

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.

International Communication: Do You Understand Me?

ave you ever sent an e-mail you thought was carefully worded, insisting on a certain detail and suggesting you were expecting something you did not get? Did you then get a phone call from a fuming person on the other end of the telephone who was offended by your wording of the e-mail? I am sure you have.

Let me tell you about the experience I have had with communication.

A few years ago, I went for a new challenge in a new start-up engineering company. The goal of our organization was to create and run an efficient design organization. We worked diligently on our approval and managed to get our Part 21, Subpart J, organization approved shortly after the establishment of EASA and early in the life of the new regulations.

Believing we had overcome the major hurdle, we soon realized this was only the start. Not only were we faced with the new regulations, which no one was able to interpret and translate into our engineering language, but we also had to deal with a team of very knowledgeable individuals originating out of eight European countries speaking six different languages, having different cultures, different language skills (we mostly communicate in English), and different experience levels.

Last, but not least, we were working at different times or remote time zones (up to 2,000 km) from both the other team members and from the aircraft on which we were working.

After an initial three-day training at the main facility, we went back to our offices throughout Europe, and we tried to run the new organization in a new regulatory environment with new people managing the group. But, as hard as we tried, we did not fulfill our expectations.

We had 10 and more STC projects running in parallel at any time. We were communicating like crazy. Some people spent more than half their time just writing e-mails in the best possible way (for them) to define new tasks within a project, to define design goals, to tell no-nos and to specify minimum standards they expected in the team and on the project.

More and more, however, we discovered the way we were communicating (e-mail and landline phone) simply was not the right tool to work efficiently.

Making a long story short: We did

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not perform the STCs in an effective manner. We failed to provide the necessary information to the team members in an effective and workable way and, as a result, we set up our team members, our sales team and, most seriously, our customers for failure.

We began to rethink the entire communications process we had been using. First, we tried to identify the critical factors within our communications. They soon were identified:

• Agreeing to a commonly understood standard, such as the complex design process, is hard to accomplish via e-mail. Telephone calls — or better, personal discussions — are essential.

• Different levels of language skills make it hard to clearly address issues.

• The distribution of information and the correct addressing of information often created problems (being listed in the "To" line of e-mail but not involved in subject matter).

• Communications skills are extremely important and often were lacking (emotional, offending, poorly formulated).

• Design sometimes needs extreme tense communications. E-mail alone is not the right tool. • A few spoken words are sometimes better than the best-worded e-mail.

• Frustrated team members often tried to voice their frustration in their e-mails.

• Remotely working on a complex and detailed task, such as design, with someone who you hardly know is not an easy task.

• You can never be certain you have the full attention of someone when you are talking on the phone. You are missing body language when you use e-mail or telephone conversations.

• A few of the team members coming out of the industry were trained over the years to be independent. They thought they would not need the team and could do everything on their own. Their egos and self-confidence (necessary in their prior involvements) created a number of problems when we tried to integrate them into the team.

All in all, we faced a number of problems. We set up a team, discussed the problems and worked out a plan to attack the communications problems through a number of different ways:

E-MAIL

We agreed on a policy of how to use the "To" and "CC" lines in e-mails. We would use "To" only for persons who would need to reply or have a task to perform. If someone was listed in the "To" line, his task would be clearly specified in the body of the e-mail. In the case of someone being addressed in the "CC" line, he would not need to respond or act but might be affected in a project.

We identified the need to remove project-related information from emails and put it on a separate project-related history and fact sheet. This project status sheet helped us stay more focused and keep all information together on a single document rather than a number of different e-mails. This helped to brief someone working on the project whenever he was looking and entering data on this document.

We identified the need to mention at least once in a written conversation that something worked fine or that we appreciated the way things were moving along.

TELEPHONE

Telephone conversations soon were changed from landline to a more direct and cheaper version using Voice Over Internet Protocol (VoIP). By luck and introduction by one of the group members, we experienced this communications vehicle and soon realized it would give us a number of advantages.

We could quickly ask someone a question (live) for an ongoing project. We also could communicate freely with our colleagues and easily establish group conversations if need be. Written statements and the spoken word could be transmitted, and it was a much less formalized communication than by e-mail.

PEOPLE

We tried to convince and encourage all involved persons to speak with each other rather than trying to write long and time-consuming e-mails explaining a problem. Using VoIP helped to overcome a potential misinterpretation of an e-mail.

We had to start a number of serious talks with people working as "lone fighters" to get them to participate in the teamwork, which in turn dramatically improved the atmosphere in the team.

In the end, and after a certain time, we succeeded. We are proud of it, knowing we have to continue to work on the success every day.

Let me say it loud and clear: Having a team sitting in a single facility will overcome most of the problems we have identified; however, real life tells us remote working will be seen in the working environment more often in the future and provides undoubtedly some advantages to both the company and the individual compared to the current way of working.

It is, of course, necessary to mention communication is not the only thing that can go wrong in a company, but it is certainly one major factor in an organization.

