

The Update Report

The Airline Suppliers Association

January 1999 Volume 7, Issue 1

LAW YOU CAN USE

Back-to-Birth Traceability and Life-Limited Parts

Last month, the first part of this article addressed parts traceability and the ways that traceability can support an installer's regulatory obligations. A key feature in last month's article was the fact that no regulation requires "back-to-birth" traceability. This second half of the article summarizes some of the arguments on both sides of the "back-to-birth" debate, and then explains why back-to-birth traceability is the preferred method for life-limited parts even though the regulations do not require it.

The Back-to-Birth Argument

The term "back to birth traceability" describes documentation that clearly demonstrates every owner and installation of a part all the way back to the time that it was manufactured (the "birth" of the part). A person who reviews this documentation can easily identify every past owner of the part. Some people in the aviation industry feel that every part in the industry ought to bear traceability documentation that shows that it was originally manufactured by a company holding FAA production approval.

There are a number of potential benefits to back-to-birth traceability. Some installers like to have this sort of traceability for parts that they purchase,

because they feel more comfortable knowing who possessed a part in the past. In the event that a part is found to be unairworthy, traceability helps an inspector to track the source of the problem, and may therefore provide useful assistance in preventing similar problems in the future. Traceability to a prior finding of conformity (at the manufacturer's facility) or airworthiness (e.g. by an overhauler) shows that at the moment of that finding, the part was in a condition at least equal to that shown in the type design of the aircraft on which it was meant to be installed. This helps the installer, who must merely show that the part remains in this condition.

On the other hand, there are also arguments against traceability. The most important is that reliance on traceability places a stronger emphasis on paperwork than it does on the actual airworthiness of the part. A part may appear to be airworthy on paper, but its actual condition could be unairworthy. There are many reasons for this, like shipping damage, degradation due to shelf-time or human error in labeling. No matter what conditions may apply to the airworthiness of the part, the installer bears the responsibility to judge the airworthiness of the part at the time of installation.

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Keep monitoring, http://www.airlinesuppliers.com for a growing list of FAA accredited distributors.



A Message from ASA's President

It may surprise you to learn that ASA members have a power that is not that common among aviation associations. ASA members nominate and elect the governing body of the Association: the Board of Directors.

ASA's Board of Directors consists of 7 elected Directors, 5 of whose terms expire in March. In addition to fulfilling their Board of Directors duties, Directors regularly represent ASA at industry meetings, provide assistance to ASA staff, and volunteer at ASA functions. ASA does not reimburse Board members for their expenses.

ASA is seeking nominations for the Board of Directors. Details are provided on page 3. This is your opportunity to help shape the future of your Association. If you are interested in running for the Board of Directors or would like to nominate a member, the deadline is March 2, 1998. If you have any questions regarding the duties or obligation of a Director, please feel free to contact me or any Director.

ASA is also seeking nominations for the Edward J. Glueckler Award. The award will be presented at ASA's annual conference, July 18-20, 1999 in Marco Island, FL. This Award was established to recognize outstanding commitment, dedication and contribution to ASA and the aviation industry. Deadline for nominations is March 31, 1999.

By popular demand, ASA has announced the schedule for our 1999 workshop, Better, Stronger, Smarter: Preparing for Aircraft Parts Distribution in the New Millennium. In support of our commitment to educating and training our members

ASA has scheduled training workshops in 9 locations, one more than 1998 (lucky Chicago). Sending employees to the workshop is a cost effective way to train your employees.

In an effort to allow members to send multiple employees we have kept the price as low as possible, \$50 per person, which includes 6 ½ hours of training, handout materials and lunch. The workshop is limited to members and air carrier employees. Additional information on the workshop will be faxed to all members.

I look forward to seeing you at the workshops.

Best Regards,

Michele Schweitzer

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The Update Report

provides timely information to help Association members and readers keep abreast of the changes within the aviation supply industry.

The Update Report

is just one of the many benefits that the Airline Suppliers Association offers members. For information on ASA-100, the ASA Accreditation Program, Conferences, Workshops, FAA guidance like Advisory Circulars, Industry Memos, or services and benefits, contact the Association.

The Update Report

For information on special package rates for advertising, contact the Association at 202-216-9140. Subscription cost is \$120.00 US per year.

