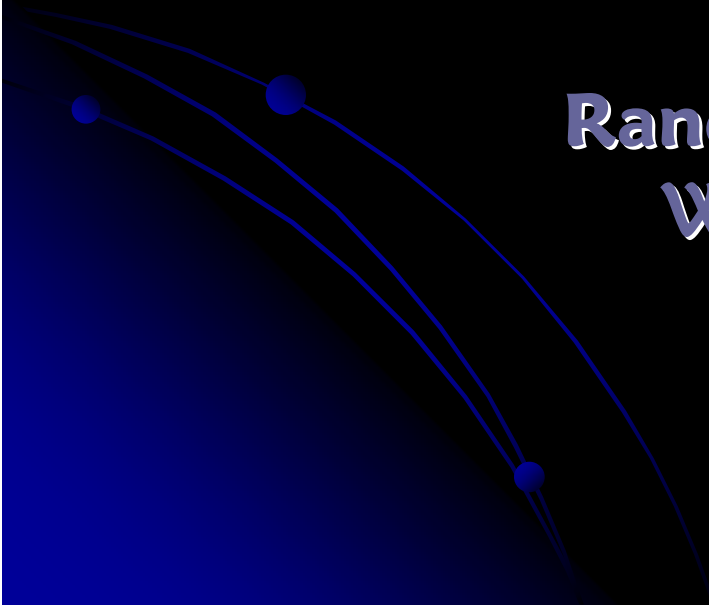


**Interim Report to ATSRAC
EAPAS Rulemaking
Advisory Committee HWG
(HWG 11)**

**Randy Pope, Chairman
Washington, D.C.
July 7, 2004**



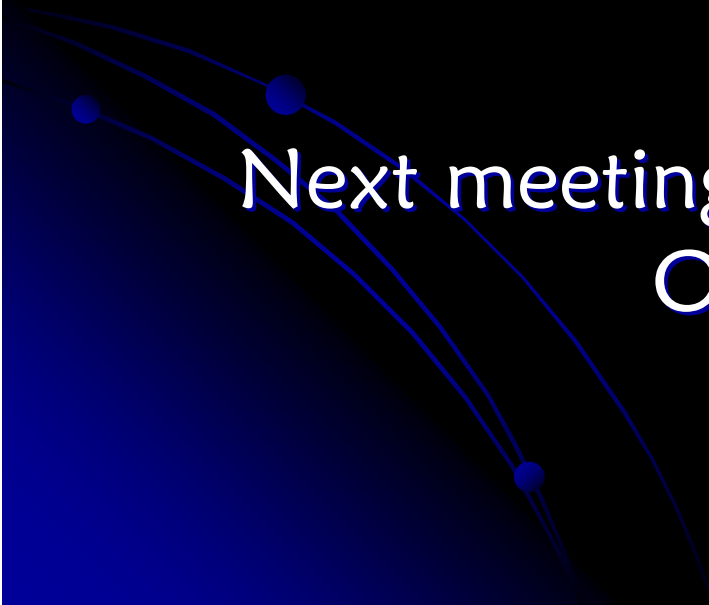
Meetings To-Date

Newark, New Jersey, November 2003

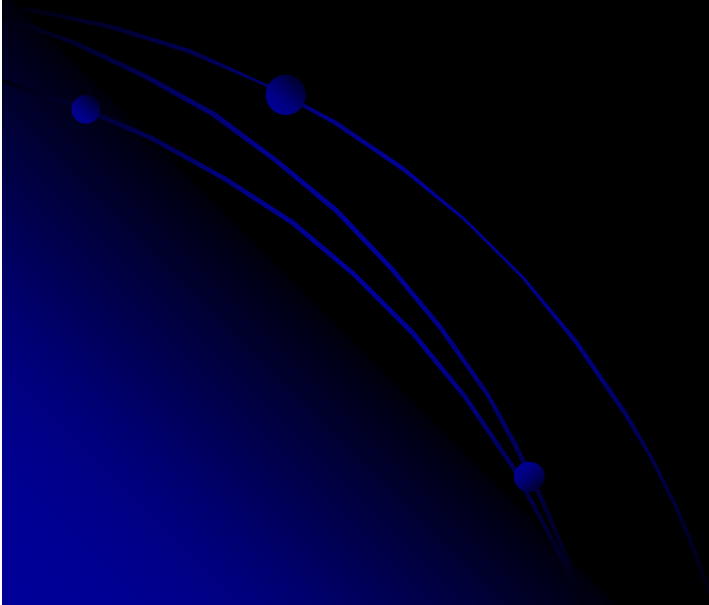
Seattle, Washington, April 2004

Washington D.C., June 2004

Next meeting is tentatively scheduled for
October 5-7, 2004



Current HWG 11 Tasks



Task 11.1.1 – due 10/31/04

In accordance with the changes to an air carriers maintenance program as defined in the ATSRAC Task 9 Final Report, dated July 15, 2002, please identify the minimum set of training requirements to support these changes. The minimum set of training requirements should be based on the recommendations as identified in the ATSRAC Task 8 Final Report, dated August 2, 2002

Task 11.1.2 - due 1/31/05

Provide recommendations that will facilitate voluntary implementation of the remaining training recommendations of the ATSRAC Task 8 Final Report not implicitly mandated as described under Task 11.1. Consider the following items:

- Method for documentation and implementation into an air carriers training program
- Method for documentation and implementation into a repair station training program
- Regulatory Authority support needed
- Other programs where implementation can be concurrent
- Identification of metrics and process to measure success
- Schedule for implementation
- Other items that ATSRAC determines necessary

Task 11.2 Introduction

