

SARAH SAYS...

Regulations: SEXY AT LAST!

The Annual Repair Symposium held the attention of over two hundred registrants because substantive and current information on aviation regulations is the prophylactic which will keep business alive in the years to come. The days of paying attention to our business and regulatory habits, only after a problem is discovered, are in the past.

Safe and clean business practices far out perform any regulatory act requirements. Safe practices include excellent recordkeeping, continuous internal auditing, documented employee training, writing internal procedures manuals and following them. No one practice, by itself, will fully satisfy the many laws needing gratification. An active interest in continual improvement is required for a successful relationship between industry and our many regulators.

The pleasure of the moment -- get the money in the door today while letting tomorrow take care of regulatory compliance -- is an unprotected road to a business' demise. Being aware of how the regulations currently are being interpreted, or misinterpreted, working towards a more practical and reasonable solution and becoming involved as part of the solution protects a business from this unwanted result.

Acute business practices require foreknowledge of proposed regulatory changes. The Aeronautical Repair Station Association has worked hard for over eight years to coordinate current business practices and regulatory compliance. Through ARAC Working Groups, direct contact with key FAA personnel and this publication, we are being heard in a positive manner, while word of our good work is spreading.

The success of the Symposium is an excellent sign that all businesses involved in the maintenance industry are realizing that their bottom line is being directly impacted by non-uniform regulatory application. Okay, regulatory compliance isn't all that sexy, but it will keep you safely in business! →

Review of the Annual Symposium

Following are summaries of each Symposium Session. A limited number of Symposium Packets are available for a fee of \$75.00. We have noted below the summary of each Session whether a handout will be made available in the Packet. The Packets are available on a first-come-first-serve basis. Please FAX your request to the Association Headquarters and we will invoice you upon shipment.

*The majority of this month's **hotline** was written by Jennifer Colussy. She was also courteous enough (and curious enough) to capture most of*

our Symposium on tape. Persons wishing to order from Jennifer's amateur production company please contact Ms. Colussy at (410) 889-1164. We are deeply grateful for her help and good cheer during the Symposium and hope to make use of her good services in the near future.

SPECIAL NOTE: All participants will be mailed Fred Leonelli's presentation on Unapproved Parts under separate cover.

(see **Symposium**, page 2, column 1)

KEYNOTE ADDRESS:

The Associate Administrator for Regulation and Certification of the FAA, Anthony Broderick, was the keynote speaker at ARSA's Annual Repair Symposium. Broderick addressed several issues facing the aviation industry. Emphasizing that the ARSA members make up an extremely valuable pool of knowledge and expertise, Broderick stressed that everyone must be part of the solution. In his opinion, change can only happen when there is an atmosphere of cooperation and an open line of communication between all segments of the industry. He went on to compliment ARSA for their efforts in affecting change.

Mr. Broderick stated that the industry needs to take advantage of current events and new organizations that will facilitate these changes. For example, the new JAA organization and the developing relationships between the U.S. and the European community is an excellent means for providing growth opportunities. Our eventual goal is to eradicate any differences between FAA and JAA regulations regarding their interpretation and role in the aviation industry. We already see indications of greater cooperation between the FAA and the JAA. Broderick suggested that there is a need for airlines, manufacturers and repair stations to engage in internal auditing systems. He alluded to the advantages in earning the ISO 9000 designation, which is recognized internationally.

Broderick noted that the Office of the Inspector General is playing a more visible role in criminal investigations, prosecution of those who sell unapproved parts and in oversight duties. He recognized this growing visibility as posing a problem for the aviation industry. IG's presence is drawing publicity to the industry and creating a false image regarding aircraft safety. In fact, Broderick insists that airline safety systems work quite well.

In conclusion, Broderick emphasized the importance for everyone to help the FAA do their job efficiently. He says this can be best realized by mutual proficiency in the FAA regulatory system and rules. Broderick believes that cooperative relationships are the key to obtaining the lowest possible cost for both industry and government. These valuable partnerships will also ensure the adherence to safety regulations.