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The Airline Suppliers Association Continuing Education Series Presents

The 1999 ASA Annual Workshop:

Better, Stronger, Smarter: Preparing for Aircraft Parts Distribution in the New Millennium

March 16 - Los Angeles, CA March 18 - Seattle, WA March 31 - Newark, NJ April 6 - Fort Lauderdale, FL April 7 - Miami, FL April 22 - Phoenix, AZ April 28 - Chicago, IL April 30 - Dallas, TX May 12 - Atlanta, GA

The new millennium is around the corner. The rules are changing. Will you be one of those who take advantage of the new rules or will the new rules take advantage of you?

This full day workshop features classes in both introductory and advanced subjects that are critical to successful business. In addition to aviation and regulatory (FAR) subjects, the workshop will also address commercial law subjects to help you get the most out of your transaction. It is designed to appeal to both the industry novice and the seasoned veteran. Tuition is \$50 per person. Because of this special price, this workshop is only available to ASA members.

Registration forms were faxed to all ASA members. For more information or an additional registration form see ASA's web site at http://www.airlinesuppliers.com/workshop.html or contact Charles Cunningham at ASA: Phone: (202) 216-9140 - Fax: (202) 216-9227

YOUR ASSOCIATION IN ACTION

Call for Nominations for the 1999 Board Election

Have you ever wanted to become more active in ASA governance? Run for the ASA Board of Directors!

The ASA Board of Directors is made up of seven representatives from member companies. Board members serve a two-year term and are expected to attend the four quarterly ASA Board meetings each year (starting with the April 12 meeting in Minneapolis). Board members are not compensated, so they must be prepared to pay their own expenses associated with Board meetings. Nominees should be persons who are willing to lend their expertise and experience to ASA for the purpose of improving the Association and the industry.

The Association will soon hold elections for five seats on the ASA Board of Directors. ASA is currently accepting nominations for these positions. The deadline for nominations is 5 p.m. Eastern Time on March 2, 1999. An individual may nominate himself or herself. All valid nominations will be listed on the ASA voting cards for the upcoming election.

On or about March 5, ASA will fax voting cards to all regular members of the Association. Members will have until March 26 to return their completed voting cards. Each voting card will enable the member to vote for up to five different nominees to fill the available seats on the Board.

ASA Board Nomination Procedure

Please fax to ASA the Nominee's name and company name, the Nominee's position in the company, and the Nominee's contact phone number. ASA also requests, but does not require, the name and company of the person doing the nominating. When ASA publishes the ballot, it will include brief biographical paragraphs on each Nominee, so ASA requests, but does not require, a brief statement of the Nominee's qualifications for the Board and/or goals as a Director on the Board.

Fax nominations to ASA at (202) 216-9227

Y2K: All's Fair in Love and Warranty

Can you believe your business partners when they say they're Y2K compliant? If they say they're Y2K compliant and they turn out to be wrong, then can you sue them? Most importantly, could YOU be liable if a customer sues you for Y2K compliance issues?

Few ASA members appear to have escaped the waves of letters from customers asking for guarantees of Y2K compliance. Everyone is concerned about their business partners meeting two goals:

- 1) assuring that business will continue, unabated, after 12:00:01 a.m. on January 1, 2000; and
- 2) assuring that the parts that could be susceptible to Y2K problems are, in fact, Y2K compliant.

Business functions that could fail under a non-Y2K system include billing and payment schemes, filling orders in a timely fashion, and even sorting functions within a database holding time-stamped documents (this could include some document management systems associated with scanned traceability documents). If you haven't yet

implemented a plan to assure that your business is able to dodge the Y2K bullet, then you should read the article *Getting Ready for Y2K* on page 5 in this issue, and give serious thought to implementing a Y2K assurance system.

Assuring Y2K compliance in your own facility is time-consuming and can be frustrating, but is still capable of being accomplished. Assuring the Y2K compliance of your inventory can be a much more difficult task.

Several manufacturers have supported their parts and products by publishing information concerning the Y2K compliance of these items. Boeing is one of these companies (see 6 The Update Report 135 (December 1998)), as are AlliedSignal (see 6 The Update Report 102 (September 1998)) and Sundstrand (see 6 The Update Report 68 (June 1998)). Others, though, have not yet published any information.

Embedded Systems

One of the main problems is that certain components, particularly certain avionics components, include

"embedded systems." Embedded systems are small-self contained hardware (computers) within a component that includes some element of 'programming." Often, these are very simple single-function systems, although an embedded system can be quite complex. They are called "embedded systems" because their programming is embedded within them. This makes it difficult for anyone to review the programming to determine whether it is susceptible to Y2K problems.

