travel

The following information is from a January 2009 FAQ posted on the EASA website.

QUESTION:

Are travel costs included in the EASA certification fees?

ANSWER:

For certification tasks, the fee corresponding to the task carried

out as set out in the Annex to Reg. 593/2007, as last amended, does not include the travel costs outside the European Union member states.

The average travel costs inside the territories of the member states will be deducted from the total travel costs due with the application of the "e" component.

The "e" component covers the average time spent by experts in the means of transport inside the territories of the member states multiplied by the hourly fee set out in Part II of the Annex to Reg. 593/2007, as last amended, as well as the average ticket costs inside the member

states. The "e" component will be clearly indicated in the travel costs breakdowns provided by the agency.

The total amount of the "e" component will be revised once a year on June 1.

For services based on an hourly rate, the cost of travel within or outside the EU member states will be invoiced in addition to the charges due. The "e" component is not applicable to services the agency provides.

All travel costs will be divided proportionally among applicants if an expert visited more than one company in the course of one single trip.

SOUTH PACIFIC News & Regulatory Updates

Advisory Circular Provides Guidance for Australian Supplemental Type Certificates

The second issue of Advisory Circular AC 21-15(1) on supplemental type certificates was released in September 2009. It replaces AC 21-15(0), dated August 1999.

This advisory circular provides information and guidance to persons applying for the issuance of

Australian supplemental type certificates. The AC has been amended to update certain information for further clarification. The AC should be read in conjunction with Civil Aviation Safety Regulation CASR Part 21, Subpart E, "Supplemental Type Certificates;" CASR Part 21, Subpart B (CASR 21.012 and 21.019) and Subpart D (CASR 21.091 through 21.098); and Regulation 35 of the Civil Aviation Regulations. □

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.