

# INTERNATIONAL NEWS 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 e-mails to avionicsnews@aea.net.

# **Significant Advances Made on the International Front in 2008**

The end of 2008 brought some significant advances on the international front, including the report from the European Aviation Safety Agency's Safety Standards Consultative Committee/Engineering & Maintenance meeting in November. published in 2009. This will be a major initiative for the Association throughout 2009 and 2010. Canada plans to implement SMS beginning this spring, followed by Australia, Europe and the United States.

EASA is proposing a complete re-

#### BECAUSE OF THE GRANDFATHERING OF AIRCRAFT TYPE RATINGS, THE AIRCRAFT ELECTRONICS ASSOCIATION ENCOURAGES ITS MEMBERSHIP TO EXTEND THE ISSUANCE OF NEW LICENSES FOR AS LONG AS POSSIBLE.

Executive Decision 1056/2008, from EASA, extends the implementation of Part M for light general aviation for 12 to 24 months, depending on the application. This also extends the requirement for Part 66 licensing for light aircraft.

You should check with your national authority for its new implementation schedule. Because of the grandfathering of aircraft type ratings, the Aircraft Electronics Association encourages its membership to extend the issuance of new licenses for as long as possible.

EASA also announced the safety management system NPA should be

structuring of EASA regulations — as if the industry needs any more confusion. This new structure is to be proposed by the end of 2009, with full implementation before April 2012.

The proposal will bring the general requirements together, with specific requirements in each regulatory requirement. Essentially, basic requirements will not be repeated in each set of regulations. Specific requirements will be included only in the specific regulations (for example, Part 145 would address only those issues unique to a repair station). As you read this, the Part M AMC should be published. It was due out by the end of December 2008.

The FAA's international field office in Frankfurt, Germany, again approved the AEA's proposal to teach U.S. FAA repair station regulations the day prior to the start of the AEA Europe Meeting in 2009. As was done in 2008, the AEA will teach a full day of U.S. FAA repair station regulations for members holding an FAA foreign repair station certificate.

#### Automatic Dependent Surveillance–Broadcast

ADS-B was a major topic of discussion during the AEA South Pacific Meeting in November, in Palm Cove, Australia.

AirServices Australia had been hoping for an Australian-wide implementation of ADS-B to replace its aging radar infrastructure; unfortunately, the Australian parliament denied the necessary funding for the subsidy for general aviation operators.

This certainly isn't the death of ADS-B. In fact, the use of ADS-B will continue to grow throughout Australia — but on its own merit, rather than with the promotion and subsidy of AirServices.

By 2010, the objective of Europe's Cascade program is to plan and coordinate the implementation of a first set of ADS-B applications, using the position broadcast by aircraft as a basis for surveillance.

#### **Avionics Licensing**

One of the greatest opportunities for the AEA through its membership is the opportunity to help develop a viable approach to avionics engineer qualifications that promote and advance general aviation.

Currently, the AEA is taking the lead simultaneously in Europe and Australia to develop a harmonized approach to avionics engineers licensing, which is reasonable and supports general aviation apprenticeships.

Through the AEA's position with EASA's Safety Standards Consultative Committee, the Association is chairing the first in a series of meetings to address the needs of the general aviation industry throughout Europe. This issue has long been the focus of Jim Herbert, a member of the AEA board of directors. While we are a long way from resolving the issue, in the past couple of months, the AEA has made significant inroads toward a solution.

Through parallel efforts and the support of Peter Flanagan of Pacific Avionics in Australia, the AEA is making the same proposal to CASA's Maintenance Standards Subcommittee of the Standards Consultative Committee. In fact, while the argument of a modular approach to the basic B-2 licensing originated in Europe shortly after EASA developed its initial Part 66 licensing standards, the actual format of the B-4 proposal was developed during the AEA South Pacific Meeting.

The AEA has been advocating for general aviation relief from the oner-

ous airline-centric standards of EASA. EASA has not resolved the general aviation issues. Its approach to general aviation is so juvenile it has been forced to delay the implementation of the general aviation regulations in Europe for another 24 months.

Unfortunately, the Australian authorities have chosen to adopt these same airline-centric standards and are working overtime to amend, adjust and simply change the standards to fit the unique Australian general aviation industry — a challenge that means frustration for the general aviation avionics industry for years to come.

