

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

Primary Report and Recommendation	AD CRT Task 2 Rpt. Rec: R1 (Bul. 2) Simplified Service Bulletin Format
Secondary Report and Recommendation	None.
Assigned Members¹	Chris Armes (Learjet) Ken Hurley (Bombardier) Rose Opland (FAA) Elizabeth Bumann (FAA) Serge Cheyrouze (Airbus) Tom Novello (JetBlue)
Links to Other Working Groups	FAA Organization/Procedures Working Group
Date to Sent to ARC	11/24/10
Date of ARC Approval	2/15/11

WORKING GROUP REVIEW OF ISSUE/PROBLEM

The Working Group initially focused on the second sentence of the recommendation, that is, “standardizing the format of service instructions to facilitate user effectiveness by repetition in knowing where critical information is referenced”. Standardizing service instruction format will facilitate user effectiveness by repetition in knowing where critical information is referenced. The Working Group interpreted this to mean that all Design Approval Holders (DAHs) should standardize the location and content of information within service instructions. It was interpreted that information in one DAH’s service bulletin would look the same as information in another DAH’s service bulletin. It was interpreted that the DAHs should share best practices and develops standards for all DAHs to use. However, after talking to members of the AD Compliance Review Team (ADCRT), the Working Group was redirected to focus on simplifying the SB format and content to make it easier for an airline to potentially take the service bulletin, add a cover page to the service bulletin, and give the package to a mechanic to accomplish. This included things such as building flexibility into the instructions, clarifying whether a figure is authoritative or reference only, and referring to standard practices as much as possible. The intent was to make the SB easy to accomplish and reduce the amount of change an air carrier’s engineering staff must make to the service instructions.

REGULATIONS AND GUIDANCE IDENTIFIED FOR REVIEW

Air Transport Association (ATA) Spec2200 “Information Standards for Aviation Maintenance” - Reviewed

S1000D – International Specification for Technical Publications - Reviewed

¹ The solution and summary sheet were developed by a subgroup within the working group; all members of the working group were involved in reviewing and agreeing with the solution(s) and summary sheet(s).

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

The aviation industry currently has specifications to define the format, content, and location for material in various service documents. These industry specifications are S1000D and ATA iSpec 2200. These two documents are being used by the five DAH's supporting the Airworthiness Directive Implementation Aviation Rulemaking Committee and are used to standardize the location, content and format of the material in their service documents. Following the standards defined in those specifications will help to facilitate user effectiveness by repetition in knowing where critical information is referenced.

Each DAH has their own processes for creating, approving and distributing service documents. Each DAH shall consider the implementation of standard format and layout as given in Spec 2200 and S1000D. In addition to this, the sum of the recommendations given as part of the Service Information Working Group will positively influence the overall quality and clarity of service instructions distributed to operators.

Assumption: The recommendations below are specific to service bulletins listed as the means of compliance of an airworthiness directive.

A summary of recommendations and the proposed solutions are listed below; details on the solution for each is provided in the summary sheet for that specific recommendation.

- Only the safety related issue shall be addressed. (Task 1, Rec 2, Bul 1). Service bulletins will not include extra tasks that are convenient to do while in the work area. Critical task differentiation (Task 2, Rec 1, Bul 1) will be applied. The FAA will ensure that items in the service bulletin that are required for compliance to an AD are clearly identified. This will allow other actions to be accomplished using an air carrier's procedures or common industry practices. (Task 2, Rec 1, Bul 1)
- Instructions for Continued Airworthiness (ICAs) shall be published before or at the same time as the service bulletin. This will ensure the operator(s) fully understand and administer the post service bulletin incorporation requirements prior to completion. (Task 1, Rec 2, Bul 2; Task 2, Rec 1, Bul 2)
- ATA Spec 111² (Lead Airline Process) will be reviewed / updated as needed. (Task 1, Rec 2, Bul 3; Task 2, Rec 3, Bul 1; Task 2, Rec 3, Bul 2; Task 2, Rec 3, Bul 3). The updated process will provide a method for a "Lead Airline" to review and comment on service bulletin instructions before they are published by the DAH. This will improve the ability for airlines to accomplish the modification and reduce the need for submitting requests for Alternative Methods of Compliance (AMOCs).