A copy of Mr. Broderick's speech has been made part of the Symposium Packet. Order information is listed above. →

SESSION ONE - THE REGULATORY PROCESS:

Fred Emery, President of the Regulatory Group gave an excellent overview of how regulations are developed, reviewed and made into proposed rules. He also explained the importance of public comment and how to effectively be heard.

Mr. Emery reviewed the negotiated rulemaking process upon which the ARAC process was modelled. He stressed the importance of using the trade association as a vehicle for bringing not only positive change to regulations, but also to advisory, guidance and training materials used by the FAA.

Fred Emery made several handouts available which are part of the Symposium Packet. Ordering information is set forth above. →

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SESSION TWO - INTERACTING WITH THE FAA:

Vice President of Phaneuf Associates, John Sheehan, outlined the various stages of interaction between the FAA and the aviation industry. These stages include the initial design and certification process, surveillance and the enforcement of airworthiness. Sheehan also addressed the use of appropriate MIDO and FSDO offices strategically located in many geographic areas. The function of these offices is to assist with any confusion over new rules.

Acting Director of Aircraft Certification Services in the FAA, Tom McSweeney, discussed in detail the role of the Aircraft Certification division. McSweeney identified customer focus, employee involvement and the continuous improvement as the basis from which certification delivery is founded. He summarized certification of technical design approval, standards of certification and the process of design production approvals. McSweeney also outlined the Aircraft Certification Regulatory Program and described the certification products available to cover design approvals, production quality assurance system approvals, airworthiness certification approval of aircraft, engines, propellers, materials, parts and appliances.

Deputy Director of Flight Standards Services, Bill White commended ARSA on the communication they provide regarding concerns of constituents seeking resolutions to current problems. White gave information about the interaction between the Flight Standards department and aircraft certification. He stipulated that pressure in Washington, regarding policy decisions and technology, needs to be taken into account when analyzing new and old issues. The complications arising from an in-depth portrayal of the organizational chart was also defined. He emphasized the importance of recognizing the geographic location of Flight Standard offices and the AFS's international field offices. The most recent AFS offices are located in Singapore and Brussels.

Both Tom McSweeney and Bill White provided handouts for the Symposium. Packets of all materials are available for \$75.00 on a first-come-first-serve basis. →

SESSION THREE - JAR/FAR HARMONIZATION:

Leo Weston, Special Assistant to the Aircraft Maintenance Division, noted the development of a harmonized set of regulations between the FAA and the JAA. In addition, he called attention to the FAA's activities relating to the long range solutions - bilateral agreements.

Weston related the results of the quarterly meeting between the FAA and the JAA as being a convoluted endeavor. The outcome resulted in a mutual agreement that the process was and will be both difficult and challenging. One of the questions facing the two authorities is, who will be responsible for airworthiness, the operator or the repair station? This issue will effect recordkeeping. Currently differences exist in maintenance data approval, equipment and facilities. The question to be answered is how to apply JAR 145 since it currently only applies to foreign carriers. According to Weston, the maintenance organization must be identified and qualified under a JAR 145 standard. Any maintenance organization will need to be certified with a JAR 145 certificate by January 1, 1994. It is interesting to note that the JAA is not a civil air authority. Each country has their own national aviation authority, known as the NAA.

Negotiations for maintenance Bilateral Agreements began in June 1992. Agreement objectives include: FAR 43, 145, JAR 145, maintenance performance standards, and production of airworthy aircraft. So far the accomplishments of the bilateral agreements are: JAR 145/FAR 43 and 145 is complete; JAA has trained 100 surveyors/inspectors, FAA has participated in JAA training and the FAA has invited JAA to FAA training. They are working to complete the agreement by December 1993, however, political considerations may push that date out. Remember, bilaterals are approved by each country individually. Although the JAA anticipates visiting 10 to 15 sites in the United States by the end of 1993.

