

AGING TRANSPORT SYSTEMS RULEMAKING ADVISORY COMMITTEE

**OFFICE OF THE CHAIRMAN
KENT V. HOLLINGER
10309 DUNN MEADOW ROAD
VIENNA, VA 22182-1325
(703) 757-3831**

November 27, 2002

Mr. Nicholas A. Sabatini
Associate Administrator
Regulation and Certification AVR-1
Federal Aviation Administration
Room 1000 West
800 Independence Ave. SW
Washington, DC 20591

Dear Mr. Sabatini:

There has been much discussion surrounding the implementation plan for incorporation of an Enhanced Zonal Analysis Program (EZAP) into air carrier maintenance programs. ATSRAC directed the membership of Harmonization Working Group #9 to include three (3) alternative recommended compliance plans in their Final Report, based upon discussion at our July 2002 meeting. The Committee preferred the third plan as described on page 31 of the Final Report.

Since that time, internal FAA EZAP compliance proposals have been presented that depart significantly from the submitted recommendations. ATSRAC prefers that airlines would incorporate the enhanced inspections at the first regularly scheduled maintenance opportunity for each aircraft. In many cases, the FAA presented proposals allow for longer compliance schedules than what has already been committed to by industry, while forcing special maintenance visits for other cases. ATSRAC does not agree with this approach.

The ATSRAC charter specifies that the purpose of the Committee is to provide rulemaking advice and recommendations to the Administrator with respect to aging transport system issues. From the very start of its activities, ATSRAC has striven to formulate data driven recommendations and we would wish to see the final EZAP implementation plan also take full consideration of the available data.

Specifically, ATSRAC recommends that the FAA:

- Utilize a data driven overall Risk Mitigation Strategy (attachment 1)
- Allow for an industry typical timeline for TC/STC Holders to develop EZAP tasks (attachment 2)
- Derive an Airline Operator Implementation Timeline using industry data to accomplish a cost/benefit analysis (attachment 3)

While EZAP tasks are an important element in the overall wiring system risk reduction strategy, it is the view of ATSRAC that the overall risk will still be significantly reduced by the other risk mitigation strategies (e.g. new AD's, SFAR 88, etc.) identified in the

attachment. Also, it is important to note that data collected from ATSRAC WG#1 and WG#10 found no immediate fleet-wide safety of flight concerns on 120 aircraft inspected.

Boeing and Airbus have advised that, based on extensive experience in developing maintenance programs, developing an EZAP-based maintenance program on all affected airplane models cannot be accomplished in less than 2 years. Any implementation plan must recognize this constraint.

In summary, the Committee submits that the need to accelerate the implementation of tasks beyond ATSRAC recommendations is not supported by the data. We further assert that the recommendations of the Committee are well reasoned, technically justified, and based upon risk mitigation, in-service data and experience. The ATSRAC membership would appreciate an opportunity to hear FAA feedback on these recommendations at our January 22-23, 2003 meeting in Savannah, Georgia.

Sincerely,

Kent V. Hollinger
ATSRAC Chairman

Attachments

Cc: James Ballough
Brenda Courtney

John Hickey
Charles Huber

Risk Mitigation Strategy

ATSRAC has adopted a data driven approach to support its decision making. Similarly, FAA safety decisions should utilize Risk Management supported by service history data. The Risk Management process accepts that risk avoidance is untenable and promotes the definition of the overall safety issue in order to implement an effective overall strategy. Actions taken to reduce the occurrence of the hazard decrease the effective exposure or hazard occurrence probabilities. Reduction in hazard occurrence probabilities results in a reduction of risk and improvement in wiring safety.

The FAA should review service history data for use in the Risk Analysis portion of Risk Management considering the hazard, hazard severity and probability of occurrence. Sources for the data include, but are not limited to, FAA NASDAC AIDS database, ICAO ADREP database and reports, and FAA/TCCA Service Difficulty Reports.

