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 e-mails to avionicsnews@aea.net.*

AEA Remains Active in International Arena

October is here and the AEA has been quite active in the international arena again this year. The Association just finished the second of three international regional meetings with its AEA Canada Meeting last month in Calgary. The AEA Europe Meeting took place in May, in Colgne, Germany. The third international meeting, AEA South Pacific, takes place Nov. 13-14, in Palm Cove, Australia.

In addition to these annual international meetings, the AEA holds a seat on and is active with rulemaking committees in Europe, Canada and Australia. And, in June, the AEA was invited to join yet another EASA committee, the European General Aviation Safety Team.

In August, I traveled to England, where I met with our members in the U.K. to discuss an alternative strategy the AEA has developed for compliance with EASA B-2 requirements for type-rating training and qualifications.

One topic brought up during this membership meeting was a strong challenge to the logic and applicability of the current EASA B-2 licensing and type ratings in general.

While the AEA listens to its membership and continues to work with EASA to "adjust" the regulations to better fit the needs of general and corporate aviation, the rulemaking process takes between three and five years to move a change to the regulations through the rulemaking process.

THE AEA IS YOUR ACTIVE INTERNATIONAL REPRESENTATIVE IN REGIONS AROUND THE WORLD. AS YOUR REPRESENTATIVE, LET US KNOW WHEN A REGULATION, PROPOSAL OR POLICY IS HAVING A NEGATIVE IMPACT ON YOUR BUSINESS.

Therefore, while the AEA continues to work with the authorities to fix some of these problems, the Association also is working to develop processes to comply with the regulations as they are written today. Interestingly enough, most AEA members and their staff's qualifications are "grandfathered" with only a few "new" engineers who could take advantage of this alternative process.

Fortunately, thanks to AEA member Robin Walsh of Adams Aviation, we were able to recruit a new member with an engineer who is ready for type-rating training and is now qualified for grandfathering.

Following the meeting with our AEA membership, I attended a meeting with the U.K. Civil Aviation Authority, where Guy Lachlan of the British Business and General Aviation Association and I briefed the CAA on our proposal and our intent to start the process shortly. The CAA fully understood the proposal and concurred that while the AEA's type-training process does not utilize Part 147 training courses, it fully meets EASA requirements.

The good news about this AEA type-training process for European members is, because the Civil Aviation Safety Authority has adopted EASA Part 66 regulations, this process should be an acceptable alternative to Part 147 training in Australia as well. I will be briefing this process at the AEA South Pa-

cific Meeting in November, and I hope to fully report on its success at the AEA Europe Meeting in May 2009.

While I was in London, one of our member repair stations took advantage of my being there to arrange a brief meeting with its quality staff about its U.S. Part 145 repair station certificate and issues with the FAA. AEA consultations are one of the seldom-discussed benefits of AEA membership.

Because of AEA's international representation, we frequently work with the regulations of Europe, Canada, Australia and New Zealand, as well as being a recognized authority on U.S. regulations. This year, the AEA offered a optional U.S. regulatory training day prior to the European and Canadian meetings. However, AEA members worldwide have access to ask questions about U.S. regulatory issues or compliance with U.S. regulations for operating U.S. Part 145 foreign repair stations or for maintaining U.S. registered (N-registered) aircraft.

In addition, with the help of the AEA's consultants, Association members have access to regulatory experts in support of aviation regulations in Australia, Europe and Canada. If there is an occasion for which the AEA does not necessarily have regulatory expertise, it often can get access to the regulatory authorities of that country with the help of AEA members.

The first nine months of the year have been very active with the establishment of AEA government affairs working groups in Europe and Canada; the completion of two of the three AEA international meetings; the B-2 licensing proposal in Europe; the complete rewrite of the aviation maintenance regulations in Australia; and the SMS proposal in Canada.

The AEA is your active international representative in regions around the world. As your representative, let us know when a regulation, proposal or policy is having a negative impact on your business. ❑

UNITED STATES
News & Regulatory Updates

New Consensus Standards Available for Light-Sport Aircraft

The Federal Aviation Administration announced the availability of three new consensus standards and a revision to a previously accepted consensus standard relating to the provisions of the Sport Pilot and Light-Sport Aircraft rule, which was issued July 16, 2004, and effective Sept. 1, 2004.

ASTM International Committee F37 on Light-Sport Aircraft developed the new and revised standards with FAA participation.

