

ATSRAC WSHWG Task 6 Comments and Suggestions

The Boeing Company

October 23, 2002

Boeing Comments

- Boeing has been an active leader in supporting industry and ATSRAC safety enhancement activities
- Boeing agrees on the safety benefits of paying the right attention to wiring through all phases of an airplane service life

Boeing Comments

- We are in agreement with the ATSRAC desired end state:
 - Airplane wiring that contributes to the safety of airplanes throughout their service life.
- We also have agreement with wanting the changes being proposed to be:
 - Of the highest quality
 - Quick to implement
 - Efficient in use of resources
 - Effective as a change mechanism
 - Able to stand the test of time with stability.

Boeing Comments

- ATSRAC field investigation activities found areas for improvement with airplane wire in the following general classifications:
 - Separation (Insufficient regulations)
 - Marking (Insufficient regulations)
 - Interaction (Compliance issues)

Boeing Understanding

- To address the areas of insufficient regulations, the Task 6 Working Group developed new rules that will improve future designs for both TC and STC applicants.
 - Separation (25.1709)
 - Marking (25.1711)
- To address the issues of inadequate and inconsistent compliance, the Task 6 Working Group developed a means for better raising the attention of applicants and regulators to existing regulations.
 - The means developed was constrained by the ATSRAC tasking to be based on rules and associated guidance
 - The unanticipated result of this constraint caused an inappropriate and incomplete recommendation

Boeing Comments

- The Task 6 Working Group references many existing FAR paragraphs in creating a new 14 CFR Part 25.1700 series section.
 - New rules and advisory material must go through the long NPRM and harmonization cycle, competing for processing priority
 - The collection of existing and slightly modified rules into a new section will not cure inadequate and inconsistent compliance
 - Duplicate rules create complexity and confusion and also tend to drift apart with use resulting in:
 - Conflicting Interpretations
 - Diverging Requirements
 - Gaps in coverage

Boeing Recommendations

- We support the adoption of new rules covering requirements not currently in the regulations
 - 25.1709 Wire Separation
 - 25.1711 Part Marking

Boeing Recommendations

- We recommend the FAA immediately release a Policy Memo that identifies all the existing 14 CFR Part 25 paragraphs that have applicability to wire. This will raise awareness among the applicants and regulators of the extent and complexity of compliance required in assuring a safe wiring installation.
- We recommend that pursuit of the remainder of 14 CFR Part 25.1700 (except for .1709 and .1711) be stopped. Continuing this effort will slow down the adoption of the two excepted paragraphs and cause confusion and dilution of compliance efforts as application of similar and identical, but separate, regulations drift apart with use.

Boeing Recommendations

- We support Recommendation (F6) asking that appropriate training be developed to assist applicants and regulators in applying properly and consistently the necessary standardized safety assessments and highlight this expectation by releasing an FAA Policy Memo in the near term.

Boeing Recommendations Summary

- Adopt Rules
 - 25.1709 Wire Separation
 - 25.1711 Part Marking
- Immediately issue an FAA Policy Memo identifying all existing regulations applicable to wire.
- Halt efforts to pursue reorganizing other sections of 14 CFR Part 25.1700.
- Quickly institute regulatory and industry compliance education programs.