INTERNATIONAL NEWS AND REGULATORY UPDATES

FROM RIC PERI
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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.*

Have You Explored the AEA's Website Lately?

As I sit here writing this column, I am reminded of the times when, over a cup of coffee (OK, this is the AEA after all, most likely an adult beverage), I am talking with members and listening to various suggestions about how we might make membership an even stronger investment. Invariably, the recommendation almost always includes a good or service already available on the AEA website at www.aea.net.

So, this month, I thought I would take the opportunity to review some of the hidden gems that might not be apparent without some searching.

The first stop on this tour is the "Professional Development" tab on the AEA website. There are four areas in this section: "Training," "Scholarships," "Careers" and "Educational Foundation."

On the "Training" web page, you will find "Online Training," "Regulatory & Technical Presentations," "Tech Time Library" and "Repair Station Training Program Tools."

Under "Online Training," there are links to the annual *Avionics News* Technical Training Exam, which the FAA has recognized as approved training. This exam easily fits into any training program.

Aspen Avionics also has two required training programs hosted on the AEA website. In addition, there are seven Web-based regulatory training programs, including a Human Factors training program, and this list is growing every year.

The "Regulatory & Technical Presentations" tab contains the presentation from the AEA's annual international convention, as well as the various AEA regional meetings hosted throughout the world. If you didn't

take notes, this is a great way to view presentations from the meetings.

Want to know about autopilot basics, serial buses or performing an electrical load analysis? Under the tab "Tech Time Library," there are 10 years' worth of "Tech Time" articles from *Avionics News*. There isn't a better source of information for someone trying to brush up on electronics basics.

For those who also hold a U.S. FAA Foreign Part 145 repair station certificate, you will find the tab "Repair Station Training Program Tools" quite useful. The FAA's requirements for employee training has some uniquely FAA training topics, such as U.S. FAA regulatory training. The tools listed under this tab will guide you through the elements you need to be FAA-compliant.

The second stop on this tour is the "Government Affairs" tab. While this section is fairly lean, we are working to build a more robust area for our international members. Still, there are some valuable nuggets to be mined from this area.

Under the "Europe" tab, there is a complete list of EASA Part 147 training organizations providing maintenance type training. At the recent AEA Europe Meeting, we surveyed the membership to determine which B-2 type training courses were needed. The majority of them already are offered somewhere in Europe. The AEA has the only pan-European database of Part 147 schools, something EASA doesn't maintain.

Do you have a European customer and need to know what the European avionics requirements are? You will find this information under the "Eu-rope" tab. Are you having problems communicating with Transport Canada? There is a TC-sanctioned Issues Resolution Process document listed under the "Canada" tab, as well as the necessary documents to understanding the Canadian mandate for safety management systems.

Finally, there are links to every major aviation authority, including the Federal Aviation Administration, the European Aviation Safety Agency, Transport Canada, the Civil Aviation Safety Authority of Australia, and the Civil Aviation Authority of New Zealand.

Here is your challenge: Take a few minutes to review the information available on the AEA website, then let us know of one item (just one item) you would like to see added to the AEA's web pages. Send your ideas to Aaron Ward, AEA's website administrator, at aaronw@aea.net.

Remember, this is your website, your tools — together we can stock this tool box with the tools to make you and your business more productive.

The third stop on this tour is the "Member Services" tab. Here you will find "Warranty Forms," "EEDirect," "Technical Publications," "Repair Station Resources," "Stolen Equipment," "Member Benefits" and more. You asked for a place to search for STCs available from member companies, and your request was answered under the "STCs Available" tab. Have you noticed the growth in affiliate programs? Under the "Affiliate Programs" tab, you will find everything from avionics financing for your customers to rental cars for you. Take look through this area and see if you can't save a dollar, Euro or pound.

Out last stop is the "Events" tab. This is an important area because, in addition to providing the current year's regional meeting dates and locations, it also gives you the dates and locations for the annual AEA International Convention & Trade Show for the next six years.

Do you want to add a ski trip during the convention next year? AEA 2011 takes place in Reno, Nev., which is at the base of the Sierra Mountains, some of the best skiing in the western United States and home to the 1960 Winter Olympics. How about a family trip to Washington, D.C.? AEA 2012 will be offered in the nation's capital. Like to gamble? AEA 2013 finds the association back in Las Vegas. Have you ever been to the Grand Ole Opry? AEA 2014 will be in beautiful Nashville, Tenn. What to see the Cowboys new stadium? AEA 2015 is back in Dallas, Texas. Or perhaps it's the time to take the little ones to visit Mickey Mouse at Disney? AEA 2016 returns to Orlando, Fla.

In my talks with members, it seems the most underutilized benefit of AEA membership is the association's website. Our strength is in our numbers; let our members all benefit from having quick and easy access to the information they need to be more efficient. Take a tour of the AEA website and visit it regularly. If you need something that isn't there, we are here to find it and make it accessible for you on www.aea.net.