Leo Weston's presentation is part of the Symposium Packet. See ordering information above. →

the hotline is published monthly by the Aeronautical Repair Station Association in cooperation with Baseline Productions. For additional information, contact ARSA headquarters at (703) 739-9543.

SESSION FOUR - ENVIRONMENTAL ISSUES:

Manager of Maintenance Operations for the National Air Transportation Association (NATA), Fred Workley, highlighted the impact environmental issues pose for repair stations. Affected are employees, the environment and the handling of toxic materials. Some of the new environmental rules and regulations will affect the following: general insurance, material data sheets, corporate image, workers compensation, injuries and sick days, inventory control, regulatory compliance and recordkeeping. According to Workley, non-compliance issues are attracting the attention of Congress and therefore, must be handled appropriately. To monitor non-compliance OSHA is cross-trained with EPA and will attribute large and stiff penalties to non-compliant companies.

Workley cautioned certificate holders about their handling of hazardous waste substances. He reminded them that the types of solvents used in repair stations require proper training and education in their use and disposal.

Workley emphasized that the area of environmental law is expanding and will seriously impact aviation certification holders. The result of this expansion will be an increase in cost of doing business as materials and processes used are critical to quality and performance.

New technology created to meet the demands of environmental stipulations will be costly. The benefits, however, will help to improve existing processes. For example, new lasers are used to burn off selected layers of paint eliminating airborne and toxic solid wastes. In addition high pressure water stripping is a popular alternative. There is however, a need to document goals for waste reduction and waste minimization. Recordkeeping issues are critical to regulatory compliance. Workley identified the source reduction of hazardous waste by process identification, material substitution, improvements in product purity and good management practices. Recycling is also important as it involves the use and reuse of waste. Recycled waste is an effective substitute for a commercial product.

Workley believes that the training employees in waste disposal is essential. Good faith efforts will keep companies safe from potential liability situations. Workley recommends companies plan an environmental life cycle that includes materials, processes, performance economics and reliability. In addition, companies should consider worker safety and environmental issues and the regulatory impact of these issues.

Fred Workley did not provide us a handout at the Symposium, but next month we will run his excellent in-depth article on environmental issues. →

SESSION FIVE - COMMUNICATING WITH THE MANUFACTURER

The Regional Manager for Boeing's Spares Division, Kurt Amundsen is responsible for worldwide aircraft support. His company prides its service on the ability to maintain long term relationships and to successfully provide worldwide support. Boeing's support includes products and services, training, spares and technical support.

The company's support philosophy is to yield to total customer satisfaction over the life of the aircraft. While they support over 6200 jets they also provide support to third party maintenance facilities and to customers relying on third party maintenance.

Director of Customer Support for Bell Helicopter Textron, George Hawkins cites one in ten employees in his company are responsible for

customer support in the following areas: warranty, supply support, customer service facilities, and customer account representatives. They have 177 customer service facilities worldwide that are independently owned.

Manager of Airport Operations from Textron Lycoming, Larry Roush, is proud of his company's focus on the after market portion of his business. He claims this provides the end user a more personal way to get the support needed. His company established a technical support group for customers with overruns and other problems. Textron Lycoming has 22 domestic distributors as well as 45 international distributors. They also offer a technical refresher course covering a 4-5 day period.

Kurt Amundsen's presentation is part of the Symposium Packet which can be ordered by following the instructions above. →

SESSION SIX - PARTS MANUFACTURING APPROVAL:

Manager of Aircraft Engineering Division, Jack McGrath, explained how the interconnection of design approval, production quality assurance systems and approval of individual aircraft and engines are required in order to obtain a PMA certificate.

McGrath says obtaining a PMA involves two methods of compliance. The applicant must attain both design approval and production approval before the certificate is awarded. McGrath cautions that the issue of identity must be overcome as well. Identity is an issue that has been controversial for some time due to several factors: proprietary design, liability for production of parts, and the unfair issue of spending money developing a design only to have it copied by a competitor.