Embedded systems can have date information "hard-wired" into them; this date information can control a variety of features associated with the workings of the embedded system. Fire and security alarm systems often rely on embedded systems that may feature date information for self-testing purposes.

Without any information from the manufacturer, it is almost impossible for a distributor to warrant that the parts are Y2K compliant. A British company, WSP Business technology, claims to have developed a device for

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Getting Ready for Y2K: Establishing Your Y2K Strategic Plan

Are you ready for the year 2000 (Y2K)? Have you made your hotel reservations for New Year's Eve already? More importantly, have you checked your computers to make sure they will continue to function as expected on January 1, 2000?

Most Americans now know that there is a potential problem with computer programs that use a two-digit date field based on the assumption that the first two digits are "19" (e.g. 1999 is stored as "99"). When the first two digits of the year are "20" (as in "2000"), these program could fail to perform as expected if the computer believes that the year 2000 is actually the year 1900. This can affect a wide range of operations in our industry like billing and delivery scheduling.

Computer programmers and consultants are in high demand for 1999 as they work to assure Y2K compliance among their clients. Information Technology Departments are enjoying their moment in the sun as the golden boys who will save their corporations from disaster; and well they should be: industry experts say that 90% of small American companies that have a major computer failure find themselves out of business within a year. This is a frightening statistic with the Y2K problem just around the corner.

Even the most optimistic computer experts expect Y2K to cause some problems. Boston-based computer expert Scott Corzine explained that every company needs to develop an action plan not only for remediating their computer systems, but also for addressing Y2K that are outside of the company's control. Sample issues to be addressed includes a corporate continuity plan in the event your customers billing systems crash and they are unable to pay you, and alternative

routes of supply in the event your suppliers are unable to provide you with the parts on which you and your customers rely.

Corzine also warns that not all of the problems will occur on January 1, 2000. Many companies have fiscal years that are different from the calendar year, and this could generate early problems for billing and other programs. Other problems are related to other dates, so making computer system review a part of your quality system can help prevent or minimize problems. Corzine suggests that everyone should retain a healthy suspicion of unusual results - "just because the computer says it is so, doesn't make it true."

There is still time for ASA members who do not have Information Technology Departments and have not yet hired a consultant to manage their Y2K assurance, but the time to start this process is now. For those who are not sure where to start, there is no need to panic. You can have advisory material delivered to your doorstep with a single phone call to the U.S. General Accounting Office.

GAO Y2K Guides

The General Accounting Office (GAO) published a report in 1997 that offered a structured approach for assessing a company's Y2K readiness. Year 2000 Computing Crisis: An Assessment Guide, GAO/AIMD 10.1.14 (September 1997). The Assessment Guide proposes a five phase program of awareness, assessment, renovation, validation and implementation. It is meant to help companies assure that they will be able to perform core business operations into the new millennium. The government published more detailed guidance a year later. Year

2000 Computing Crisis: Business Continuity and Contingency Planning, GAO/AIMD 10.1.19 (August 1998).

The next installment in this series has just hit the bookshelves. Entitled Year 2000 Computing Crisis: A Testing Guide. GAO/AIMD 10.1.21 (November 1998), it is a step-by-step framework for establishing and managing a Y2K testing scheme. It recommends key processes for the Y2K testing scheme, from defining the compliance criteria, through establishing testing processes and metrics, to documenting the test results. In addition to addressing testing mechanisms, it also provides management oversight recommendations, to permit the program to be successfully controlled no matter how large the company may be.

These GAO reports are available from the GAO order desk at (202) 512-6000. The order desk is automated, so callers can leave their orders at any time of the day.

Compliance Tools

Of course, the private sector is also doing its part to produce Y2K compliance tools. Apple Computers claims that its MACs have always been Y2K compliant. For IBM-compatibles, a company called NSTL has published software to test the personal computer for Y2K compliance. The program tests the BIOS and the real-time clock's functionality (you'll have to find another method to test the functionality of your software). NSTL's product is called " YMARK2000," and it is available for free to any individuals interested in downloading it from the internet. The program is available for download; see ASA's website for details.

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Life Limited Part Documentation Must State Current Status

(Continued from page 1)

Other opponents have been quick to point out that the weight of the paperwork associated with a small part could be greater than the weight of the part itself. Not only does the idea of paperwork that is heavier than a part evoke a powerful but humorous image, but it also raises the question of where the industry would store such a volume of documentation. Paperwork storage issues represent only half of the battle; reassociation is also an issue.