UNITED STATES
News & Regulatory Updates

FAA Provides Guidance to ASIs, Maintenance Providers for Flammability Testing

In July, the Federal Aviation Administration issued FAA Notice N 8900.128, which provides guidance to aviation safety inspectors and maintenance providers regarding flammability testing of materials used in repairs and alterations of aircraft interiors.

Flammability testing is necessary for repairs and alterations to interior materials and components if required in the aircraft certification basis. The person authorized by 14 CFR §43.7 to approve an aircraft for return-to-service after repair or alteration is responsible for determining the materials used are suitable and meet applicable requirements.

FAA legal interpretations have concluded flammability testing is not a maintenance function set forth in Part 43. The purpose of a flammability test is to ensure a material conforms to the requirements of the airworthiness standards so one may use it as part of a design, maintenance or alteration. Accordingly, the FAA has determined flammability testing is not maintenance that one may conduct in accordance with Part 43, and authorizing a repair station to perform these tests under a limited rating is not appropriate.

Any person who can perform the testing to the requirements of the applicable airworthiness standard may accomplish flammability testing.

The FAA will not approve or cer-

tificate flammability test facilities. The following are alternative methods for approval of flammability test data:

Data for major repairs and major alterations must receive approval by one or a combination of the following alternatives:

1) DERs use FAA Form 81103, "Statement of Compliance with the Federal Aviation Regulations," only to approve flammability test data associated with specific certification projects (design approvals), major repairs and major alterations. This form is not for quality assurance or material certification.

2) Appropriately authorized ODAs use FAA Form 81009, "Statement of Compliance with Airworthiness Standards," to approve flammability test data for major repairs or major alterations only for a specified product (by make, model and serial number).

3) A letter from an ACO approves specific flammability test data.

When a repair or alteration is not major and does not need FAA-approved data, the flammability testing documentation should be such that it meets the needs of the person approving the aircraft for return-to-service. The documentation should provide evidence that the tests complied with FAA standards and include the test results necessary to show compliance.

For minor repairs and alterations, any test data that shows compliance with the aircraft's certification basis is acceptable without ACO, DER or ODA findings or approvals. Certification of Conformance statements (or similar) are not adequate. The test data must include specifics, such as burn length, flame time, burn rate and glow time, as required by the regulations.

To read FAA Notice N 8900.128, visit www.faa.gov/regulations_policies/orders_notices.

FAA Finalizes Recurrent Aircraft Registration Rule

In an effort to create a more accurate aircraft registration database, the FAA is requiring re-registration of all civil aircraft during the next three years and renewal every three years after that.

The rule establishes specific expiration dates during a three-year period for all aircraft registered before Oct. 1, 2010, and requires re-registration of those aircraft according to a specific schedule. All aircraft registration certificates issued on or after Oct. 1, 2010 will be good for three years with the expiration date clearly shown.

"These improvements will give us more up-to-date registration data and better information about the state of the aviation industry," said FAA Administrator Randy Babbitt.

Current regulations require owners to report the sale of an aircraft, the scrapping or destruction of an aircraft, or a change in mailing address; however, many owners have not complied with those requirements.

Re-registration of all U.S. civil aircraft by Dec. 31, 2013, will enhance the database with current data derived from recent contact with aircraft owners. The new regulations also will ensure aircraft owners give the FAA fresh information at least once every three years when they renew their registration. The FAA will cancel the N-numbers of aircraft not re-registered or renewed.

The FAA's final rule can be found at http://edocket.access.gpo.gov/2010/pdf/2010-17572.pdf.

Flammability Testing

The following information is from FAA Notice N 8900.128.

QUESTION:

Can I receive a field approval for the flammability testing needed for a GPS mount?

ANSWER:

No, your FAA aviation safety inspector is not authorized to field approve the flammability testing data.

FAA Notice N 8900.128, "Flammability Testing of Interior Materials Used in Repairs and Alterations," specifically states, "ASIs will not field approve flammability test data for materials."

The FAA notice clarifies that major repairs and major alterations must receive flammability data approval from a DER, appropriately authorized ODA, or a letter from an ACO. When a repair or alteration is not major and does not need FAA-approved data, the flammability testing documentation should be such that it meets the needs of the person approving the aircraft for return-to-service.

For minor repairs and alterations, any test data that shows compliance with the aircraft's certification basis is acceptable without ACO, DER or ODA findings or approvals. The test data must include specifics, such as burn length, flame time, burn rate and glow time, as required by the regulations.

CANADA
News & Regulatory Updates

Transport Canada Takes Back Authority for Business Aviation Regulatory Oversight

Transport Canada announced, effective April 1, 2011, it will take back from the Canadian Business Aviation Association full responsibility for issuing operating certificates to new applicants as well as for processing changes to existing certificate holders.