The AEA is not only an international representation organization; it is clearly the international representative for the avionics industry. Thank you all for supporting our international efforts.

# **UNITED STATES** News & Regulatory Updates

#### Moving Forward on NextGen Implementation

On Nov. 18, 2008, President Bush signed Executive Order 13479, which states it is the policy of the United States to establish and maintain a national air transportation system that meets the present and future civil aviation, homeland security, economic, environmental protection and national defense needs of the U.S., including through effective implementation of the Next Generation Air Transportation System, also known as NextGen.

EO 13479 mandates a governmentwide effort to move forward with the Next Generation Air Transportation System, as referred to in Vision 100, Century of Aviation Reauthorization Act (Public Law 108-176). It also states NextGen should be implemented as soon as safely and environmentally practical.

#### FAA Gives Green Light to NextGen Satellite System

In a step that promises to greatly improve the efficiency of air transportation for millions of Americans, Bobby Sturgell, FAA acting administrator, gave the green light to nationwide deployment of the system that allows aircraft to be tracked by satellite rather than radar.

According to the FAA, automatic dependent surveillance–broadcast will reduce the risk of midair collisions and weather-related accidents, provide more efficient routes in adverse weather, and improve situational awareness for pilots.

"The next generation of air travel has arrived," Sturgell said. "ADS-B is the backbone of the future of air traffic control. NextGen is real and...NextGen is now."

Sturgell's commissioning of essential services for ADS-B in Florida clears the way for nationwide deployment of the system by 2013. The installation of 11 ground stations in Florida gives pilots viewing ADS-B cockpit displays the same live traffic seen by controllers.

Pilots also receive free, real-time weather updates from the National Weather Service, as well as critical flight information, such as temporary flight restrictions and special-use airspace.

The commissioning marks a significant milestone in the FAA's aggressive deployment schedule for ADS-B. By 2013, more than 790 ground stations would provide ADS-B services everywhere there is radar coverage today, with further coverage in places currently lacking radar coverage, including the Gulf of Mexico and Alaska.

Work at the sites of the next key milestones for ADS-B services — Juneau, Alaska, Louisville, Ky., the Gulf of Mexico and Philadelphia. Pa. — are scheduled for completion by the end of 2010.

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# FREQUENTLY ASKED QUESTIONS

**United States** 

#### Avionics Requirements for Flights Within Europe

The following information is from the Eurocontrol website at www.eurocontrol.be.

#### **QUESTION:**

What avionics are required for a U.S.-registered (or non-European) aircraft to fly within Eurocontrol airspace?

#### **ANSWER:**

Each non-JAA (Joint Aviation Authorities) operator must be in accordance with its national legislation, which should encompass the Annex 6 standards.

However, any operator getting ready to fly into European airspace really should be ICAO Annex 6-compliant, even though there are certain areas where the U.S. has filed differences.

The advantage for operators to equip to ICAO Annex 6 equipment requirements is that they can use all airspace. If they choose not to comply, they might need to fly under or around certain European-controlled airspaces.

For example, since March 15, 2007, the carriage and operation of 8.33 kHz radio equipment (an ICAO requirement) is mandatory above FL-195 in the ICAO EUR Region.

A full listing of Eurocontrol avionics equipment requirements can be found at www.eurocontrol.int/airspace/public/standard\_page/16\_Avionics.html.

# **CANADA** News & Regulatory Updates

#### AEA Gives Input to Transport Canada on Undocumented Parts

The AEA has expressed concern to Transport Canada Civil Aviation about avionics parts and equipment being classified as "undocumented parts" even when it is possible to identify the part and return it to an airworthy condition using manufacturer's documentation and procedures.

The "undocumented part" classification for avionics parts means an approved maintenance organization must have a procedure in place to meet STD 571, Appendix H, resulting in additional costs for the AMO, which the AEA believes are not necessary to maintain a satisfactory level of safety.

At the AEA Canada Meeting, in September 2008, Transport Canada requested the AEA provide input regarding the "undocumented parts" regulations and policy as stated in the referenced documents.