McGrath noted that the FAA is immune from tort liability in PMA certification. The FAA is currently working on revisions or expansions to advisory materials and have created a parts approval action team for that purpose. In addition, a Part 21 rulemaking advisory interest group had been created to work on the parts and production certificate issue.

Aerospace Engineer for the Policy and Procedures Branch of the Aircraft Certification Service, Bruce Kaplan, shared a new definition for the acronym 'PMA' -- Permanent Meeting Attendee. Mr. Kaplan claims that PMA has used the advisory material process to tune up the existing process. Some of the highlights of the current circulars include clarification on the definition of what parts must be approved, the owner/operator exclusion, test for standard parts, and guidance on technical data submitted. He reviewed the work of the Parts Approval Action Teams - Phases I and II processes. He stated that the Team was currently working closely with Flight Standard Services to complete Phase III dealing with current and incoming inventory approvals.

Chair of the ARAC PMA Working Group and Director of Group Quality Assurance for the Boeing Airplane Company, Peter Gallimore, provided interesting insights into the PMA rulemaking process. Gallimore says that the ARAC work is chiefly one of obtaining consensus among the terrifically diverse concerns of the industry and the FAA.

Some of the issues relative to Parts Manufacturing Approvals that the working group will center around are, defining the issues and establishing a checklist of material to be resolved (such as addressing the parts requirements for older or out of production aircraft), fear of being shut out of the market, and fear of losing design rights. Gallimore claims that a change in mindset is desperately needed along with an understanding of political and economic constraints. He feels there is a need to construct TQM based tenets upon which to establish a philosophy for team action.

Peter Gallimore's presentation is available as part of the Symposium Packet. Order information is set forth above. →

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Advisory Material for PMA Applicants:

During Bruce Kaplan's review of the current activities on PMA, he reviewed the new draft advisory material available for comment. This document outlines the procedures for obtaining a PMA without evidence of a licensing agreement or proof of being an Original Equipment Manufacturer or original vendor. Originally the document was going to be made available as an Advisory Circular, however, due to the urgent need for guidance in this area, it will be released in the form of an Order. Therefore, Notice 8110.XX on the regular PMA Approval Procedures is available for review by interested parties. Members should submit their comments on this document to Sarah MacLeod no later than May 15, 1993. Members may FAX a request for this document to the Association headquarters. Other interested parties are requested to send \$5.00 for this document to the Association Headquarters along with a request for Notice 8110.XX.

SESSION SEVEN - RECORDKEEPING:

Chair of the ARAC Recordkeeping Working Group and Manager of Technical Records for Northwest Airlines, Paul Murphy, states that accurate and efficient recording of maintenance is essential to continued airworthiness.

Mr. Murphy said the ARAC working Group has met 10 times over the past 18 months. The objective was to test concepts by selecting a cross section of the representatives and allowing them to air their concerns and raise resolutions to problems. Murphy believes a guiding principle should be that operators adhere to data required to support continued airworthiness to aircraft and component parts. He admits yellow tags do need to be more informative. Some of his group's objectives were to: eliminate confusion across FAA parts, add language to include records for components and parts, provide maintenance with legitimate maintenance releases, provide language to allow computerized recordkeeping and to report current maintenance status. Record information is important and should provide current status versus years of particular history.

IAMAW's Union Representative, Safety Committee, John Goglia, says today's position regarding maintenance records is confused because the rule regulating the keeping of records is unclear. The vague regulation causes problems for certificated mechanics employed by 121, 135 and 145 certificate holders. In addition, the validity of the yellow tag, is being questioned as it does not necessarily mean the part is approved. The idea of what actually constitutes a proper record is currently too confusing for the FAA and the industry, leaving the certificated mechanic holding the bag.

