# INTERNATIONAL NEWS AND REGULATORY UPDATES

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*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.*

## Europe Fine-Tunes Carriage of 8.33 kHz Above FL195

Brussels, Belgium — As of March 13, 2008, Bulgaria, Cyprus, Malta, Portugal and Spain have enforced the mandatory carriage of 8.33 kHz radio equipment above flight level 195 (FL195). All European states now are aligned with European Commission Regulation 1265/2007 on this issue.

"The fact that these five countries have enforced carriage of 8.33 kHz equipment above FL195 brings to an end a fragmented situation where most (European) states enforced above FL195, whilst a few enforced above FL245," said Peter Alty, 8.33 kHz program manager for Eurocontrol.

"The next important goal is to ensure that ground equipment is converted to 8.33 kHz by the deadline of July 2008," he said.

The work that has been done on converting to 8.33 kHz above FL195 will alleviate the current difficulties in obtaining VHF assignments in the aeronautical communications VHF band from 118-137 MHz. European states are concerned, however, that in line with increasing air traffic levels, the demand for VHF assignments will continue to grow.

In response, Eurocontrol is working on 8.33 kHz below FL195, as well as other measures to address frequency congestion.

"A revised business case, implementation plan and safety assessment for 8.33 kHz below FL195 are being prepared," said Guido Kerkhofs, director of ATM programs for Eurocontrol. "This work will take into account the results of a study into frequency usage, which is a key issue for general aviation and military stakeholders."

Eurocontrol plans a stakeholder consultation in June on implementing 8.33 kHz below FL195, with a view to seeking conclusions from key consultative bodies by the end of the year.

## UNITED STATES
### News & Regulatory Updates

### FAA Rewrites AC for Inspection, Alteration on Civil Aircraft

On March 3, 2008, the Federal Aviation Administration issued a complete rewrite to Advisory Circular 43-13.2b, which contains methods, techniques and practices acceptable to the Administrator for the inspection and alteration on non-pressurized areas of civil aircraft of 12,500 lbs. gross weight or less.

This AC 43-13.2b is for use by mechanics, repair stations and other certificated entities.

This data generally pertains to minor alterations; however, the alteration data may be used as approved data for major alterations when the AC chapter, page and paragraph are listed in Block 8 of FAA Form 337 when the user has determined it is:

- appropriate to the product being altered;
- directly applicable to the alteration being made; and
- is not contrary to manufacturer's data.

### Fabricated Parts Must Have Equivalent Safety Level

On Feb. 29, 2008, the FAA issued Change 1 to Advisory Circular 43-1, which ensures parts fabricated during maintenance and alteration have an

equivalent level of safety as those parts produced under the original design holder's production certificate.

AC 43-18 provides one means of complying with the requirements of Title 14 of the Code of Federal Regulations (14 CFR) Part 21 and Part 43 for the design and fabrication of parts by persons performing maintenance and alterations using methods, techniques and practices acceptable to the Administrator.

As required by regulation, such parts fabrication and its implementation must be accomplished "in such a manner...that the condition of the aircraft, airframe, aircraft engine, propeller or appliance worked on will be at least equal to its original or properly altered condition."

## Cockpit Voice Recorder, Digital Flight Data Recorder Regulations Amended

The FAA has amended the cockpit voice recorder (CVR) and digital flight data recorder (DFDR) regulations.

This final rule:

• increases the duration of certain CVR recordings;

• increases the data recording rate for certain DFDR parameters;

• requires physical separation of the DFDR and CVR;

• improves the reliability of the power supplies to both the CVR and DFDR; and

• requires certain data-link communications received on an aircraft be recorded if data-link communications equipment is installed.

While the entire new regulation should be reviewed, I've included the changes to 14 CFR Part 91 and Part 135 for review:

• § 91.609, Flight Data Recorders and Cockpit Voice Recorders:

(c)(2) All airplanes subject to paragraph (c)(1) of this section that are manufactured before April 7, 2010, by April 7, 2012, must meet the requirements of § 23.1459(a)(7) or § 25.1459(a)(8) of this chapter, as applicable.

(c)(3) All airplanes and rotorcraft subject to paragraph (c)(1) of this section that are manufactured on or after April 7, 2010, must meet the flight data recorder requirements of § 23.1459, § 25.1459, § 27.1459, or § 29.1459 of this chapter, as applicable, and retain at least the last 25 hours of recorded information using a recorder that meets the standards of TSO–C124a, or later revision.