Complete traceability would create a paperwork nightmare for air carriers that needed to store documentation for a part upon installation and then reattach the documentation to the part in question at the time of sale. The act of reassociating the paperwork with the part could be complicated if the documentation is stored in a location far from the base at which the part was removed.

There are also commercial concerns to be addressed. Some distributors fear that complete traceability would permit a customer to bypass them in the future, going directly to the prior source for the part. These distributors prefer to provide sufficient documentation to demonstrate airworthiness without necessarily identifying every prior owner of the part.

As a matter of law, the traceability argument is settled in favor of the opponents, because there is still no regulation that requires back-to-birth traceability. While there is no rule requiring traceability, there is a rule requiring owner/operators to track the times/cycles of their life-limited parts. Back-to-birth traceability is the standard industry practice for tracking times/cycles on life-limited parts.

Life-Limited Parts

Present day aircraft and engines commonly have life-limited parts installed.¹ These are parts for which there is a limited service life. When this service life has been exhausted, the part must be removed from the aircraft and replaced before the aircraft is permitted to fly again.² The service life of life-limited parts may be expressed in hours of operation, cycles of operation, or calendar time.³

Life limits are proposed by the manufacturer as a component of the Instructions for Continued Airworthiness (ICAs);⁴ they are approved when the FAA approves the Airworthiness Limitations Section (ALS) of the ICAs.⁵ The Federal Aviation Regulations generally require that operators of aircraft comply with the life limits stated in the ALS.⁶ Sometimes, the FAA permits extensions to these life-limits, but a request for an extension to a life-limit must be supported by adequate engineering data to show that the new life limit is appropriate.

The general operations regulations that apply to all aircraft require replacement of expired life-limited parts. They also require each owner or operator of an aircraft to keep certain aircraft records;⁷ and one set of records that must be kept is records of the current status of all life-limited parts.8 Current status means total time on the part. These records help to confirm that the life-limited parts are installed and removed appropriately. The FAA suggests that the records should include the name of the part, part number, serial number, date of installation, total time in service, date removed, and signature and certificate number of the person installing or removing the part.10

The question that always arises is, to what extent must the life-limited parts' records verify the current status information provided. Some people feel that there must be an audit trail for each life-limited part that permits an auditor to trace the part all the way back to its "birth." Such records would show all past owners of the part and would indicate all dates of installation and removal, with appropriate indications of then-current life-status. This additional information substantiates the recorded statements concerning the time that has accrued on the part. Although back-to-birth traceability of this sort is often not necessary for other parts, industry practice is for owners and operators to maintain back-to-birth traceability of this sort for all life-limited parts.

Back to Birth Traceability is Not Required

Does the law require back-to-birth traceability for life-limited parts? No. The FAA has stated that complete back-to-birth traceability for life-limited parts is not necessary. This means that air carriers and other persons are free to establish alternative systems for establishing and tracking the time on life-limited parts.

When an aircraft is being transferred, the transferring operator's certification that the current status of life-limited parts is true and correct can be acceptable as valid (without further substantiation) unless obvious discrepancies are apparent. Remember, though, that the owner or operator of an aircraft remains liable for assuring its airworthiness, and the FAA may ask the owner/operator to substantiate that its recordkeeping system is sufficiently robust to assure accurate records.¹²

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Back-to-Birth Traceability Can Support the Quality System

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The FAA could also ask for an audit trail tracing a life-limited part back to its origin in situations where the operator's records are incomplete or inadequate so that an accurate determination of the time elapsed on the life-limited part could not be made from them. ¹³

The FAA has said that life-limited parts records that do not contain complete back-to-birth traceability, but which are traceable to an air carrier's approved recordkeeping system, are generally acceptable. Piecemeal records such as stand alone parts tags that are not traceable to historical source documents may not be acceptable because they are not records from which the current status can be determined.

In some rare cases, the FAA is willing to remedy a record-keeping lapse by assuming that the part was in service for its maximum possible hours and cycles during the lapsed period. Generally, if the FAA does this, they also add a 'fudge factor' of +50% just to be sure that the hours and cycles on the life-limited parts reflect a number that could not possible represent an underestimate. This is only possible where the lapsed aircraft records fall within a verifiable time period upon which the estimates may be made. This is one example of a situation where records may be adequate to reflect current status, but they do not represent a pure back-to-birth traceability.

The Air Carrier's Recordkeeping System

Air carrier's today are more concerned than ever before about whether the parts they buy are demonstrably airworthy, and whether they can sell their own excess inventory. Some are changing the way they track and document parts to support better quality within their own systems and better quality throughout the entire aviation parts industry. In developing a comprehensive quality system, an air carrier must consider all of its safety, commercial, and legal goals and challenges.