With this notice, the FAA finds the new and revised standards acceptable for certification of the specified aircraft under the provisions of the Sport Pilot and Light-Sport Aircraft rule.

Avionics shops performing alterations to light-sport aircraft must ensure the alterations conform to the ASTM consensus standard.

While the following previously accepted consensus standard were revised, either the previous revision or the later revision may be used for the initial certification of special light-sport aircraft until Jan. 1, 2009. This overlapping period of time allows aircraft already in the initial certification process to use the previous revision level to complete the process.

After Jan. 1, 2009, manufacturers must use the later revision and must identify the later revision in the Statement of Compliance for initial certification of special light-sport aircraft unless the FAA publishes a specific notification otherwise.

The consensus standard, ASTM Designation F 2245-06, titled "Standard Specification for Design and Performance of a Light-Sport Airplane," may not be used after Jan. 1, 2009

The FAA finds the following new and revised consensus standards acceptable for certification of the specified aircraft under the provisions of the Sport Pilot and Light-Sport Aircraft rule. The consensus standards listed below may be used unless the FAA publishes a specific notification otherwise:

• ASTM Designation F 2245-07a, titled "Standard Specification for Design and Performance of a Light-Sport Airplane."

• ASTM Designation F 2506-07, titled "Standard Specification for Design and Testing of Fixed-Pitch or Ground Adjustable Light-Sport Aircraft Propellers."

• ASTM Designation F 2538-07a, titled "Standard Practice for Design and Manufacture of Reciprocating Compression Ignition Engines for Light-Sport Aircraft."

• ASTM Designation F 2626-07, titled "Standard Terminology for Light-Sport Aircraft."

These consensus standards are copyrighted by ASTM International. Individual reprints of a standard (single or multiple copies, or special compilations and other related technical information) can be obtained by writing to the ASTM at 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pa. 19428-2959, or by calling 610-832-9585. For more information, send e-mails to service@astm.org or visit www.astm.org.

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Hazardous Materials Regulations to Align with International Standards

The Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to amend the Hazardous Materials Regulations to maintain alignment with international standards by incorporating various amendments.

These amendments would include changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport quantity limitations and vessel stowage requirements.

The most significant proposals in this Notice of Proposed Rulemaking address the transportation of batteries and battery-powered devices.

Any manufacturer producing avionics with back-up battery capability should review this proposal to determine the affect on shipping equipment to avionics dealers and customers.

The revisions are necessary to harmonize the Hazardous Materials Regulations with recent changes to the:

• International Maritime Dangerous Goods Code

• International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air

• United Nations Recommendations on the Transport of Dangerous Goods

The proposals include amendments and clarifications addressing the safe transportation of batteries and battery-powered devices.

Consistent with recent changes to the International Civil Aviation Organization's Technical Instructions, PHMSA is proposing to clarify the prohibition against transporting electrical devices, including batteries and battery-powered devices. PHMSA also is proposing to modify and enhance requirements for the packaging and handling of batteries and battery-powered devices — particularly in air commerce — to emphasize the safety precautions necessary to prevent incidents during transportation.

PHMSA developed these proposals in conjunction with the Federal Aviation Administration to enhance the safe transportation of batteries and battery-powered devices.

Currently, batteries and battery-powered devices are subject to a number of requirements in the Hazardous Materials Regulations. Most importantly, the regulations restrict the transportation of electrical devices, including batteries and battery-powered devices, that are likely to create sparks or generate a dangerous amount of heat that could cause fire, smoke or otherwise adversely affect the packaging material or means of conveyance.

These batteries and battery-powered devices are forbidden from transportation unless packaged in a manner that prevents such an occurrence (Section 173.21c).

Additionally, the following types of batteries are subject to packaging and hazard communications requirements:

• Wet (electric storage) batteries (Section 173.159)

• Batteries containing sodium (Section 173.189)

• Lithium cells and batteries (Section 173.185)

• Solid potassium hydroxide batteries (Section 173.213)

• Battery-powered vehicles and equipment (Section 173.220)

These requirements primarily address the hazards posed by the chemicals contained in the batteries as opposed to the stored electrical energy. For instance, wet cell batteries are required to be packaged in a manner to prevent leakage of the corrosive battery fluid in case of an accident.

The electrical hazard of the battery is addressed through general requirements to prevent short-circuiting and the general prohibition on transporting such devices without proper protection and packaging (Section 173.21c).