(h) All airplanes required by this section to have a cockpit voice recorder and a flight data recorder, that are manufactured before April 7, 2010, must by April 7, 2012, have a cockpit voice recorder that also:

(1) Meets the requirements of § 23.1457(d)(6) or § 25.1457(d)(6) of this chapter, as applicable; and

(2) If transport category, meets the requirements of § 25.1457(a)(3), (a)(4), and (a)(5) of this chapter.

(i) All airplanes or rotorcraft required by this section to have a cockpit voice recorder and flight data recorder that are manufactured on or after April 7, 2010, must have a cockpit voice recorder installed that also:

(1) Meets the requirements of § 23.1457, § 25.1457, § 27.1457, or § 29.1457 of this chapter, as applicable; and

(2) Retains at least the last 2 hours of recorded information using a recorder that meets the standards of TSO–C123a, or later revision.

(j) All airplanes or rotorcraft required by this section to have a cockpit voice recorder and a flight data recorder, that install data-link communication equipment on or after April 7, 2010, must record all data-link messages as required by the certification rule applicable to the aircraft.

• § 135.152, Flight Data Recorders:

(l) By April 7, 2012, all aircraft manufactured before April 7, 2010, must also meet the requirements in § 23.1459(a)(7), § 25.1459(a)(8), § 27.1459(e), or § 29.1459(e) of this chapter, as applicable.

(m) All aircraft manufactured on or after April 7, 2010, must have a flight data recorder installed that also:

(1) Meets the requirements of § 23.1459(a)(3), (a)(6), and (a)(7), § 25.1459(a)(3), (a)(7), and (a)(8), § 27.1459(a)(3), (a)(6), and (e), or § 29.1459(a)(3), (a)(6), and (e) of this chapter, as applicable; and

(2) Retains the 25 hours of recorded information required in paragraph (d) of this section using a recorder that meets the standards of TSO–C124a, or later revision.

These amendments became effective April 7, 2008.

## FREQUENTLY ASKED QUESTIONS

### United States

**TOPIC:**

### Calibration of Test Equipment

*The following information is from the Federal Aviation Regulations.*

**QUESTION:**

Can I follow the manufacturer's recommendations for the calibration of test equipment?

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**ANSWER:**

Yes. The Federal Aviation Administration lists acceptable means of compliance for test equipment in Advisory Circular 43-13.1B, Chapter 12, "Aircraft Avionics Systems," Section 5, "Avionics Test Equipment."

Paragraph 12-72 read as following:

Test Equipment Calibration. Test equipment, such as meters, torque wrenches, static and transponder test equipment, should be checked at least once a year.

a) National Institute of Standards and Technology traceability can be verified by reviewing test equipment calibration records for references to National Institute of Standards and Technology test report numbers. These numbers certify traceability of the equipment used in calibration.

b) If the repair station uses a standard for performing calibration, that calibration standard cannot be used to perform maintenance.

c) The calibration intervals for test equipment will vary with the type of equipment, environment and use. The accepted industry practice for calibration intervals is usually one year.

Considerations for acceptance of the intervals include the following:

(1) Manufacturer's recommendation for the type of equipment.

(2) Repair facility's past calibration history, as applicable.

d) If the manufacturer's manual does not describe a test procedure, the repair station must coordinate with the manufacturer to develop the necessary procedures, prior to any use of the equipment.

# CANADA
## News & Regulatory Updates

### Transport Canada Issues Guidance for EMC Testing

TCCA recently issued AC 500-002, "Electromagnetic Testing of Electrical and Electronic Equipment," which provides guidance with respect to compliance with electromagnetic compatibility (EMC) requirements to obtain approval for the installation of electrical and electronic equipment on any category of aircraft.

AC 500-002 outlines a method for performing an EMC test. It also denotes the minimum information that should be included in the applicant's EMC test plan and the associated EMC test report, and it identifies where ground tests may be used in lieu of conducting a flight test.

Guidance is provided for the applicant to substantiate EMC based on evidence other than the results of an aircraft level EMC test. For example, it may be possible for an applicant to apply similarity as the means of compliance for the replacement of electrical or electronic equipment by a unit of identical form, fit and function — in other words, if there are no physical changes to the installed location, mounting and wiring provisions, or changes in the function and operation of that equipment.