For most air carriers, meeting the minimum safety standards of the regulations is not enough. This is one reason why some operators choose to require "back-to-birth" traceability as their own 'in-house' requirement for all parts. Related reasons include the fact that back-to-birth traceability provides an audit trail of verification documentation to support the air carrier's determination of the current status on the life-limited part.

Whether the records reflect back-tobirth traceability or some of other method acceptable to the FAA, it is often helpful for an owner/operator to maintain separate records for each life-limited part on the aircraft. If the records are kept separately for each such part, it makes it easier to keep the records with the part if the part is removed and subsequently sold or installed on another aircraft or engine. This is not a legal requirement, though, and the life-limited parts records may be incorporated as part of the records for the entire aircraft so long as they contain sufficient information to clearly establish the status of the life-limited parts installed.¹⁴

Applying the Lessons to an Inventory

What does this mean to a distributor of life-limited parts, particularly one who has surplus life-limited parts in inventory? It means that he should be certain that the documentation showing parts status is adequate to show current status, and also sufficiently robust to meet his customer's needs. If the

customer's operations specifications insist on back-to-birth traceability, then back-to-birth traceability will be required.

When receiving parts, the distributor should bear in mind the customer's requirements. If the customer does not require back-to-birth traceability, then the distributor should still review the paperwork associated with the lifelimited parts to make sure that these parts bear records of their current time in service, and that these records can be relied upon. An air carrier's airworthiness certification indicating the time in service based upon the air carrier's approved recordkeeping system is generally adequate; a commercial document that indicates time in service is generally considered inadequate. Examples of commercial document generally considered inadequate include: work orders, maintenance installation records, purchase requests, and sales receipts.

Sometimes, a distributor obtains lifelimited parts with no remaining service life, or whose service life can not be verified (so they must be treated as having no remaining service life). There is no legal requirement concerning the disposition of these parts; however industry practice tends to follow the FAA recommendations, which suggest segregating expired lifelimited parts in a secure area, and using caution to assure that such parts are mutilated so they will not be placed back in actual use.¹⁵

Endnotes

1. Other popular terms for life limits include: retirement times, service life limitations, parts retirement limitations, retirement life limits, and life limitations. *Maintenance Records*, FAA Advisory Circular

(Continued on page 8)

Life Limited Parts: Endnotes

(Continued from page 7) 43-9B, ¶ 15(a) (June 8, 1998).

- 2. <u>See</u> 14 C.F.R. § 91.403(c) (prohibiting the operation of an aircraft unless the aircraft complies with the mandatory replacement times).
- 3. *Maintenance Records*, FAA Advisory Circular 43-9B, ¶ 15(a) (June 8, 1998).
- 4. <u>E.g.</u>, 14 C.F.R. app'x H25.4 (requiring life limits to be published in the ICAs for transport category aircraft).
- 5. 14 C.F.R. § 21.31(c) (making the ALS an element of the approved type design).
- 6. 14 C.F.R. § 91.403(c).
- 7. 14 C.F.R. § 91.417; see also 14 C.F.R. §§ 121.380, 135.439.
- 8. 14 C.F.R. § 91.417(a)(2)(ii); see also 14 C.F.R. §§ 121.380(a)(2)(ii), 135.439(a)(2)(ii).
- 9. FAA Letter of Interpretation from Kenneth P. Quinn, FAA Chief Counsel to Senator Howell Heflin (D-AL) (June 1, 1992).
- 10. *Maintenance Records*, FAA Advisory Circular 43-9B, ¶ 15(b) (June 8, 1998).
- 11. Letter of Interpretation from Kenneth P. Quinn, FAA Chief Counsel to Senator Howell Heflin (D-AL) (June 1, 1992); see also Current Federal Aviation Administration (FAA) Policy Regarding Aircraft Records, FSAW 92-04 (stating "It is not intended that the regulations be interpreted to require historical records which are complete to the date of manufacture").
- 12. According to FAA policy, Part 135 operators must be able to verify the accumulated time in service of all life-limited items by providing records for the item showing each segment of its operation, in service since its manufacture. *Airworthiness Inspector's Handbook*, FAA Order 8300.10, Volume 3, Chapter 41, § 1 ¶ 9(C). This back-to-birth traceability requirement is not extended to other operators. <u>See id.</u> at Chapter 42 § 1 ¶ 7(C) (for Part 121 operators) and <u>id.</u> at Chapter 61 §

