SUMMARY SHEET
Airworthiness Directive Implementation Aviation Rulemaking Committee
Service Information Working Group

Primary Report and Recommendation	AD CRT (Task 2), Recommendation No. 4: (T2, R4, B2,) Streamline SB Development
Secondary Report and Recommendation	None.
Assigned Members	Chip Amidon (Boeing) Chris Armes (Learjet) Eduardo Cerdiera (Embraer) Serge Cheyrouze (Airbus) Ken Hurley (Bombardier)
Links to Other Working Groups	None
Date to Sent to ARC	11/23/10
Date of ARC Approval	2/15/11

WORKING GROUP REVIEW OF ISSUE/PROBLEM

The working group reviewed the AD_CRT Task 2 Report Finding No. 4 and AD CRT Task 2 Report Recommendation No. 4 Bullet 2 which states: *OEMs should streamline service instruction development and revision processes to expedite release to air carriers.*

The working group consists of representatives from all five Design Approval Holders (DAH) Boeing, Airbus, Embraer, Bombardier and LearJet). The consensus amongst the group was that there was no singular or set of process improvements that could be implemented with each DAH internal process and in parallel through their primary regulatory authority's approval process. It was agreed that each DAH continuously investigates opportunities for improvement.

However, the group did share existing process improvement projects that enhanced (or has the potential to enhance) the service instruction development. Therefore, each DAH will review these projects and identify opportunities to incorporate them within their organization.

One function of the Continued Operation Safety Process (COSP -Boeing) or Continued Airworthiness Review Board (CARB – Bombardier and Learjet) is to establish a date for the availability of service information with the regulatory authority. It is the responsibility of the DAH to meet or exceed this date. To provide better service to their customers, the five DAHs on the Service Information Working Group (SIWG) continuously look for opportunities to improve their delivery dates of service instructions.

The group also noted that while service information (SI) is the final deliverable to customers, the process by which SI is developed involves inputs and interim deliverables from many departments/offices in the DAH's organization. Therefore it is not possible to identify specific improvements that would apply to all DAHs.

REGULATIONS AND GUIDANCE IDENTIFIED FOR REVIEW

Since the recommendation addressed in this Summary Sheet was focused on streamlining the development and revision processes of service instructions to expedite release of those service instructions to air carriers, the SIWG did not specifically review the FAA regulations associated with design change approval. Members of the SIWG understand and agree that when a design change is instituted by a DAH, the DAH must evaluate whether that action will necessitate a change to applicable service instructions. The regulations that control design approval in the United States are contained in 14 CFR part 21, Subpart D. In addition, part 26 was developed specifically to cover those instances where the FAA would require changes, additions or enhancements to existing Instructions for Continued Airworthiness (ICA). As noted by ARC members, whenever a design change is instituted by a DAH, it must evaluate whether that action will necessitate a change in service instructions.

WORKING GROUP PROPOSAL TO ADDRESS THE RECOMMENDATION(S)/FINDING(S)

Each DAH has their own process(s) for creating, approving and distributing service instructions, all must ensure that they are in compliance with the applicable regulations. Therefore, it is not possible for this Working Group to develop a solution that will work for all affected stakeholders.

Each DAH has the responsibility to address design changes: it becomes more imperative to ensure proper coordination when safety issues are identified.

Each DAH has systems in place to continuously look at and implement process improvements. These systems are used to improve processes to enhance the quality of the deliverables to the regulatory agencies and customers as well as reducing flow time to produce those deliverables. Each DAH must continue to use those systems to investigate and implement future improvements to improve the quality of the deliverables they produce while reducing the flow time.

Below are recent examples of process improvements implemented by various DAH(s) to reduce flow time and improve quality. Each DAH should review the list of items below and evaluate the possibility of implementing items from the list, or identify alternatives/equivalents that would improve the development and delivery of ICA, including SI, that result from design changes.

- Quality Improvement Process – Methods such as Lean Management Systems, Statistical Process Control, and 6 Sigma used to improve productivity and quality.

- Safety Management System – A system or process to make sure the action described in service instructions, including proposed compliance periods, are soundly based on risk management principles

- Lean Management System – A system which incorporates tools, principles, training, and a common language to improve productivity.

- Statistical Process Control – Application of statistical methods to monitor and control a process to ensure that it operates at its full potential to produce a conforming product.

- 6 Sigma Improvement Processes – A data driven process used to improve processes and products.

- Use of Checklists – Implemented to assist authors in making sure requirements are met before documents are sent for approval.

- Use of Tip Sheets – Implemented to assist authors in understanding requirements.

- Use of Boilerplates – Implemented to standardize the location and content of text in service documents. Also used to reduce variation.

- Documented Standards – Implemented to document standard practices, formats, etc to reduce variation.

- Documented Guidance – Implemented and used by people within an organization to document, understand, and manage information used to create and publish service information.

- Dispute Resolution Process – A formal process used to resolve differences between a regulatory agency and the DAH during development of service information.

- Compliance Recommendation Process – A formal process used by a DAH to develop and communicate recommended compliance action to a regulatory agency.

- Validation Processes – A formal process used to validate that procedures in service information are accurate, complete, and can be accomplished.

- Airline Review Process – A formal process in which a copy of service information is sent to an airline prior to publication. The airline then reviews the information and submits comments back to the DAH for consideration.

- Partial Revision Process – A process in which only changed information in a service document is sent to affected customers.

- Temporary Revision Process – A process in which only changed information in a service document is sent to affected customers. The information is later included in the next revision to the document.

- Contingent Approval Process – A process in which an organization approves a document contingent upon changes being made prior to publication.

- Prioritization Process – A process in which service documents are prioritized and work is accomplished based on those priorities and the national authority is kept appraised.

- Delegated Approval Process – A process in which a regulatory agency will delegate certain functions be accomplished by the DAH.
- Electronic Signature Process – A process which allows a DAH to use electronic signatures for certain types of documents
- Information Exchange Process – A process in which a DAH shares information used to develop service information. For example, posting proposed solutions, proposed compliance times, estimated part availability dates, and other information regarding plans for correcting an unsafe condition. Airlines can then view the information and provide feedback back to the DAH.
- Airworthiness Concern Coordination Process (ATA Spec 111) – A process in which a DAH, airline operators, and a regulatory agency work together to develop and accomplish service instructions necessary to correct an unsafe condition.

ALTERNATIVES CONSIDERED

No Alternatives considered.

IMPLEMENTATION PLAN

By 6/30/11 each DAH has the responsibility to review the list of items in the summary sheet and evaluate the possibility of implementing items from the list, or identify alternatives/equivalents that would improve the availability of service instructions. Then the DAH would send a letter to the ARC to say that they have evaluated the list and state what they will implement or if not, an explanation as to why not.

ASSUMPTIONS/CONSTRAINTS

It is assumed that each applicable regulatory authority has been informed of the recommendation and solutions being approved by the ARC.

ISSUES FOR WORKING GROUP CONSIDERATION

Not Applicable.

ISSUES FOR ARC CONSIDERATION

Improvements to ATA Specification 111 will aid this process.

FINDING NO.

AD CRT Task 2 Report Finding No. 4

Occasionally, the OEM's service instructions are not available when the AD NPRM is issued. In addition, copies of service instructions are not included in the Government's electronic regulatory docket system. In either case, this prevents air carriers from having the full comment period to comment on the specifics of the service document.

RECOMMANDATION NO.

AD CRT Task 2 Report Recommendation No. 4 Bullet 2

OEMs should streamline service instruction development and revision processes to expedite release to air carriers.