This AC has been published as a result of the Aircraft Electronics Association's input during Transport Canada/industry avionics workshops concerning disparity between Transport Canada regional approaches to EMC testing of avionics installations.

Although the AC does not address all of the concerns raised by the AEA, it will help to standardize Transport Canada's approach to avionics installation approvals, and all AEA members in Canada should follow the guidance contained in the AC to ensure Transport Canada acceptance of EMC test plans and results.

The AC can be viewed on Transport Canada's website at www.tc.gc.ca/CivilAviation/IMSdoc/Recent.htm.

# FREQUENTLY ASKED QUESTIONS
## Canada

**TOPIC:**
### CAR 625.86 and CAR 571 Maintenance and TCCA-Approved RVSM Maintenance Programs

**QUESTION:**

What maintenance instructions should be followed when performing 625.86 and 571 checks on turbine-powered aircraft that may have TCCA authorization to operate in RVSM airspace?

**ANSWER:**

For Canadian private operators and air operators, Transport Canada Civil Aviation (TCCA) provides the authorization for operations within RVSM airspace by an operations specification to their private operator certificate or air operator certificate.

The first maintenance instruction to review when performing any maintenance to a pitot-static system, or a transponder system, that could have an affect on the RVSM-critical systems is the TCCA-approved RVSM maintenance program identified in the operator's approved maintenance schedule.

This includes air-data computers, altimeters, transponders or any other component that is a part of the RVSM certification for a particular aircraft.

While the individual aircraft manufacturer's maintenance and inspection program may be applicable to

the maintenance being performed, any time maintenance or an inspection is being performed on the pitot-static systems, transponder systems, flight director systems or the skin around the aircraft nose section, the RVSM maintenance program should be reviewed first to ensure there are no additional or unique maintenance or inspection requirements before issuing an approval for return-to-service.

*Note: The AEA offers "Frequently Asked Questions" to foster greater understanding of 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.*

# EUROPE
## News & Regulatory Updates

### Significant Changes Made to EASA Regulation

The European Commission published Regulation (EC) No. 216/2008 of the European Parliament and of the Council of Feb. 20, 2008, on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealed the original EASA establishing regulations, Council Directive 91/670/EEC, Regulation (EC) No. 1592/2002 and Directive 2004/36/EC.

There are significant changes in this new regulation. The regulation now applies to aeronautical products, parts and appliances, as well as for first-time operators and pilots.

The new regulation specifies, "it would not be appropriate to subject all aircraft to common rules, in particular aircraft that are of simple design or operate mainly on a local basis and those that are home-built or particularly rare or only exist in a small number; such aircraft should therefore remain under the regulatory control of the Member States, without any obligation under this regulation on other Member States to recognize such national arrangements."

The regulation also creates the ability for the European Commission, apparently through EASA, to fine certificate holders for issues of non-compliance.

According to the regulation, "to help achieve the safety objectives of this regulation, the Community should be given powers to impose financial penalties on holders of certificates and approvals issued by the Agency. In accordance with the Community legal order, such financial penalties should be imposed by the Commission acting upon a recommendation of the Agency. It should be underlined that through the introduction of financial penalties, the Commission will be able to give a more nuanced, flexible and graduated response to a breach of the rules, compared to the withdrawal of a certificate."

# SOUTH PACIFIC
## News & Regulatory Updates

### CASA Order Allows Pilot in Command to Update GNSS

CASA recently issued Civil Aviation Order 100.5, Amendment Order (No. 1) 2008, giving the pilot in command of an aircraft the ability to update navigation system databases of global navigation satellite systems (GNSS) of an aircraft on the following conditions:

- He or she must be authorized under Civil Aviation Order 40.2.1 to use the GNSS.
- He or she must satisfy all the requirements in Paragraph 13.7 of Civil Aviation Order 40.2.1.
- He or she may only use the data supplied by an organization that is approved in writing by CASA to provide the data.
- He or she may update the navigation database system only if it involves the insertion into the navigation data unit of a data card, a disk or similar device.
- He or she must ensure that the update of the navigation database system is carried out in accordance with the instructions of the manufacturer of the GNSS navigation equipment.

A copy of Civil Aviation Order 100.5, Amendment Order (No. 1) 2008 can be viewed at http://casa.gov.au/rules/changes/2008/CAO100_5.pdf. ❑