A review of service history data would support the ATSRAC view that accelerating the HWG#9 EZAP-derived Cockpit, Electrical Equipment and Power Feeder (CEEPF) tasks for older large transport airplanes significantly mitigates risk. This falls in line with the findings of the Intrusive Inspection Report. Additional risk mitigation strategies currently being implemented include: The issuance of 24 fleet specific ADs; Establishment of a Wiring Awareness Training Program; SFAR 88 reviews, more robust CASS programs in place from increased FAA oversight; OAM issuance of service information to the carriers to enhance maintenance programs of wiring; and unilateral operator maintenance programs changes concerning wiring.

As noted in the cover letter, it is ATSRAC's view that the hazard probabilities, and thereby the overall risk, will be significantly reduced with the current risk mitigation strategies.

TC/STC Holders Timeline to Develop EWIS (Electrical Wiring Interconnect Systems) ICAW (Instructions for Continuing Airworthiness) Tasks

The FAA should be cognizant of the following when determining the appropriate timeline:

- a) An internal specialist core team will have to be established to insure consistent application of EZAP across all aircraft programs of each TC/STC holder.
- b) WGs must include airline as well as OAM representatives. The availability of qualified members and scheduling constraints will have to be considered.
- c) The WGs will have to assess the condition and configuration of at least two aircraft of each fleet type from different operations undergoing major check. Aircraft undergoing heavy checks may not be readily available in convenient locations, and last minute changes to schedule are not uncommon
- d) The Industry Steering Committee will need to form a WG, identify policy and procedures, and, review and approve the WG proposal upon completion.
- e) Following ISC approval the OAM will require time to prepare their submission to the FAA.
- f) There is a standard 90-day period that the MRB has to review and approve the submission.
- g) Following MRB approval, the OAM will require time to finalize, publish and distribute the revised programs to the air carriers.
- h) Development of EZAP will take much longer on those large transport airplane models not currently assessed under MSG-3.
- i) Operators who are in operation of STCs no longer supported by the STC owner will by default have to accomplish an EZAP analysis on each STC. This, as is being learned in SFAR88 is a tremendous impact on operators to examine the design and determine effective EZAP tasks.

ATSRAC relied heavily on Airbus and Boeing members to provide expertise in maintenance program development. That expertise agreed that developing an EZAP-based maintenance program on all affected airplane models cannot be accomplished in less than two years.

Considerations of Initial EZAP Task Incorporation Outside of Established Operator Check Intervals

An ATA (Air Transport Association) operator caucus held prior to our October 2002 meeting supported incorporation of EZAP into operator maintenance programs in accordance with ATSRAC recommendations. However, airlines indicated concern over the economics involved with an accelerated schedule. Additionally, ATSRAC had quickly estimated that 40% of the regulated fleet would have to be scheduled in ahead of the normal maintenance interval to meet FAA proposed EZAP implementation timelines. To determine a reasonable and effective compliance timeline, the FAA must consider the following:

- a) Using the CPCP (Corrosion Prevention and Control Program) implementation timeline as a model for EZAP. Critical corrosion prone areas were implemented sooner in this program, leaving less critical areas to be implemented within the normal access opportunities of each operator's maintenance program.
- b) Rulemaking should require operators to start EZAP within an implementation period, but allow operators to implement within their existing maintenance programs where possible.
- c) Utilize man-hours for inspection, cleaning and repairs from the one operator who has accomplished a prototype EZAP analysis. A second operator is also interested in providing man-hour estimates. These estimates should provide the core operator cost data needed for a cost/benefit analysis.
- d) Provide side-by-side comparison of costs/benefits associated with accelerated EZAP implementation (tasks within 3 years) against implementation into a current maintenance program access schedule. The first major inspection for many new aircraft will occur no later than 6 years (4C interval or first structural visit).

We strongly encourage examination of the data above in determining an effective implementation timeline for operator EZAP task accomplishment.