The Hazardous Materials Regulations, however, currently prescribe no separate or unique classification for identifying materials that present a hazard in transport based on their stored electrical energy. This proposed rule will address the electrical hazards posed by batteries and battery-powered devices by enhancing packaging and hazard communications requirements.

In this Notice of Proposed Rulemaking, PHMSA proposes the following provisions to enhance the safe transportation of batteries and battery-powered devices:

• Require reporting of incidents involving batteries and battery-powered devices (devices include equipment) or vehicles.

• Clarify the requirement for batteries, battery-powered devices and vehicles to be offered for transportation and transported in a manner to prevents short-circuiting, dangerous evolution of heat, damage to terminals and, in the case of transportation by aircraft, unintentional activation.

• Require a certification on the shipping documentation that batteries and battery-powered devices have met the conditions and all requirements for transport as specified in the applicable exception or special provision.

The measures proposed in this rule will harmonize the Hazardous Materials Regulations with international standards applicable to the transportation of batteries and battery-powered devices.

More importantly, these measures will provide data and information to develop an understanding of the root causes of battery incidents in transportation and reduce the associated risks.

Special Awareness Training Needed for Flying in Washington, D.C., Area

It has been seven years since the terrorist attacks on the United States on Sept. 11, 2001, and more than five years since the FAA implemented the Washington, D.C., Air Defense Identification Zone (ADIZ); yet, operators continue to violate this airspace at an alarming rate.

The AEA encourages its member companies to remind operators based in the mid-Atlantic states or those who anticipate flying to the mid-Atlantic states to take the Special Awareness Training offered by the FAA.

The FAA is requiring its Special Awareness Training for any pilot who flies under visual flight rules within a 60 nautical mile radius of the Washington, D.C., VHF omni-directional range/distance measuring equipment. The FAA has developed and provided this training on its website at www.faasafety.gov.

The training focuses primarily on training pilots on the procedures for flying in and around the Washington, D.C., metropolitan ADIZ and the Washington, D.C., metropolitan area flight restricted zone (FRZ).

A new rule will reduce the number of unauthorized flights into the airspace of the Washington, D.C., metropolitan ADIZ and FRZ through education of the pilot community. This final rule is effective beginning Feb. 9, 2009.

In February 2003, the FAA, in consultation with the Department of Homeland Security, the Department of Defense and other federal agencies, issued notices to airmen implementing an outer ADIZ and an inner FRZ around the Washington, D.C., metropolitan area.

At that time, the ADIZ closely resembled the Washington tri-area Class B airspace area. The FRZ, requiring more stringent access procedures than the ADIZ, was established within an approximately 15 nm radius from the Washington, D.C., high-frequency, omni-directional range/distance measuring equipment. The NOTAMs also established radio communications, transponder and flight-plan requirements for pilots to follow.

Some types of operations, such as U.S. military, law enforcement and approved aero-medical flights, are excluded from the requirements.

The ADIZ and the FRZ, along with other security measures, enable law enforcement and security communities to identify pilots and their intentions and to track aircraft operating in the vicinity of the nation's capital.

On Aug. 30, 2007, the airspace restrictions in the Washington, D.C., area were modified by Flight Data Center NOTAMs 07/0206 and 07/0211. While the specifications for the FRZ remain essentially the same — except the western boundary is moved slightly eastward — the radius of the ADIZ has been reduced to a 30 nm radius from the DCA VOR/DME.

This reduces the number of airports affected by the airspace restrictions and makes more navigable airspace available to pilots conducting operations in the area.

In addition, these requirements remain the same:

- Obtain appropriate authorization.
- Establish two-way communications with air traffic control.
- Be equipped with an operating transponder with altitude-reporting capability.
- File a flight plan remain the same.

However, the revised NOTAM also added a "maneuvering area" for Leesburg Airport and imposed an airspeed restriction of 180 knots or less, if capable, within the ADIZ/FRZ. For VFR aircraft operations conducted between 30 and 60 nm of the DCA VOR/DME, aircraft are restricted to an indicated airspeed of 230 knots or less, unless otherwise authorized.

Since the creation of the ADIZ, there have been more than 3,000 incursions into the Washington, D.C., ADIZ. Between Feb. 12, 2003 and April 30, 2008, there were approximately 3,200 observed incursions into the Washington, D.C., ADIZ.

A few of these flights came so close to the Capitol and the White House, they caused mass evacuations of these buildings and other federal office buildings. In other incidents, U.S. Coast Guard helicopters and U.S. Air Force fighter planes have intercepted civilian aircraft.