- 1¶ 7(C) (for Part 125 operators).
- 13. Letter of Interpretation from Kenneth P. Quinn, FAA Chief Counsel to Senator Howell Heflin (D-AL) (June 1, 1992).
- 14. <u>See Maintenance Records</u>, FAA Advisory Circular 43-9B, ¶ 15(b) (June 8, 1998).
- 15. <u>See</u> *Disposition of Unsalvageable Aircraft Parts and Materials*, Advisory Circular 21-38 (July 5, 1994) for complete recommendations. Note that ASA-100 follows these recommendations

Software Solutions

(Continued from page 5)

Corporate licenses for the YMARK2000 software are also available for sale from NSTL. The corporate version can be automated over a network, and also provides the user with greater technical support.

One apparent drawback to the NSTL software is that NSTL explicitly denies any warranties with respect to their software. This means that NSTL does not guarantee accuracy, adequacy or completeness of the program. Because of laws modifying the effect of Y2K warranties, NSTL's denial of warranty is not necessarily the obstacle it may appear to be. For more information on why Y2K warranties are not really warranties, see Y2K: All's Fair in Love and Warranty on page 4 in this issue.

FAA Recommendations for Reviewing Validity of Life-limited Parts Documentation from Foreign Sources (from FAA Order 8300.10)

- "(1) If the operator holds an FAA-approved FAR Part 129 maintenance program, that approval includes the records requirements of International Civil Aviation Organization (ICAO) Annex 6. A spot check of visible ADs and source records would indicate the quality of the operators records.
- (2) If the State of the operator is an ICAO signatory, the operator's records should meet ICAO requirements and an operator certified record of current status would be acceptable. However, the operator's ICAO compliance posture must be established.
- (3) A spot check of visible ADs would be indicative of the accuracy of those records.
- (4) A spot check of source records for the operator's system would indicate the quality of the operator's records.
- (5) The state of the operator's shop records would be indicative of the integrity of the operator's system.
 - (6) Significant errors or omissions in a records status report would indicate

New Y2K Law Modifies Warranty Liability

reading the software code associated with embedded systems and determining whether it is Y2K compliant. The device is known as a Delta-T Probe. Information on this company can be found on the internet. There is a hypertext link to WSP on The Update Report portion of ASA's web site.

New Law on Y2K Warranties

In its last act before turning its attention to the impeachment issue, Congress passed a new law that provides protection to companies that allege their products are Y2K compliant: *The Year 2000 Information and Readiness Disclosure Act*. The new law provides a small amount of legal immunity to companies that claim their products are Y2K compliant.

Under the terms of the new law, a company that states its product or service is Y2K compliant will generally enjoy some immunity from legal liability in the event that the statement is incorrect. The protection of the law means that a customer cannot bring your Y2K statement up in court, and the customer cannot claim that the Y2K statement was a warranty and then sue you for breach if the part was not Y2K compliant.

Like any legal protection, this one is riddled with loopholes, although most distributors will probably agree that the loopholes are well-placed. Most importantly, this law does not protect false and misleading statements made by someone who knows that they were false; nor does it protect a Y2K guarantee made with reckless disregard for its accuracy.

If company XYZ claims that the parts it distributes are Y2K compliant, and they turn out to be non-compliant, then a purchaser cannot sue company XYZ

for a breach of warranty unless he can prove one of these situations:

- 1) XYZ knew that the parts were not Y2K compliant when it claimed they were;
- 2) XYZ made the Y2K statement with the actual intent to deceive; or
- 3) XYZ made the Y2K statement with a reckless disregard for the truth (e.g. XYZ had no basis for making the Y2K statement); or
- 4) XYZ republished someone else's statement (like a manufacturer's statement) without disclosing that XYZ is not the source of the Y2K statement, and that XYZ has not verified the Y2K compliance statement.

Note that someone who buys parts is not precluded from suing for negligence; however the buyer must prove that the seller was negligent. The Y2K law provides that negligence in Y2K cases will be judged according to ordinary standards of care, and not according to any more stringent standard.

Cry 'Havoc' and Let Slip the Dogs of Warranty

What is the best way to use this new law? If you are making a Y2K compliance statement, then make sure that you have a reasonable basis for making the statement, and maintain documentation in your files demonstrating this reasonable basis. If you are republishing a manufacturer's Y2K compliance statement, or anyone else's Y2K compliance statement, then identify the original source of the information on which you rely and indicate in your own statement that your company has not verified this information through independent testing.