Ryder Airline Services' Director of Operations, James Innella, says it is important that

maintenance personnel record each entry. Certificates of conformance are costly pieces of documentation. Based on statistics in 1992, 75% of the business was identified to be based on the proof of source, 10% on the traceability and 1% on the proof of distributorship. Distributors are not FAA regulated, but they are driven by their customers who are regulated. The regulations are derived from the FAA advisories and seminars as well as OEM advisories. According to Innella, the lack of FAA regulation for distributors is a serious concern. It deters an organization from being proactive and aggressively buy spec sales. These sales would allow the airlines to utilize JIT more effectively. Despite good intentions, Innella believes there should be standardized requirements which would save airlines millions of dollars.

Roger Fuchs, Technical Director for Engine Components Northwest described the concerns of general aviation repair stations. He was particularly adamant for the piece part repair station responsible for only one component part of the engine, aircraft or component. The issue of the "yellow tag" and an actual maintenance release document as required by Form 337 will hopefully be solved by the new recordkeeping requirements being worked on by the ARAC group.

Fuchs discussed the additional recordkeeping for assembling the product or component must be clarified in order for a smooth transition from repair station to installation and approval for return to service. The assembly records made by individual certified mechanics are often in the aircraft log as opposed to being included in the component or engine assembly records which creates confusion when records must be reviewed for an accurate account of what was accomplished. →

GET INVOLVED....MEET WITH THE EPA

The EPA has invited industry to participate in frank discussions regarding the regulation of almost every routine procedure in the aerospace industry. These regulations will have a dramatic and immediate impact on the way repair stations perform almost every process in their business. The list includes machining, deburring, forming, heat treating, bonding, surface preparation, stripping, composite processes and testing.

The roundtable meeting takes place on May 3-5, 1993. Participants should prepare some basic

financial information about their individual business and how much having to change processes will cost, considering the waste that is truly generated. In general, agencies are not allowed to regulate unless the benefit will outweigh the cost of compliance.

The roundtable meeting will be held at the Hilton Hotel, 3800 Hillsborough Road, Durham, N.C. For further information please contact:

Ms. Kim Teal at (919) 541-5580. →

SESSION EIGHT - PART 65:

IAMAW Union Representative, Safety Committee, John Goglia recalled that before the inception of ARAC, problems existed for the certification process of mechanics. He noted the majority of mechanics have a high degree of experience and knowledge. Operators, therefore, cannot afford to lose these qualified and specifically educated mechanics. Goglia noted that there is currently a lack of qualified technicians entering the aircraft industry. The issue at hand is how to draw and keep qualified personnel while being able to afford them. Maintaining well-trained technicians will contribute to the overall viability of the industry.

Engine Components Northwest's Technical Director, Roger Fuchs, emphasized the fact that having a mechanic certificate does not necessarily qualify a mechanic unless they are trained under the supervision of an experienced mechanic. This is especially essential for new processes and procedures. In dealing with new processes it is important to establish the criteria for ratings and qualifications for mechanics in order for them to work their particular area of expertise.

Fuchs added that independent mechanics often do not have enough data, tools and equipment. They must learn from service instructions, bulletins and manuals without supervision. Also, the calibration of tools and instruments needs to be recorded and inspected. Fuchs summarized by saying there is a need for better job accountability, analysis of employee qualifications, and a means to provide for

ongoing testing and training, complete with proper documentation.

Special Assistant to the Aircraft Maintenance Division, Les Vipond, gave a description of the current ARAC process and where it is headed. FAR Part 65 regulates mechanics, inspection authorizations and repairmen. The ARAC working group is devised of members for the aviation community who provide recommendations to the FAA regarding this important regulatory issue. Perhaps the fact that Part 65 has remained unchanged for 20 years is a factor in some of the problems occurring. The most important section of the regulatory review is the consolidation of companion regulations including 121, 135, 145 and 147. Vipond detailed the Part 65 four-phase review program for the proposed regulatory changes. He also gave an overview of the Canadian system and the four technician categories as well as the ICAO system and JAR system.