Although all of the incursions eventually were determined to be non-criminal in nature, each incursion places an unnecessary burden on federal, state and local law enforcement resources.

For instance, when an unauthorized aircraft penetrates restricted airspace, the FAA's air traffic controllers must divert necessary resources to monitor the aircraft's flight, alert security operations and communicate information about the aircraft to appropriate military and law enforcement agencies.

Several branches of the federal government, the military and local law enforcement are forced to respond to the situation and execute a potentially hazardous intercept under circumstances that primarily prove to have not been a threat to national security.

In consideration of the changes, the FAA amends Chapter I of Title 14, Code of Federal Regulations, as follows:

Part 91, "General Operating and Flight Rules"— Add Section 91.161 to read as follows:

- Section 91.161, special aware-

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ness training required for pilots flying under visual flight rules within a 60 nautical mile radius of the Washington, D.C., VOR/DME.

(a) Operations within a 60 nautical mile radius of the Washington, D.C., VOR/DME under visual flight rules (VFR). Except as provided under paragraph (e) of this section, no person may serve as a pilot in command or as second in command of an aircraft while flying within a 60 nautical mile radius of the DCA VOR/DME, under VFR, unless that pilot has completed Special Awareness Training and holds a certificate of training completion.

(b) The Special Awareness Training consists of information to educate pilots about the procedures for flying in the Washington, D.C., area and, more generally, in other types of special-use airspace. This free training is available on the FAA's website. Upon completion of the training, each person will need to print out a copy of the certificate of training completion.

(c) Inspection of certificate of training completion. Each person who holds a certificate for completing the Special Awareness Training must present it for inspection upon request from:

1. an authorized representative of the FAA,
2. an authorized representative of the National Transportation Safety Board,
3. any federal, state or local law enforcement officer, or
4. an authorized representative of the Transportation Security Administration.

(d) Emergency declared. The failure to complete the Special Awareness Training course on flying in and around the Washington, D.C., metropolitan area is not a violation of this section if an emergency is declared by the pilot, as described under Section 91.3(b), or there was a failure of two-way radio communications when operating under IFR as described under Section 91.185.

(e) Exceptions. The requirements of this section do not apply if the flight is being performed in an aircraft of an air ambulance operator certificated to conduct Part 135 operations under this chapter, the U.S. Armed Forces or a law enforcement agency.

FREQUENTLY ASKED QUESTIONS

United States

Suspected Unapproved Parts

The following information is from the Federal Aviation Regulations.

QUESTION:

What is a suspected unapproved part?

ANSWER:

The FAA recently published the latest revision (Revision C) to it "Suspected Unapproved Parts Advisory Circular," AC 21-29 C.

The AC defines a "suspected unapproved part" as a part, component or material suspected of not meeting the requirements of an "approved part" — a part that, for any reason, a person believes is not approved. Reasons could include findings such as different finish, size, color, improper (or lack of) identification, incomplete or altered paperwork, or any other questionable indication.

According to the FAA, an "approved part" used in the wrong application should be addressed as a potential Part 43 violation, not as a suspected unapproved part.

The AC further defines an unapproved part as a part that does not meet the requirements of an "approved part." This term also includes parts that may fall under one or more of the following categories:

- Parts shipped directly to the user by a manufacturer, supplier or distributor where the parts were not produced under the authority of and in accordance with an FAA production approval for the part (such as production overruns where the parts did not pass through an approved quality system). This includes parts shipped to an end-user by a production approval holder's supplier who does not have direct ship authority from the PAH.
- New parts that have passed through a PAH's quality system but do not conform to the approved design/data. Do not report parts damaged because of shipping or warranty issues as a suspected unapproved part.
- Parts intentionally misrepresented, including counterfeit parts.

The definition of an "approved part" includes not only the classic definition of an approved part as defined in Part 21, but also the colloquial term of an acceptable part as defined in FAA AC 20-62D.

Advisory Circular 20-62D defines an acceptable part as standard parts, such as nuts and bolts, conforming to an established industry or U.S. specification; or parts produced by an owner or operator for maintaining or altering their own product and which are shown to conform with FAA-approved data; or parts for which inspections and tests have been accomplished by appropriately certificated persons authorized to determine conformity to FAA-approved design data.