In buying products that bear Y2K

compliance statements, understand that the Y2K compliance statement is limited to the maker's knowledge, and that unusual and unforeseen circumstances may make any warranties given null and void. Also remember that the warranty on software or other products claiming to be able to help you assure Y2K compliance may be worthless if the advertising for the product claims the statements are made subject to the Y2K Information and Readiness Disclosure Act.

The new law provides other guarantees and interpretations, so please read it. A copy is available on the ASA website. For a complete analysis of the way the law affects your particular business, see your general counsel or local attorney. Bear in mind that this law may not prevent people from filing lawsuits against your company, but it may help you win them.

The Glueckler Award Call for Nominations

The Edward J. Glueckler Award is presented annually in recognition of outstanding commitment, dedication and contribution to the Airline Suppliers Association and to the aviation industry. ASA is currently seeking nominations. Complete information is available on the internet at:

http://www.airlinesuppliers.com/ glueckler.html

Nominations are due to ASA by March 31, 1999.

It's Time to Review Your Safety Programs

Try this in your facility. Find the Material Safety Data Sheets (MSDS) and determine if they have a quarter inch of dust on the top of them. I go into many organizations located all over the country. They all say that they have a safety program that meets all the regulations. I ask questions like: who in the organization conveys to new employees the basic understanding of how to read chemical labels; how is the Hazard Communication Standard met; and are the MSDS reflective of the currently used chemicals? The answers tell me that we need a review of some of the basics. When the "Right to Know" programs were initiated everyone seemed to be up to speed, let's stay that way. By the way, when was the last time you had a good house cleaning of your "hazardous material storage area?" I hope that you are not surprised!

It is every employer's responsibility to teach employees about the Hazard Communication Standard. The Hazard Communication Standard is a uniform standard to communicate workplace hazards. It clearly spells out what specific information has to be communicated and how that information must be communicated. The Hazard Communications Standard is an OSHA (Occupational Health and Safety Administration) requirement to cover handling of workplace chemicals. It addresses both health and safety issues. The standard is a "Right to Know" requirement for potential chemical hazards. It says that everyone handling chemicals needs to know how to protect themselves. This is a Federal standard; however, there may also be state and local "Right to Know" laws that you must meet.

We are often exposed to chemicals. Improper handling of some of these chemicals is dangerous and could result in illness, injury or incapacitation. The effects may be either external like burns or rashes or internal resulting in nausea or organ damage. Chemicals generally enter the body through the skin, nose, mouth or the eyes.

Have you reviewed your written program lately? The Hazard Communication Standard requires employers to develop, implement and continuously maintain a documented program for the instruction of employers. The written program has to list all the hazardous chemicals used in each specific work area and how to handle them. There has to be information on how to read and understand MSDS and chemical labels. Also, it must cover chemicals moved in pipes. The written methods program must include both how to observe and detect a release or presence of hazardous chemicals in the workplace. The last element of the written program is to provide for training of new employees and a means to inform non-employees, either visitors or vendors, about the specific hazardous chemicals handled in each work area.

When any chemical is made or distributed its potential hazards must be determined. Manufacturers, importers and distributors are required by law to assess the extent of this potential hazard and make this information available on MSDS. For each chemical used in the work place it is the employer's task to make readily available the MSDS and to tell everyone where the MSDS are in your facility. Anyone using a chemical has to also take responsibility for knowing how to read labels, understand MSDS, handle chemicals with all necessary precautions, and respond if a particular chemical becomes spilt or contacts someone. The MSDS tell how the chemical would enter the body. They also give emergency first aid procedures to cover symptoms such as faintness, dizziness, headache, and irregular heart beat.

There is no specific format for the MSDS but they serve as the vehicle to inform every one of safety procedures, emergency response options, and chemical components and dangers. The MSDS will generally have the chemical; its trade name and often the formula. Addresses and emergency numbers are provided as well as the chemical identification of ingredients with exposure limits listed as either ACGIH-TLV (American Conference of Government Industrial Hygienists -Threshold Limit Value) or OSHA-PEL (OSHA - Permissible Exposure Limit). Physical data includes: percentage of volatile components, odor, appearance, boiling point, specific gravity, vapor pressure and density, evaporation rate, and solubility in water. Also included is information regarding the stability of the chemical, how it reacts and the extent of reaction with other chemicals and compounds, along with things to avoid to prevent an unexpected and unwanted chemical reaction.

