EASA Service Bulletin Review Process I.A.W Annex 4 to Appendix 3 to AMC 20-20: Service Bulletin Review Process - ED Decision 2007/019/R

Introduction

Guidelines for Following the Service Bulletin (SB) Flow Chart

NOTE: While it is believed that this guidance is fairly comprehensive, it may not address every possible situation. It is therefore incumbent on the user to use good judgment and rationale when making any determination.

Screening SBs to determine which ones require DT data is primarily a TCH responsibility.

The result of this screening is a list of SBs which require special directed inspections to ensure continued airworthiness.

The SBs included on the list will be grouped into Type I and Type II SBs.

- Type I SBs have existing DT data and
- Type II SBs require developing DT data.

The list is not comprehensive and will not include all of the SBs associated with an aircraft.

Specifically, the list will not include those SBs where a BZI programme developed for the Repair Assessment Programme has been determined to be sufficient to meet the damage tolerance requirements for the FCBS that is affected by the SB.

A note should be prominently placed somewhere in the Compliance Document stating that SBs not included in the list satisfy the DT data requirement.

"ALL SBs HAVE BEEN EVALUATED FOR DAMAGE TOLERANCE INSPECTION REQUIREMENTS; SERVICE BULLETINS NOT INCLUDED IN THIS LIST HAVE BEEN DETERMINED TO SATISFY THE DAMAGE-TOLERANCE REQUIREMENT BY INSPECTIONS COVERED IN THE BZI. THE BZI IS DOCUMENTED IN SECTION X.XXX.XX.X OF THE MAINTENANCE PLANNING DOCUMENT."

Query 1 Does the SB address a structural repair or a modification to FCS?

Historically, any SB, service letter or other document that lists ATA chapters 51 through 57 could provide repair or modification instructions that may require DT data. In addition, certain repairs or modifications accomplished under other ATA chapters may affect FCS. The first step in the screening process is to identify all such service instructions and develop a list of candidates for review (Q2).

Query 2 Does the service instruction specify either a repair or modification that creates or affects FCS?

If it does, then the service instruction requires further review (Q3). If it does not, then the service instruction does not require further review.

Query 3 Is the service instruction mandated?

Service bulletins and other service instructions that are mandated by an AD have requirements to ensure inspection findings (e.g., detected cracks or other structural damage/degradation) are addressed in an approved manner. If the TCH can demonstrate that it applies a process for developing inspection programmes for mandated SBs using DT data and/or service-based inspection results, and for continuously reviewing the SBs for their adequacy to detect cracks in a timely

manner, the mandated SBs should then be considered as compliant with the intent of this process. Otherwise, the TCH will need to demonstrate the inspection programme in the mandated SB has been developed using DT data and/or appropriate service-based inspection results. The outcomes of Query 3 branch to two unrelated boxes (Q4 – if mandated by an AD) or (Q7 – if not mandated by an AD).

Query 4 Does the SB or service instruction contain terminating action?

Query 3 established that the inspection programme for the baseline configuration is acceptable.

Query 5 Does the terminating action have DT data?

If the terminating action has a documented continuing airworthiness inspection programme based on damage tolerance principals, then no further review is required. The SB should be documented in the list. If the terminating action does not have DT data, or the status of the inspection programme cannot be verified, then further review is necessary (Q6).

Query 6 Does the SB address a safe-life part?

If it does no further action is required. Otherwise, damage-tolerance based inspections will need to be developed and provided to the operators. The SB should be included in the list along with where to find the required continued airworthiness inspection programme.

Query 7 In Query 3 a structural SB that was mandated by AD was identified.

Query 7 asks if a one-time inspection is required to satisfy the intent of the requirement. If it does, it is deemed that this is being done to verify that a condition does not exist and, on finding that condition, correct that condition to baseline configuration. As such, normal SSID programmes would then be expected to cover any required continued airworthiness inspections. If a repair is necessary, it is further assumed that this was done by reference to the SRM or other suitable means. No further action is required if this is the case and, if a repair was necessary, other means exist to determine the required DT data. If no inspections or multiple inspections are required, additional evaluation is required (Q8).

Query 8 Is this a major structural design change (e.g., modification)?

This is a TCH decision that is part of the original certification process and is not a major/minor repair decision. If it is not a major design change then proceed to Q10, if not, proceed to Q9.

Query 9 Does the change require non-destructive inspections to verify the integrity of the structure or are normal routine maintenance inspections (as delineated in the BZI) sufficient?

This is a subjective question and may require re-evaluating the change and determining where specific fatigue cracking might be expected. If normal maintenance inspections are adequate, no further action is required. Otherwise, proceed to Q10.

Query 10 Does the SB contain DT data for both the baseline and modified aircraft configurations?

If so, the SB is satisfactory. Otherwise, damage tolerance-based inspections will need to be developed and provided to the operators. The SB should be documented in the list along with where to find the required continued airworthiness inspection programme.

Service Bulletin Screening Procedure

1. The TCH will perform the screening and the Structures Task Group will validate the results.

2. A list of all SBs requiring action will be included in the TCH Compliance Document. Those not requiring action will not be in the list.

3. Service Bulletins included on the list will fall into one of two general types:

— Type I – SBs which have existing DT data.

— Type II – Service Bulletins that require developing DT data.

4. TCH actions:

— Type I – No action required.

— Type II – Develop DT data and make it available to operators.

5. Operator actions (apply to both SB Types):

— Review SB incorporation on a tail number basis.

— For incorporated SBs that rely on BZI (i.e., no special inspections required based on DTE performed), reconcile any maintenance planning document structural inspection escalations.

— For incorporated SBs that require DTI, verify that DTI has been included in the operations specification and include it if it is missing