CANADA
News & Regulatory Updates

Transport Canada Issues Guidance for SMS Implementation

Transport Canada Civil Aviation issued Advisory Circular AC 107-002, "Safety Management Systems Development Guide for Small Operators/Organizations." This AC was based on the findings of the Small Operator SMS Pilot Project, which sought to review and create guidance for the implementation of SMS into small aviation operations operating under CAR IV, V and VII.

The AC provides an interpretation of the intent and application of the SMS regulatory requirements for small operators, including small aircraft maintenance organizations (AMOs). The AC does not apply to AMOs with a certificate issued under CAR 573.02 for which the certificate includes ratings for an aircraft of a type that, if operated in commercial air transport, would be subject to CAR 705.

The guidance contains practical examples of how the components making up an SMS plan might be implemented. However, Transport Canada cautions that it is not meant to be a list of prescriptive requirements or a template to be used verbatim. Each organization is required to develop policies and procedures in accordance with its unique operating requirements.

The AC includes appendices such as:

- Developing a Safety Management Plan
- Occurrence Report and Hazard Identification Form
- Incident/Accident Analysis
- Corrective/Preventive Action Plan
- Risk Management Worksheet
- Risk Matrix

The appendix for development of a safety management plan identifies alternate approaches for both a minimal complexity, one-person operation and a moderate complexity, five- to 10-person operation.

Organizations falling between minimal and moderate complexity must review any additional SMS element expectations.

AC107-002 is available in html and PDF format from Transport Canada at www.tc.gc.ca/CivilAviation/IMSDoc/ACs/100/107-002.htm.

EUROPE
News & Regulatory Updates

Eurocontrol Facilitating 8.33 kHz Below FL195 Process

The Eurocontrol agency is facilitating the decision-making process for 8.33 kHz below FL195. To support this activity, the agency has prepared the following documents:

- NA Draft Business Case (Version 0.5), which provides information on future VHF demand, the frequency planning benefits and costs for different 8.33 below FL195 scenarios, and initial planning information.
- NA Draft Safety Assessment, which describes the accumulated results from a number of safety sessions on 8.33 kHz below FL195.

The reference documents can be found on the Eurocontrol website at www.eurocontrol.be.

FREQUENTLY ASKED QUESTIONS
Europe

Maintenance Experience

The following information is from the European Aviation Safety Agency.

QUESTION:

What is the proper interpretation of "maintenance experience" as required by Part 145.A.35c? Does the experience need to be on each aircraft type?

ANSWER:

According to an EASA Frequently Asked Question, dated Aug. 7, 2005:

Recent experience requirements are placed both in Part 66 and Part 145, as they are the responsibility of both the license holder and the maintenance organization issuing certification privileges.

Both cases require six months of relevant experience. This is more developed in Part 145, and it is clearly not the intent to require such experience on each aircraft type.

What is understood as six-months experience is detailed in Part 145.A.35c. In the case of isolated certifying staff, the requirement is more stringent as there is only the Part 66.A.20b(2) because there is no system to accompany the certifying staff.

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.

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SOUTH PACIFIC
News & Regulatory Updates

Australia Cuts Red Tape to Help Boost Engineer Numbers

The red tape hindering experienced overseas and defense force aircraft engineers from joining the Australian aviation industry has been cut by the Civil Aviation Safety Authority.

Procedures for qualified aircraft engineers to have their skills and training recognized have been streamlined to help boost the numbers of licensed aircraft maintenance engineers in Australia. This follows a careful review of maintenance personnel licensing requirements by CASA.

The changes reduce the time and costs for overseas or Australian defense-trained aircraft engineers to gain approval to work in the Australian civil aviation maintenance industry. New procedures mean the qualifications of overseas and defense engineers can be assessed before they come to Australia or leave the defense force.

CASA examined the maintenance personnel licensing system and regulatory oversight of six nations and agreed to recognize engineers from these nations without a requirement for further technical examinations. The recognized nations are Canada, Germany, France, Italy, the Netherlands and the United Kingdom.

It is expected the list of recognized nations will grow as CASA continues to make more assessments.

CASA also reviewed the training and qualifications provided by the defense forces and determined what levels provide the equivalent technical competency to the civilian requirements. This means defense engineers who have reached these levels do not need to complete further exams.

Bruce Byron, chief executive officer of CASA, said the changes are good news for Australia's aviation industry.

"The aviation industry always needs engineers and, by cutting red tape, we can open up new opportunities for new people with the right qualifications to fill critical vacancies," Byron said.

"Overseas aircraft engineers will find Australia a more attractive place to work, and defense force engineers can move more smoothly into civilian occupations." ❑