Good luck, and I hope you can take advantage of my experience. \Box

UNITED STATES News & Regulatory Updates

FAA Halts All New Foreign Repair Station Certifications

The FAA issued FAA Notice N 8900.47 on Aug. 3, regarding the initial certification of foreign repair stations.

Based on the failure of the Transpor-

tation Security Administration (TSA) to finalize a congressionally mandated repair station security program, the FAA is prohibited from certifying any new foreign repair stations after Aug. 3.

This does not affect any repair station whose formal application predates Aug. 3, 2008.

In August 2007, the president signed into law legislation implementing suggestions from the 9/11 Commission. Of those suggestions implemented, one included a provision prohibiting the FAA from issuing new foreign repair station certificates (although renewals still could be processed) unless the TSA issued its final repair station security rules.

In addition, the legislation shortened the time TSA had to audit foreign repair stations from 18 months to six months *Continued on following page*

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The law further mandates that TSA had one year after enactment (August 2007) to issue security regulations concerning Part 145 foreign repair stations.

If the regulations were not issued within the allotted time (Aug. 3, 2008), the FAA is prohibited from certificating a foreign repair station unless the repair station was previously certificated, or the repair station is in the process of certification.

Once the security rules are issued, the law gives TSA only six months to conduct audits of all foreign repair stations and prohibits the FAA from certifying any foreign repair station other than those previously certificated, or in the process of certification, until the TSA audits have been completed.

For more information, visit the FAA's website at www.faa.gov or the AEA's website at www.aea.net.

Federal Minimum Wage Increases to \$6.55

The U.S. Department of Labor reminded employers and employees that the federal minimum wage increased to \$6.55 on July 24. With this change, employees who are covered by the federal Fair Labor Standards Act (FLSA) are entitled to no less than \$6.55 per hour.

This increase is the second of three provided by the enactment of the Fair Minimum Wage Act of 2007. A third minimum wage increase to \$7.25 an hour goes into effect July 24, 2009. Last year, on July 24, the minimum wage increased to \$5.85 an hour.

This summer also marks the 70th anniversary of the FLSA, the federal law providing minimum wage, overtime and youth employment standards. This law established the Labor Department's Wage and Hour Division, authorizing it to enforce the provisions of the law and to educate the public on the law's protections and requirements.

Every employer of employees subject to the FLSA's minimum wage provisions must post, and keep posted in each of its establishments, a notice explaining the act. These notices must be posted in conspicuous places so as to permit employees to read them readily.

Updated posters and other compliance assistance materials concerning the minimum wage increase are available free of charge from the Wage and Hour Division and can be obtained from the agency's website at www. wagehour.dol.gov.

Many states have minimum wage laws with provisions differing from the federal law. When an employer is subject to both the federal and state wage laws, the employer must comply with the provisions of each law.

FREQUENTLY ASKED QUESTIONS United States

Keeping Data On-Hand

QUESTION:

What maintenance data is a repair station required to keep on-hand? And what data must be kept current?

ANSWER:

Like any good bureaucratic answer: It depends. There are two regulatory references to refer to: 14 CFR 43.13, "Performance Rules" (general), and 14 CFR 145.109, "Equipment, Materials and Data Requirements."

14 CFR 145.109 states, "A certificated repair station must maintain the documents and data required for the performance of maintenance, preventive maintenance or alterations under its repair station certificate and operations specifications in accordance with Part 43."

14 CFR 43.13(a) states, "Each person performing maintenance, alteration or preventive maintenance on an aircraft, engine, propeller or appliance shall use the methods, techniques and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques and practices acceptable to the Administrator." (Except as noted in Section 43.16.)

While not explicit here, this statement usually is interpreted to mean the technician shall use the current manufacturer's maintenance manual or Instructions for Continued Airworthiness (ICA) and, if the maintenance task is not addressed in the maintenance manual or ICA, the Administrator may accept other methods, techniques or practices. This statement should not be used to circumvent the manufacturer's maintenance instructions.

The exception to 14 CFR 43.13 is for 43.16.

14 CFR 43.16 states, "Each person performing an inspection or other maintenance specified in an Airworthiness Limitations section of a manufacturer's maintenance manual or Instructions for Continued Airworthiness shall perform the inspection or other maintenance in accordance with that section or in accordance with operations specifications approved by the Administrator under Part 121 or Part 135, or an inspection program approved under § 91.409(e)."

For the avionics industry, 14 CFR 43.16 would include such maintenance limitations as damage tolerance inspections for antenna installations and RVSM continued airworthiness.

Going Back to Part 145:

14 CFR 145.109 further requires the following documents and data be current and accessible when the relevant work is being done:

• Airworthiness directives

• Instructions for Continued Airworthiness

• Maintenance manuals

- Overhaul manuals
- Standard practice manuals

Service bulletins

• Other applicable data acceptable to or approved by the FAA.

