Airworthiness Group

November 16, 2007

Direction Forward

- Organization Concepts
  - Coordinator selection
  - Initiative Champions with support team
- Roles
  - Facilitator
    - Issues identification
    - Criteria for selection
  - Implementer
    - Select two finite airworthiness initiatives
    - Apply criteria for selection
  - Process
    - Establish process for create universal, acceptable standards

Issues Identification – First Cut

Candidate List

- Update AC 20-107A: Composite Aircraft Structure Certification and Compliance (Larry Ilcewicz)
- Document guidelines showing the steps involved in the substantiation of standards (design, materials, processes) for composite repair, including examples (Team TBD)
  - Report on examples where OEM have used such steps to adopt SAE CACRC standards for specific parts
  - Implement scenarios with the objective of providing consistency in substantiating a composite repair outside the OEM feedback loop (Epperson)

Criteria Concepts (Eric Chesmar)

- Determine obstacles to implementation at OEMs, and facilitate process for removing obstacles
- Target biggest airline costs, incorporating past CACRC efforts as a way of prioritizing
- Modify long term vision
  - Was: Evolve composites' technology practices into a model similar to that of the metal industry
  - Suggested: Evolve composites' technology practices into a model similar to that of the metal industry **through implementation and acceptance of standards**

Discussion

- Larry I. will propagate AC 20-107A information at Airworthiness Task Group
  - This AC is at a very high level, and doesn't have enough detail to drive implementation

Discussion on AC 20-107A

- ATG has already been formed.
  - Lester and Larry to lead this from FAA
  - This group will meet off-line to avoid encumbering CACRC general meetings
  - New AC’s intention will be to show how SAE material specs have been adopted to achieve increased standardization.

Discussion on Substantiation (Implementation)

- Document guidelines showing the steps involved in the substantiation of standards (design, materials, processes) for composite repair, including examples (Team TBD)
  - This is the missing ingredient on incorporation of a Material Spec.
- What are the technical and economic considerations that are road-blocking substantiation?
  - ECONOMIC: Determine where is the business cast the strongest, then look to those areas for support.
- Create a white paper that describes substantiation …
  - What boxes have you checked?
  - What are the line items associated with these boxes?
  - [Action Item – All] Compose examples of what substantiation might look like
  - For Example: A test plan will be provided to FAA for approval [Goodrich]
    - The plan is to use the AMS material spec, but its important that the AMS remains viable.
- Report on examples where OEM have used such steps to adopt SAE CACRC standards for specific parts
- Implement scenarios with the objective of providing consistency in substantiating a composite repair outside the OEM feedback loop (Epperson)