Staff Specialist of the Repair Branch, Bill Henry gave an overview of the regulatory changes to Part 43, Part 65 and Part 145. He described the details of a proposed Part 66 and how it will interface with Parts 43 and 145. He also covered the details of the pending changes to Parts 43 and 145. The NPRM on Part 145 is anticipated for release in May of 1993.

Both Les Vipond and Bill Henry provided copies of their presentations for the Symposium Packet. Please follow ordering instructions above. →

SESSION NINE - DEVELOPING REPAIRS AND SUBSTANTIATING DATA:

Lauren Nelson, President of Avitas Engineering, presented a comprehensive analysis of major and minor repairs and alterations. He provided views on the difference between "acceptable data" and "approved data".

Mr. Nelson provided an excellent and extensive handout for Symposium participants. A review of this material will give repair stations the background information needed to develop a program within their facility to differentiate between major and minor repairs and the different engineering reviews which are needed to substantiate the scope of work.

As mentioned, the Avitas handout is available to Symposium participants who did not receive a copy during the event and it is also available to non-participants as part of the Symposium Packet. Participants wishing a copy should FAX their request to the Association, stating they attended the Symposium and wish a copy, while non-participants should order the Packet as outlined above. →

A diamond is but a lump of coal that has done well under pressure.

Unknown

SESSION TEN - UNAPPROVED PARTS:

There was standing room only during Fred Leonelli's (Manager, Aircraft Maintenance for FAA) presentation on Phase III efforts which will outline the procedure repair stations will follow to substantiate the airworthiness of present and incoming inventories. The final document will not be presented until the industry has sufficient opportunity to provide substantive procedure solutions.

Dennis Dutch, Director of Special Investigations for the Inspector General's Office of Investigations outlined the role the IG's office plays in investigation of fraud and abuse as well as their responsibility for auditing the FAA's policy and procedures. Potential violations of federal law are investigated by the Investigations Branch of the IG. The office is currently reviewing almost 200 potential violations.

Mr. Dutch specifically reviewed the differing offices of the IG across the country and their regional areas of responsibility. He explained how complaints are passed between the IG's office and the FAA.

Joe Doubleday, Manager of the Airworthiness Unit in the FAA Field Programs Division, reviewed the procedure used to coordinate regulatory violations with potential federal criminal investigations. He specifically reviewed the Suspected Unapproved Parts Reporting Program and gave the audience a historical review of the results of regulatory violation investigations.

The presentations were followed by an active question and answer period wherein the FAA was able to hear the frustration of the maintenance industry with the complicated problem of current inventory validation. The FAA specifically assured attendees that they will work closely with industry to assure the approval of all airworthy inventory being held by certificate holders.

Fred Leonelli's excellent summary of current activities on validating current inventory is available as part of the Symposium Packet. Participants will be receiving this information under separate label. →

*The power of accurate observation is commonly called cynicism by those who have not got it.
George Bernard Shaw*

NEW MEMBERS

The following firms have joined ARSA since January of 1993:

AIRINC

Aero Corp

Air-Sur, Inc.

Aircraft Technology Corporation

Airmotive, Inc.

Airsupply Company

Avox, Inc.

Caribe Aviation, Inc.

Chromalloy Gas Turbine Corp.

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Martin Marietta Aero & Naval Systems

Miami Field Services, Inc.

NORDAM

Pacific Aircraft Maintenance Corp.

Premair Corporation

Skycraft Incorporated

Textron Lycoming

The AGES Group

UNC, Inc.

The Board extends welcome and appreciation to these companies for joining the ranks of the Aeronautical Repair Station Association.

Pass Around the hotline !

The ARSA Board of Directors and the hotline staff encourage you to forward copies of the hotline to your co-workers and other members of the industry. We feel that open exchange of ideas among the members of our industry is crucial and encourage the use of the hotline to help achieve that goal. Your ideas, comments, and suggestions are needed here. You will be listened to. So please, contribute to and distribute the hotline.