The repair station should be able to show the FAA it either has, or has access to, all of the required airworthiness directives, Instructions for Continued Airworthiness, maintenance manuals, service bulletins standard practice manuals and other data applicable to the work being performed. This includes a process to ensure, if the customer has an approved inspection program or maintenance program, they have access to the maintenance data while performing the maintenance function.

The second part of the question is: When must the data be current? The answer is in both Part 43 and Part 145.

Part 43 requires each person to use the methods, techniques and practices prescribed in the current manufacturer's maintenance manual or ICA. It is difficult to "use" the methods, techniques and practices prescribed in the current manufacturer's maintenance manual if you do not "have" the current manufacturer's maintenance manual. Part 43 requires the work be performed to current maintenance manual, so the maintenance manual must be current when the work is being performed.

Part 145 is even more specific in its language. Part 145 states, "Documents and data must be current and accessible when the relevant work is being done."

If a repair station chooses not to keep its data current all of the time, which can be expensive, the repair station should have a process to "validate" the currency of the data before the work is begun.

CANADA News & Regulatory Updates

Transport Canada Hosts SMS Information Session This Month

Transport Canada conducts periodic safety management systems information sessions for the industry to provide details on the implementation of the SMS regulations.

The objectives of these information sessions are to provide the industry with basic information on SMS implementation, give an overview of the regulations, exemptions and implementation phases, and provide an opportunity to exchange information and best practices.

The next SMS information session will take place from Sept. 24-25, at the Hilton Toronto Airport Hotel.

For more information and a link to register for the session, visit www.tc.gc. ca/CivilAviation/SMS/Info/menu.htm.

GPS Navigators, Cockpit Annunciations Guidelines Discussed

In the July issue of the "Perspectives" e-bulletin for design approval delegates, TCCA published an article to remind delegates and the industry of existing guidance published by Transport Canada on the topic of GPS equipment installations and cockpit annunciators, discussing new issues arising as a result of the advent of WAAS navigation capability and the installation of GPS navigation systems in legacy aircraft, and also discussing design issues related to coupling GPS navigators to AFCS. As various GPS panel-mounted navigation systems and flight management systems become more commonplace in cockpits of fixed- and rotary-wing aircraft, TCCA said a review of the associated human factors issues identified by Transport Canada is warranted.

To view the complete article, visit www.tc.gc.ca/civilaviation/certification/delegations/Perspectives/gps.htm.

FREQUENTLY ASKED QUESTIONS Canada

406 MHz Emergency Locator Transmitters Testing.

QUESTION:

Can I test a 406 MHz ELT within the first 5 minutes of the UTC hour as is currently allowed for the 121.5 MHz ELT transmission?

ANSWER:

Live testing of the 406 MHz transmission is not permitted at any time, but there is no restriction on performing the self-test transmission on this frequency. However, the 121.5 MHz test transmission is not formatted or modulated to be identified as a test transmission.

All 406 MHz ELTs will have a selftest function. Not all ELTs with a selftest function will transmit all channels during testing. However, ELTs that do transmit 406 MHz during self-test must comply with Cospas-Sarsat requirements, in that the 406 MHz transmission will be a single burst with a specific digital-frame synchronization *Continued on following page*

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recognized by the Cospas-Sarsat system as being a test message, and therefore, will not be processed as a real alert.

Before conducting any test, it is advised that the functionality of a particular ELT during self-test is confirmed from the manufacturer's data. If the self-test activates the 121.5 MHz transmission, the test only should be conducted for a maximum of 5 seconds within the first 5 minutes of the UTC hour.

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

EASA Revises 2008 Rulemaking Program

EASA revised the 2008 Rulemaking Program adopted Sept. 21, 2007, to take into account new priorities and requests by a number of stakeholders to take more time in preparing the draft implementation rules of the extended basic regulation and to include unforeseen tasks. The new rulemaking program, Amendment 2, can be downloaded from the EASA website at www.easa.eu.int.

On June 30, the U.S./European Community Bilateral Aviation Safety Agreement (the agreement between the United States and the European Community on cooperation in the regulation of civil aviation safety) was signed in Brussels, Belgium. The bilateral agreement, signed by FAA Acting Administrator Bobby Sturgell and European Commission Vice President in charge of transport, Antonio Tajani, will enhance air safety while reducing regulatory burdens and costs for manufacturers, operators and aviation authorities in the U.S. and Europe.

The Bilateral Aviation Safety Agreement provides for technical cooperation between the FAA and the European Aviation Safety Agency in a variety of areas, including aircraft certification, environmental approvals and maintenance. The AEA will report again on the bilateral agreement once it is made public in its entirety.

AUSTRALIA News & Regulatory Updates

CASA Cuts Red Tape to Help Boost Engineer Numbers

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. This follows a careful review of maintenance personnel licensing requirements by CASA.

The changes will 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 has 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 have to sit further exams.

CASA chief executive officer, Bruce Byron, 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."