In cases where STCs impact the wiring beyond the TC, maintenance tasks identified through application of EZAP on a type design may no longer be adequate to assess the health of the wiring systems in a zone. Therefore, an air carrier may need to make adjustments to their maintenance program beyond those identified by the TC holder.

Task 11.2 – due 7/31/04

Development of adequate maintenance tasks for an air carrier may necessitate analysis of the wiring systems installed by the way of an STC. STC holders may not be required to provide the results of an EZAP analysis, or similar, on their STCs.

- Therefore, provide a recommendation that would
- facilitate development of appropriate maintenance tasks associated with STC installations and how an air carrier might implement them into its maintenance program.

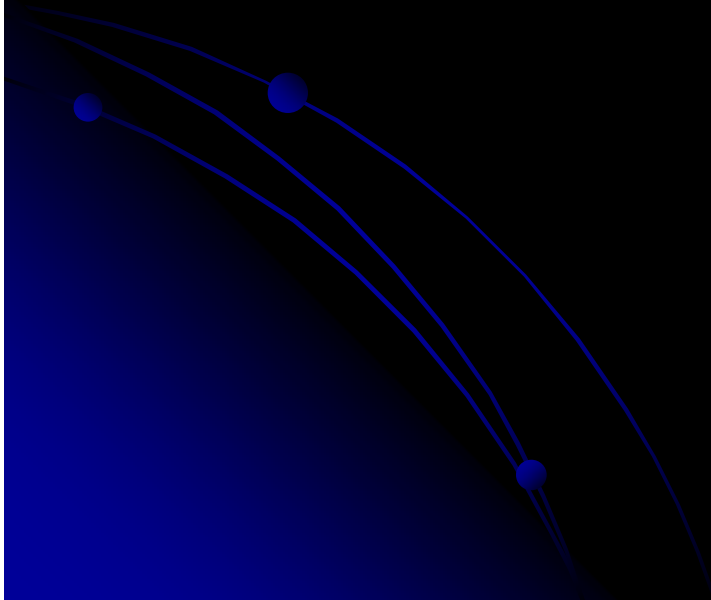
Task 11.2 continued

To complete this task please consider the following items:

- Identification of types or categories of STCs that would require additional or revised inspections or intervals as compared to those developed by the type design holder
- Method to integrate STC related maintenance and inspection tasks with the TC holder developed tasks
- Most appropriate means to include Passenger to Freighter Conversion STCs in accordance with the intent of the ATSRAC recommendations
- Other items that ATSRAC determines necessary

HWG 11

Recommendations



Task 11.1.1: HWG 11 Recommendation 1

HWG 11 reviewed the suggested minimum training requirements based on the recommendation of HWG 8 and developed a chart to identify the minimum set of training requirements for personnel performing maintenance and inspection on EWIS. Refer to Appendix A of the interim report for the chart.