The AEA has submitted the following position to TCCA:

Parts Criticality: The current requirement to determine a part is "critical" or "non-critical" is not possible to satisfy in many instances for avionics parts, as criticality only can be determined through knowledge of the intended installation of the part. For example, a part could have different criticality depending on whether it is installed in a single- or dual-redundant configuration; on a VFR- or IFR-approved aircraft; or on a FAR 23 or FAR 25 aircraft. Many avionics parts may be used in different aircraft types, roles and configurations. The part "criticality" should not be a consideration for avionics parts in determining the process for re-certification of the part.

Aircraft History: The aircraft history of an avionics part is not relevant provided the part has valid part markings, such as the manufacturer's nameplate. This is sufficient to identify the part and determine the appropriate Instructions for Continued Airworthiness for recertification of the part.

**Recommendations:** The AEA recommends an avionics product or component part should not be considered an "undocumented part" provided:

• the manufacturer's nameplate or identification is affixed or marked on the product, or the product's packaging material and the part is considered authentic following inspection, or

• a component part removed from an identifiable product is listed in the manufacturer's IPC for this product, and

• the AMO can inspect, test, repair and return the product or component part to an airworthy condition using the applicable part manufacturer's ICAs or alternate approved repair procedures or ICAs.

#### Transport Canada Mandates SMS for All AMOs

TCCA has confirmed safety management systems will be mandated for all AMOs approved under CAR 573, effective March 1, 2009.

TCCA's existing four-phase approach for implementation of SMS is planned as followed:

Phase 1 (initial implementation):

• Identification of the accountable executive.

• Identification of the person responsible for SMS.

• Preparation of a gap analysis to identify those items required to be addressed by the AMO to implement an effective and compliant SMS.

Phase 2 (after one year):

• Preparation of the SMS plan, policies and procedures.

• A reactive reporting system shall be in place.

Phase 3 (after two years):

• A proactive hazard identification system shall be in place.

Full Implementation (after third year):

• All SMS training shall be completed.

• The quality assurance system shall be integrated with the SMS.

• An emergency preparedness system shall be in place.

To assist small operators, including AMOs, in SMS implementation, TCCA has issued Advisory Circular 107-002, "Safety Management Systems Development Guide for Small Operators/Organizations."

TCCA has advised the AEA that AMOs should contact their TCCA Regional PMI for details on working with TCCA to implement SMS. TCCA also identified the following regional SMS coordinators:

- Pacific, Rosalie Kamp: KAMPR@tc.gc.ca
- PNR, Kathy Ruck: RUCKK@tc.gc.ca
- Ontario, Hanif Mawji: MAWJIH@tc.gc.ca
- Quebec, Yves Tarrissan: TARISSY@tc.gc.ca
- Atlantic, Kelly Babin: Babinkl@tc.gc.ca

# **EUROPE** News & Regulatory Updates

#### EASA Amends Airworthiness Codes for Rotorcraft

The European Aviation Safety Agency's CS-27, CS-29 and CS-VLR — the airworthiness codes for small, large and very-light rotorcraft — recently were amended. The changes contain mostly updated references to the latest FAA advisory material.

In CS-27 and CS-VLR, the current reference to Advisory Circular 27-1B, Change 1, has been updated to the Change 2 version. In CS-29, the update relates to the latest AC 29-2C, Change 2, version. The amended documents can be found on the EASA website at www.easa.eu.int.

Of interest to organizations performing flight-testing as part of a design change, EASA has issued NPA 2008-20, which addresses proposed amendments to Part M, Part 21 and pilot licensing. The proposed amendment contains the following elements:

• Definition of categories (1 to 4) of

flight-testing — substantially, as in the JAA proposals (dated 2002).

• Definition of the necessary competence and experience for flight-test engineers and for pilots engaged into categories 3 and 4 of flight-testing — based on the JAA proposals. The objectives are equal treatment and safety.

• Requirement for the development of a flight-test operation manual — substantially, as in the JAA proposals. The objective is safety.

#### **RTCA Issues New Documents** Through Efforts with Eurocae

RTCA recently issued the following new documents:

• DO-144A, "Minimum Operational Characteristics-Airborne ATC Transponder Systems." This document presents a consolidation of performance requirements from two sources: RTCA DO-144 and the performance standards referred to in Technical Standard Order C47c. The document includes the technical changes/ advances necessary to ensure proper operation with Mode S and TCAS interrogators. The document is a coordinated effort with Eurocae WG-49.

