Title: Clarification of Definitions for General Visual (GVI), Detailed (DET), and Special Detailed (SDI) Inspections

Submitter: EASA

Issue: Following IP 117 (previously called CIP –IND 2009-2) the IMRBPB recognized the need to better define the current definitions for GVI, DET and SDI as per IMRBPB Action Item AI 11-01.

Problem:

During the discussion from the previous mentioned meeting the following as been recognized.

1/ Unlike for the 2 others inspection (DET and SDI), cleaning aspect is not addressed in today GVI definition which is considered to be missing. Therefore it has been recognized the need to address cleaning aspect for GVI.

2/ In MSG-3 the Detailed Inspection was initially defined as “an intensive visual examination”. The word “visual” has been removed (in revision 2001) to highlight the possibility of tactile examination. However this has not been clearly addressed in the definition, therefore it is agreed to add this consideration in the definition.

3/ With the evolution of inspection techniques and associated regulation requirement regarding special skills and/or appropriate qualifications required, the SDI inspection level is often considered to be associated to inspection requiring special qualification from the mechanic.

A in depth review of the existing regulation (Part 145 and Part 66) clearly differentiates the following:

- Non Destructive Inspection (NDI) such as Boroscopying and delamination coin tapping which are not considered as Non Destructive Testing (NDT) by Part 145 and therefore for which associated mechanics doesn’t needs to be listed under class rating D1
- Non Destructive Testing (NDT) for which appropriated specific qualifications (e.g. D1) are required

It is hereby proposed to clarify that MSG-3 SDI definition includes both NDI and NDT and therefore doesn’t always require specific rating/qualifications.

NB: It is proposed not to force retroactive implementation of this change.
Recommendation (including Implementation):

Therefore based on the previous listed comments the following definitions are now proposed:

A. GENERAL VISUAL INSPECTION (GVI)
A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance, unless otherwise specified.
A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area.
This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight or drop-light and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked.
Basic cleaning may be required to ensure appropriate visibility.

B. DETAILED INSPECTION (DET)
An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. This could include tactile assessment in which a component or assembly can be checked for tightness/security.
Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate.
Inspection aids such as mirrors and magnifying lenses may be necessary.
Surface cleaning and elaborate access procedures may be required.

C. SPECIAL DETAILED INSPECTION (SDI)
An examination of a specific item, installation, or assembly making use of specialized inspection techniques such as Non Destructive Testing (NDT) and/or equipment (e.g. boroscope, videoscope, tap test) to detect damage, failure or irregularity. Intricate cleaning and substantial access or disassembly procedures may be required.
Classification of a task as an SDI does not define the required qualifications for the person performing the task.

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IMRBPB Position:

Date: April 26, 2012
Position:

The IMRBPB has accepted the revised CIP recommendations.

CIP closed as IP122.
Status of Issue Paper (when closed state the closure date): April 26, 2012.

Recommendation for implementation:

Incorporation into MSG-3 upon next revision. The IMRBPB does not require retroactive implementation.

Important Note: The IMRBPB positions are not policy. Positions become policy only when the policy is issued formally by the appropriate National Aviation Authority.