Target Group 1:

Personnel performing EWIS maintenance

Target Group 2:

Personnel performing maintenance inspections on EWIS

Task 11.1.1: Recommendation 1, continued

These training requirements should be identified as the minimum set of training requirements for personnel performing maintenance and inspection on aircraft EWIS (Target Groups 1 and 2) in any advisory material produce by the FAA to support the current EAPAS rulemaking effort.

Task 11.1.2: HWG 11 Recommendation 2

...Since there are no existing regulatory requirements to train Target Groups 3 through 8, the members of HWG 11, recommends that training be made available to Targeted Groups 3 through 8 through voluntary measures. The members believe that training the individuals in these groups would greatly enhance the knowledge of the importance of EWIS safety in the overall safe operation of aircraft.

- Although not all targeted groups are directly involved in the maintenance of EWIS, they have the potential to have an adverse impact on EWIS

Refer to Appendix A of the interim report for the chart

Task 11.1.2: Recommendation 2, continued

Target group 3: Personnel performing electrical/avionic engineering on in service aircraft

Target group 4: Personnel performing general maintenance/inspections not involving electrical wiring interconnection systems maintenance. (LRU change is not considered wire maintenance)

Target group 5: Personnel performing other engineering or planning work on in service aircraft

Target group 6: Other service staff with duties in proximity to electrical wiring interconnection systems.

Target group 7: Flight Deck Crew

Target group 8: Cabin Crew

Task 11.1.2: Recommendation 2, continued

The following are considerations for operators to voluntarily provide the recommended minimum set of training outlined in the table that follows this discussion.