• DO-181D, "Minimum Operational Performance Standards for Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/Mode S) Airborne Equipment." This document supersedes DO-181C. It provides standards for Mode S airborne equipment (Mode S implies a combined ATCRBS/Mode S capability). Incorporated within these standards are system characteristics helpful to users of the system as well as designers, manufacturers and installers. The document considers an equipment configuration consisting of transponder, control panel, antenna and interconnecting cables. Level 1 through Level 5 transponders are addressed. It reflects the latest amendment to ICAO Annex 10. The document is a coordinated effort with Eurocae WG-49.

• DO-313, "Certification Guidance for Installation of Non-Essential, Non-Required Aircraft Systems and Equipment." This document provides certification guidance on how to meet the airworthiness requirements for the installation of non-essential, non-required aircraft cabin systems and equipment, and in doing so, enable a standardized approach across equipment manufacturers and installers. The information is applicable to installation methodologies of aircraft cabin systems and equipment approved under Parts 23, 25, 27 and 29.

# FREQUENTLY ASKED QUESTIONS International: Europe

## **Design Organizations**

The following information is from the European Aviation Safety Agency's "Frequently Asked Questions."

#### **QUESTION:**

How can I calculate the number of staff for my design organization?

#### **ANSWER:**

The number of staff should be calculated as follows for all sites involved in design and certification activities under the approval.

All staff involved in:

• managing the design organization,

drawing, calculating, testing and simulating,

• producing and verifying compliance documentation,

• performing airworthiness office tasks, and

• system monitoring.

In addition, for design subcontractors, the following staff should be counted:

All staff involved in:

- producing compliance documents,
- verifying compliance documents,
- airworthiness office tasks, and
- system monitoring.

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# **SOUTH PACIFIC** News & Regulatory Updates

#### **Comment Period Closes this Month for Australian NPRM**

The Civil Aviation Safety Authority recently issued a notice of proposed rule making, NPRM 0806SS, "Regulatory Administrative Procedures – Proposed Amendments to Civil Aviation Safety Regulations (CASR) Part 11."

Key proposed changes to Part 11 provide the regulatory administrative requirements for authorizations, exemptions and directions issued by CASA.

The proposed amendments would refine the administrative requirements currently contained in Part 11, other CASR parts and the CARs, then consolidate them in Part 11, including:

• The regulatory services and subsequent compliance requirements governing the issue and granting of authorizations necessary for entry into the aviation system under the CASRs.

• The application and approval of exemptions against the provisions contained in the CASRs.

• The issuance of maintenance, aerodrome or operational directions (not including airworthiness directives).

The proposed amendments to Part 11 are voluminous and largely editorial and machinery in nature. They are detailed in Annex A.

Key amendments address:

• Introducing a new definition of "authorization."

• Part 11 becoming applicable to the CARs as well as the CASRs.

• Empowering CASA to impose a condition on an authorization after it has been issued by CASA.

• Requiring any conditions on an authorization are to be complied with.

• Providing a new generic provision in Subpart 11G, creating a general power for CASA to issue a notice requiring an authorization holder to notify CASA of matters specified in the notice.

•Deleting from CASR 11.260(2)(a) the requirement for the CEO of CASA to personally issue directions under Subpart 11G.

The comments period closes Jan. 30, 2009.

CASA also issued NPRM 0803OS, regarding the implementation of safety management systems and the introduction of human factors training and non-technical skills assessment.

Key proposed changes to this NPRM include:

• A requirement for all RPT operators to have an SMS in place.

• A requirement for all RPT operators to have human factors training and non-technical skills assessment in place.

• A requirement for the operator of an aircraft engaged in international flight to ensure a true and complete hard copy of the following documents be carried onboard an aircraft:

1) The operator's current AOC.

2) Each operations specification issued in conjunction with the AOC relevant to the aircraft.

While the comment period for this NPRM closed Dec. 15, 2008, and the primary focus of this NPRM is regular public transport, ICAO has included maintenance and repair operations in its mandate for SMS and human factors training; therefore, it will not be long before these operations are included in the mandate.

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