² ATA Spec 111 is a US industry standard which application is not mandated by regulation. OEMs and operators may implement equivalent means and methods to achieve the same improvements as expected from application of Spec 111.

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- When acceptable, general notes will be added to the service bulletin to allow air carriers to use
(1) acceptable alternative materials and approved internal procedures without requesting an AMOC on each deviation or (2) where applicable, the option to use their engineering authority. (Task 2, Rec 1, Bul 4; Task 2, Rec 1, Bul 5). This will give air carriers flexibility to accomplish tasks in a SB that are not required by the AD that incorporates the SB by reference, or use common industry practices, without the need for an AMOC yet, remain in compliance with the applicable AD.
- When needed, logic-based decision diagrams will be added in service instructions to assist air carriers in choosing the best corrective action path, such as continued repeat inspection or termination action, based upon the discovered condition and compliance time period. (Task 2, Rec 1, Bul 6). Logic Diagrams will be added as an aid to better understand complex modifications and choose the solution that works best for each air carrier.
- It is agreed that the illustrations shall be subservient to the text but that differences between an illustration and the associated text must be avoided. The use of ambiguous terms such as “approximately” shall not be permitted where defining allowable tolerances and performance criteria. (Task 2, Rec 1, Bul 7).
- DAHs shall adopt a continuous improvement nature with regards to streamlining service instruction development and revision process to expedite release to air carriers. (Task 2, Rec 4, Bul 2).

IMPLEMENTATION PLAN

Implementation of the solutions (such as separating critical tasks from flexible advisory tasks, referring to industry standard practices when possible, including general notes in service bulletins to provide flexibility, including logic based diagrams in complex service bulletins, and clarifying whether information in figures is authoritative or reference only) proposed by the Service Information Working Group are provided in other Summary Sheets. Each DAH will also evaluate each of the applicable recommendations proposed by other Working Groups and work with their regulatory authority to incorporate the recommendations into their products and processes. It is expected that each DAH review the solutions provided in this and other Summary Sheets and incorporate the recommended solutions by June 30, 2011.

ASSUMPTIONS/CONSTRAINTS

The corrective actions suggested by the Working Group assumes that when the FAA incorporates by reference (IBR) a service bulletin in an AD that the agency has made the appropriate review and approval of the information required to resolve the unsafe condition, and have clearly distinguished what information may be accomplished using other methods, techniques and practices acceptable to the Administrator.

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ISSUES FOR WORKING GROUP CONSIDERATION

Each DAH on the Working Group is governed by different regulatory authorities. Each DAH may have different standards they use when preparing, approving, and delivering service documents. Each DAH will need to work with their respective regulatory authority to incorporate the improvements proposed by the Working Groups into their products and processes.

ISSUES FOR WORKING ARC CONSIDERATION

Each DAH on the Working Group is governed by different regulatory authorities. Each DAH may have different standards they use when preparing, approving, and delivering service documents. Each DAH is working with their respective regulatory authority to incorporate the improvements proposed by the Working Groups into their products and processes.

FINDING No. [1]

The Team found that in some cases, service instructions were not sufficiently user-friendly and complete. These incomplete instructions resulted in widespread air carrier confusion because of the differences in the referenced service instructions and AD instructions. These deficiencies in service instructions have led to an increased demand for AMOCs and AD time extensions and/or exemptions. This has strained limited national aviation authority resources. The Team found that there is an opportunity for expanded use of the Fleet Team Emerging Issues (FTEI)³ process within the OEM industry. Use of this process will ensure air carrier's review proposed mitigating actions and make user-friendly inputs to draft OEM service instructions.

RECOMMENDATION No. [1]

The Team acknowledges the benefits of current AD-friendly service bulletin improvements, but recommends more focus on user-friendly improvements in service instructions as follows:

Simplified format. Service instructions can be written in a simplified format that allows easy translation into an air carrier's work instructions. Standardizing service instruction format will facilitate user effectiveness by repetition in knowing where critical information is referenced.

APPENDIXES

None

³ The Fleet Team Emerging Issues (FTEI) process is essentially a webpage that owner/operators can access to review and comment on fleet safety issues.