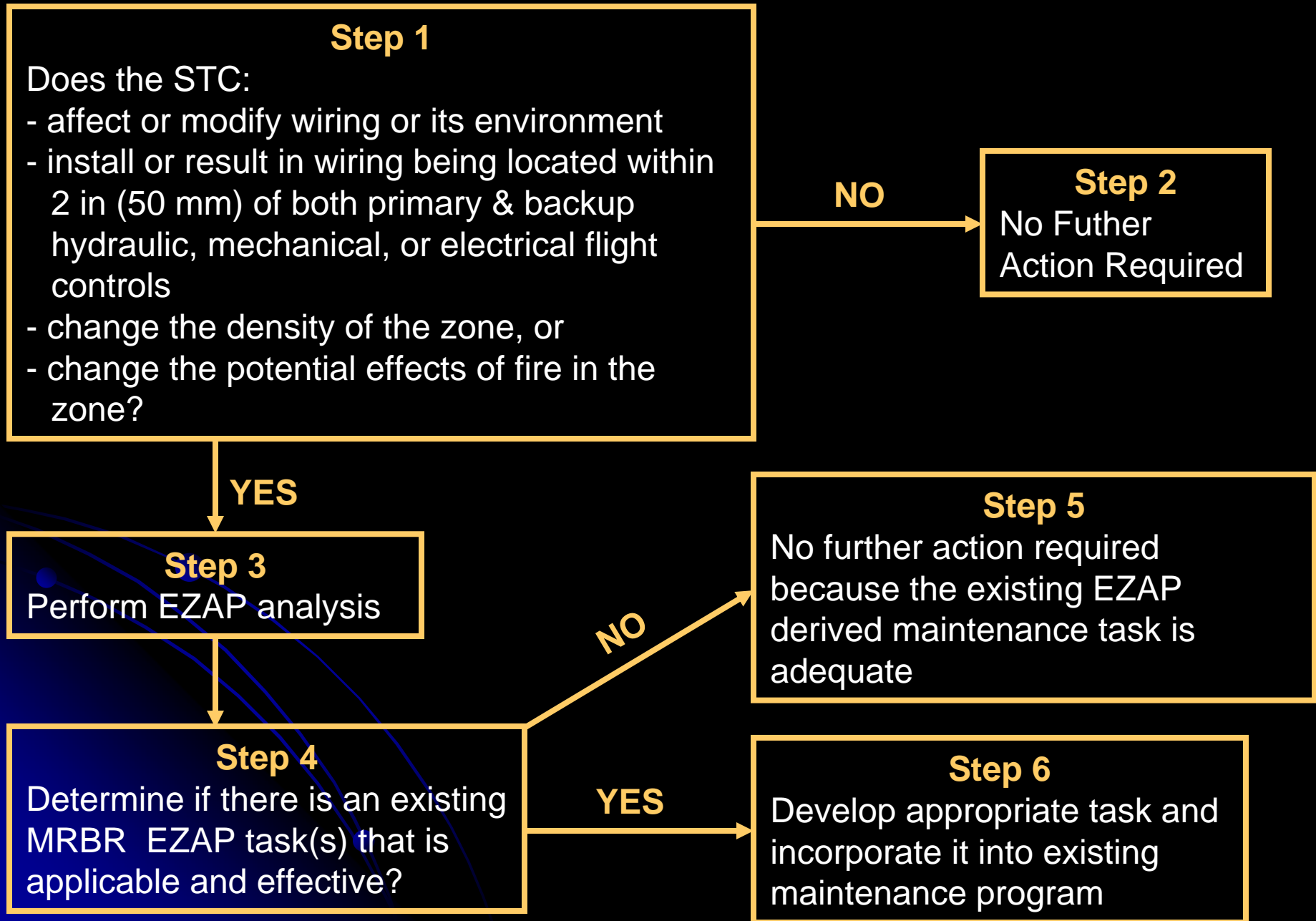
- Improves: Safety, Reliability, Availability and Cost
- Regulatory economics
- Saves face
- Public perception and political pressure
- May prevent future mandatory action
- Raises awareness – to readily detect and report obvious/potential EWIS maintenance issues
- Avoids unintended damage to EWIS by these groups as they go about their business
- Engineers and Planners could use newly obtained EWIS knowledge to improve documentation for the house keeping and cautionary notes
- Industry recognition programs (FAA's AMT, and other industry related awards programs) for outstanding EWIS maintenance or training practices
- An EWIS awareness video – Posters [e.g., FOD, Scribe (campaigns)]
- Executive management pressure at all levels – Regulatory, Operator, MRO

Task 11.2: HWG 11 Recommendation 3

Operators and STC holders should apply a simple process that could be applied to existing STCs to determine if they have any impact on the baseline EZAP performed by the airplane manufacturer.

The data gathered by the operators and STC holders under compliance with SFAR 88 could be used to identify which existing STCs impacted airplane wiring and then a three step process would be applied to make a determination as to the impact of the STC on the existing EZAP.

The Process for HWG 11 Recommendation 3



Task 11.2: Recommendation 3, continued

Thoughts on How to impact voluntary compliance

The following points should be considered as possible actions that could be taken to help achieve voluntary compliance in completing EZAP analysis on existing STCs.

- Use of “first cut’ logic...simplified process to determine applicability. Use of data gathered from compliance with SFAR 88 will allow operators and STC holders to quickly identify those STCs that have a potential affect on wiring or those that modify or add wiring.
- FAA management (AVR-1 or above) should meet with top management of air carriers’ to encourage them to review STCs for their potential impact on the TC holder developed EZAP maintenance tasks.
- Although economic considerations do not always support voluntary compliance of some initiatives, it is the right thing to do.

Task 11.2: Recommendation 3, continued

Thoughts on How to impact voluntary compliance, continued

- Operators should realize reliability improvements by ensuring that all EZAP maintenance tasks are properly identified and incorporated into their maintenance program.
- Operators could encourage STC holders to work with them to complete this task because the STC holders' ability to market new STC to the operators could depend on their willingness to participate.
- STCs that have an EZAP completed could be a potential marketing tool for the STC holders, thus it could be a potential revenue source.

Task 11.2: HWG 11 Recommendation 4

ATSRAC should ask for volunteers to use the process described in recommendation 3 in order to validate the process.