This transfer will bring together all aspects of business aviation regulation, certification and safety monitoring under one organization: Transport Canada Civil Aviation.

Until April 1, 2011, services offered to operators through the CBAA (new certifications, changes to existing certificates) will remain status quo.

During this time Transport Canada will:

• Maintain its current role in regulatory safety oversight of the industry.

• Undertake an enhanced surveillance of the association's current certification and oversight functions.

• Conduct a thorough review of the regulatory structures currently in place for business aviation operations in Canada.

During the transition, Transport Canada will take over responsibility for the witness-auditing program. As such, some CBAA auditors may have a Transport Canada inspector accompanying them during an audit as an observer with the objective of:

• Identifying areas for improvement in business aviation regulation in Canada.

• Improving on Transport Canada's ability to meet client service needs and expectations.

• Identifying and implementing changes, which will support Canada's reputation for excellence in aviation safety.

Throughout the transition process, business aviation operators will continue to be responsible for compliance with existing regulatory requirements and certifications.

EUROPE
News & Regulatory Updates

Short-Term Schedule Announced for EGNOS Activation

In a recently issued service information bulletin, SIB 2010-21, EASA announced the short-term schedule for the activation of the European Geostationary Navigation Overlay Service. As per this document, EGNOS — which is similar to the WAAS system in the United States — will stop broadcasting the "Do-not-use-me" type message recognized by the ETSO-C145 or C146 receivers, and it prohibits the units to use the EGNOS augmentation. Thus, EGNOS will be declared operational but limited to lateral guidance.

Safety-of-Life Declaration Issued

By November, the European Commission will issue a safety-of-life

service declaration to announce the entry into service of the full safety-of-life service, which includes vertical guidance.

Although an EGNOS-enabled GPS receiver will be processing SBAS signals, no impact is expected on the operation of the currently approved GPS-based procedures. EGNOS signal may be used for en-route and lateral guidance for approaches from August 2010.

Operations specifically requiring the use of EGNOS-enabled receivers for vertical guidance, such as APV SBAS approaches down to LPV minima, are not allowed in any case before the EGNOS safety-of-life service declaration from the European Commission.

To perform such operations, specific installation certification and operational approval from the competent authority is required.

EASA to Host Rotorcraft Symposium, RNP Workshop

The fourth EASA Rotorcraft Symposium will take place from Dec. 8-9, in Cologne, Germany.

EASA also has scheduled a dedicated Required Navigation Performance Authorization Required workshop. The one-day workshop will take place Oct. 20 in Cologne. The agenda includes:

• Evolution of Performance-Based Navigation

• Required Navigation Performance Authorization Required operation in the EU framework

• RNP Equipment Performance & System Capabilities

• Required Navigation Performance Authorization Required Approval

• Required Navigation Performance Authorization Required Approach Design

For more information about or to register for these programs, visit www.easa.europa.eu.

FREQUENTLY ASKED QUESTIONS
International: Europe

Mode S and ADS-B

From Eurocontrol, European Organization for the Safety of Air Navigation Mode S Frequently Asked Questions.

QUESTION:

Why are aircraft required to fit Mode S while ADS-B is expected just around the corner?

ANSWER:

Although ADS-B can be used as a replacement for secondary surveillance radar in remote low-traffic density airspace, such as that in much of Australia or Alaska, it is not expected that ADS-B will be used as a sole surveillance means in high-density traffic areas, such as the core area of Europe. The Mode S transponder extended squitter also is an enabler for ADS-B operation.

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.

Implementation of SMS in Canada

BY JOHN CARR, AEA CANADIAN REGULATORY CONSULTANT

Part II:
The Gap Analysis and Safety Management Plan

Gap Analysis Requirements

Phase one of SMS implementation requires affected organizations to conduct a gap analysis of their existing quality system to determine which components and elements of a safety management system are in place currently and which components or elements must be added or modified to meet the regulatory requirements.

The review involves comparing the SMS requirements found in Parts I and V of the CARs against the existing systems in a company. Part I, "General Provisions," contains several rule changes common to all civil aviation organizations and should be included in the analysis. Additional SMS requirements for an AMO will be published in Part V of the CARs.

TCCA has developed the Safety Management Systems Assessment Guide, TP 14326E, which will assist organizations in conducting their analysis linked to the appropriate regulation or standard. A comprehensive gap analysis form is included in this guide as Appendix B.

The form combines the criteria from the SMS Assessment Guide with the applicable references to the regulations and standards for Parts I and V. Organizations can use this format as a template to conduct their gap analysis or they can create their own, provided they refer to the SMS Assessment Guide for the appropriate criteria for each component and element.