MSDS also include information on fire prevention and fighting. Explosion and fire data includes: fire extinguishers to use and their media, the temperature at which the chemical ignites (flash point), any unusual fire hazards and special fire fighting procedures, any unusual or special dangers, and chemical flammability limits by volume. Any spill or leak procedures or processes will be identified. All equipment needed for clean up and any special precautions, including methods for disposal, will be clearly defined. Also, any special precautions for handling will be listed: safe han-

(Continued on page 12)

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Find Source Documents on the Internet

Interested in one of the subjects addressed in this issue? Want to find out more? The source documents underlying many of the articles in this issue are available on the internet. Just set your browser for http://www.airlinesuppliers.com/7tur.html#1. This address features an index to the articles which will bring you to the original documents on the world wide web just by clicking on the description.

UPCOMIN	* = ASA will be speaking there
March 10-11	Central & S. America Aircraft Tech. & Maint. Conf., Miami, FL. Call 44 171 931 7072 for details.
March 16	* ASA One-Day Workshop, Los Angeles, CA. <u>Details on page 3.</u>
March 16-17	Speednews Aviation Industry Suppliers Conference, Los Angeles, CA. Call (310) 203-9352.
March 18	* ASA One-Day Workshop, Seattle, WA. <u>Details on page 3.</u>
March 31	* ASA One-Day Workshop, Newark, NJ. Details on page 3.
April 6	* ASA One-Day Workshop, Fort Lauderdale, FL. Details on page 3.
April 6-8	MRO '99 , Atlanta, GA. Call (212) 904-3334 for details.
April 7	* ASA One-Day Workshop, Miami, FL. Details on page 3.
April 14-15	Purchasing and Aviation Suppliers Conference, Brussels, Belgium. Call 44 171 931 7072 for details.
April 18-21	CCMA, Puerto Vallarta, Mexico. For information send a fax to Aurore Rey at (33) 561 93 36 64.
April 20-22	* NATA/PAMA AS ³ . Phoenix, AZ. For information, call Joanne Stahling of PAMA at (202) 216-2378.
April 22	* ASA One-Day Workshop, Phoenix, AZ. <u>Details on page 3.</u>
April 23-25	ARSA Annual Conference, Washington, DC. Call Sarah MacLeod at (703) 739-9513 for details.
April 28	* ASA One-Day Workshop, Chicago, IL. Details on page 3.
April 30	* ASA One-Day Workshop, Dallas, TX. Details on page 3.
May 2-4	ATA Engineering, Maintenance & Material Forum, Memphis. TN. Call (202) 626-4081.
May 10-12	Regional Aircraft Association Annual Convention, Phoenix, AZ. Call (202) 419-5113.
May 12	* ASA One-Day Workshop, Atlanta, GA. Details on page 3.
July 18-20	* ASA Annual Conference, Marco Island, FL. More details will be available in future issues.
Sept. 12-14	Aircraft Valuation and Asset Management, Washington, DC. Contact Carol Everest at 44 1892 65
	5006 for more details.
Oct. 24-26	Speednews Regional & Corporate Suppliers Conference, Rancho Mirage, CA. Call (310) 203-9352.

GUEST HAZ-MAT ARTICLE by Fred Workley

It's Time to Review Your Safety Programs

(Continued from page 10)

dling of hazardous chemicals may require protective clothing, gloves, respirators, eye protection, and ventilation requirements; some chemicals require special storage precautions like refrigeration or explosion-proof cabinets.

The Hazard Communications Standard also requires that all containers that are used in a work area be labeled with special precautions identified by either words or descriptive symbols. The one exception is a portable container for use immediately by the person transferring the chemical. Everyone must have training in reading the

labels and understand what they mean. The label should identify the chemical, hazard severity, health hazards and any needed protective clothing or equipment. The most common labels are the color bar type label and the NFPA type panel label (National Fire Protection Agency).

Understanding the meaning of labels can avoid serious accidents. Investigate all chemicals that lack labels. Always follow the directions and precautions to ensure safe handling of all chemicals. Don't mix chemicals that you have not positively identified. The end result may be a big "surprise." Following instructions and warnings

will avoid surprises that could ruin you day. Everyone has the "Right to Know."

Fred Workley is an Environmental Consultant to the Aviation Industry. Before founding Workley Aircraft & Maintenance, Inc., he handled a variety of important regulatory issues for the National Air Transport Association. He can be reached in Manassas, Virginia at (703) 365-8132.