



Issue Paper (IP)

IP Number: CIP IND 2023-01

Initial Date (DD/MMM/YYYY): 30/01/2023

Revision / Date (DD/MMM/YYYY): 30/01/2023

Effective Date (DD/MMM/YYYY):

Retroactivity (Y/N): N

| | |
|-------------------|---|
| Title: | Include the use of Remote Visual Inspection |
| Submitter: | MPIG |

| Applies To: | |
|-------------|---|
| MSG-3 Vol 1 | X |
| MSG-3 Vol 2 | X |
| IMPS | |

Issue:

The use of remote power controlled video and image capture devices (i.e. drones) and handheld mechanically extended video and image capture devices (i.e. rod mounted small cameras, phones, etc.) by manufacturers, operators, MROs and engineer/technicians has become prevalent in the industry. With many airlines and charter fleets operating multiple aircraft types by different manufacturers, the use of these devices to perform General Visual Inspection for scheduled and unscheduled maintenance has become routine. The ease of using these devices to perform GVI task especially after lightning strike and the resulting economics savings has spurred operators to insist manufacturers now include this type of inspection procedural method in their maintenance manuals.

The advantages related to use of such technology are significant pertaining to:

1. reduction in accidental damage
2. reduction in risk to humans related to fall exposure
3. reduction in out of service time for maintenance
4. reduction in maintenance cost
5. capture of visual historical data

Technology enables various methods of visual detection which can produce an equivalent or higher level of detection compared to a certified individual's human capabilities for GVI task.

In that account, MPIG updated the publication of the MAP 2017-02 "AMM instruction Requirements for Remote Visual Inspection" in 2019 to create a term and definition in A4A Common Support Data Dictionary (CSDD) that can be used across the industry to refer to this method of GVI accomplishment.

quote

General Visual Inspection Performed Remotely (GVR)

General Visual Inspection Performed Remotely (GVR) is an inspection method using peripheral devices (drones, robots, scanners, cameras, etc.) which will emulate or exceed the current MSG-3 GVI glossary definition.

Unquote



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Problem:

The current MSG-3 GVI definition does not provide information on such visual devices and the quality of their performance required when being applied.

Recommendation (including Implementation):

TCH's to provide, within the AMM, EMM documentation and program rules details stating acceptance of the use of equipment which can provide an equivalent level of detection may be used for the conduct of GVI task when appropriate.

To provide a clear reference for the afore described downstream processing of ICA's, MPIG proposes to add the following entry to the MSG-3 Appendix A. Glossary:

6.

Inspection - General Visual (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. Inspection

Inspection - General Visual (GVI) - Performed Remotely (GVR)

A General Visual inspection performed Remotely (GVR) is an inspection method using peripheral devices (drones, robots, scanners, cameras, etc.) which will emulate or exceed the current MSG-3 GVI glossary definition.

Inspection - General Visual (GVI) – Stand-Alone

A general visual inspection that is not performed as part of a zonal inspection. Even in cases where the interval coincides with the zonal inspection, the stand-alone GVI remains an independent step on the work card



International MRB Policy Board

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| IMRBPB Position: | |
|---|--|
| Date: | |
| Position: | |
| Recommendation for Implementation: | |

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|-----------------------------------|--------------------------|---|
| Status of the Issue Paper: | <input type="checkbox"/> | Active |
| | <input type="checkbox"/> | Incorporated in MSG-3 / IMPS (with details) |
| | <input type="checkbox"/> | Archived |