Each gap analysis question is designed for a "yes" or "no" response. If you respond with a "yes" answer to a question, you are indicating your organization already meets the criteria for a particular SMS component or element. A "no" answer indicates a gap exists between the stated criteria and your organization's policies, procedures or processes.

If a response is "yes," the next column of the gap analysis form can be used to indicate where (in company documentation) the requirement is addressed. If a response is "no," the same column can be used to indicate how and/or where the policy, procedure or process will be further developed to bring the organization into compliance with the requirement.

Once the gap analysis is complete and fully documented, the items you have identified as missing or deficient will form the basis of your SMS project plan, which must be submitted to TCCA for review.

Next month's article in this series will look at how a project plan can be put together.

This is the second in a series of articles focusing on the implementation of safety management systems in Canadian AMOs to meet the upcoming Transport Canada regulatory requirements for SMS. This month's article explains TCCA's requirement for a gap analysis and provides a sample gap analysis for developing a safety management plan.

Sample Gap Analysis Form (573 AMOs)

Safety Management System Requirements	Response (Yes/No)	If yes, state where the requirement is addressed, If no, record SMS processes that need further development	
		Small AMO (1-10 persons)[1]	Large AMO (>10)[2]

Component 1, Safety Management Plan – Element 1.1, Safety policy (CAR 107, CAR/STD 573.163)

Is a safety management system with defined components established, maintained and adhered to?	No	**1- person AMO:** Include a brief Safety Policy Statement per Example in AC107-002. **2-10 person AMO:** Include a brief Safety Policy Statement per Example in AC107-002. For a 2-10 person AMO this will add internal communications elements and the organization's safety objectives.	A safety policy is a statement of what an organization is committed to in regards to the safety of technical operations. It should be signed by the accountable executive and should clearly state the organization's intentions, management principles and aspirations for continuous improvement in the safety level. This can be achieved through documented policies describing what organizational processes and structures it will use to achieve the SMS. It should also contain a statement outlining the organization's objectives and the outcomes it hopes to achieve through its SMS.
Is the safety management system appropriate to the size and complexity of the organization?	No		
Is there a safety policy in place?	No		
Has the organization based its safety management system on the safety policy?	No		
Is the safety policy approved by the accountable executive?	No		Include a Safety Policy statement per sample included in AC107-001
Is the safety policy promoted by the accountable executive?	No		
Is the safety policy promoted by the accountable executive?	No		
Is the safety policy reviewed periodically?	No		
Is the safety policy communicated to all employees with the intent that they are made aware of their individual safety obligations?	No		

Component 1, Safety Management Plan – Element 1.2, Non-punitive Safety Reporting Policy (STD 573.16)

Is there a policy in place that provides immunity from disciplinary action for employees that report safety deficiencies, hazards or occurrences?	No	**1-person AMO:** A non-punitive safety reporting policy is not required. **2-10 person AMO:** Refer to AC107-002 for an example of a non-punitive safety reporting policy for a small AMO.	An essential element of any SMS is the safety reporting policy. To the extent possible, it should be non-punitive and developed, and implemented with all affected parties. This builds confidence in the system but also provides a clear understanding to all employees of what the safety reporting policy actually is. Refer to AC107-001 Sec. 4.6 for guidance on a non-punitive safety reporting policy.

Component 1, Safety Management Plan - Element 1.3, Roles & Responsibilities (CAR 106, CAR 107, CAR/STD 573.16)

Has an accountable executive been appointed with responsibility for ensuring that the safety management system is properly implemented and performing to requirements in all areas of the organization?	No	**1-person AMO:** Safety roles and responsibilities can be expressed in the Safety Policy statement. Refer to AC107-002 for an example. **2-10 person AMO:** Refer to AC107-002 for an example of a roles and responsibilities statement for a small AMO.	An organization should document and define the roles and responsibilities of all personnel in the SMS. Furthermore, a statement should be made attesting that everyone has a responsibility for safety. Refer to AC107-001 Sec. 4.7 thru 4.9 for guidance on SMS roles and responsibilities, an SMS organization, and the management roles.
Does the accountable executive have control of the financial and human resources required for the proper execution of his/her SMS responsibilities?	No		
Has a qualified person been appointed to manage the operation of the SMS?	No		
Does the person managing the operation of the SMS fulfill the required job functions and responsibilities?	No		
Are the safety authorities, responsibilities and accountabilities of personnel at all levels of the organization defined and documented?	No		
Do all personnel understand their authorities, responsibilities and accountabilities in regards to all safety management processes, decisions and actions?	No		

(Footnotes)
1. Not all SMS elements will be required for small AMOs. AC107-002 addresses alleviations for AMOs with 1-person and 2-10 persons.
2. AC107-001 addresses requirements for large AMOs.
3. CAR 573.16 will address SMS requirements for "573" AMOs. It has not yet been published. Requirements are taken from the NPAs for CAR 573.16 and STD 573.16.