

<b>ENGINEERING NOTICE</b>			
<b>TO</b>	All AMO Personnel	<b>ISSUE NO</b>	GAM/EN/06/22
<b>COMPLIANCE</b>	Immediate Effect	<b>ISSUE DATE</b>	23 <sup>rd</sup> November 2022
<b>SUBJECT</b>	Awareness of adapting Independent Inspection and Re-inspection.		

This memo is issued to highlight the changes of duplicate inspection terminology which has been used all this while in accordance with AN51 (Duplicate Inspection of Control System). Even though, **the term of the duplicate inspection is not literally change to independent inspection**, a system which is call “ERROR CAPTURING METHOD” has been introduced in CAD 8601. This “ERROR CAPTURING METHOD” should be implemented by Approved Maintenance Organisation.

Independent Inspection and Re-inspection are part of “ERROR CAPTURING METHOD”. In this Engineering Notices is the definition of Independent Inspection i.a.w **CAGM 8601 para 9.4**. The way the terminology of the Independent Inspection and Re-inspection define below is such a requirement to be followed by AMO.

In general, the following maintenance tasks that may impact on flight safety are subjected to independent inspection:

- a) tasks that may affect the control of the aircraft flight path and attitude, such as installation, rigging and adjustments of flight controls;
- b) aircraft stability control systems (autopilot, fuel transfer);
- c) tasks that may affect the propulsive force of the aircraft, including installation of aircraft engines, propellers and rotors; and
- d) overhaul, calibration or rigging of engines, propellers, transmissions and gearboxes.

GAM AMO is in progress to adapt such changes in our procedures. The procedures will be established in the next revision of EPM. Please update yourself with the requirement below and read applicable document as follows.

- 1) [https://www.caam.gov.my/wp-content/uploads/2022/11/CAD-8601-Maintenance-Organisation-Approval-CAAM-Part-145-ISS01\\_REV01.pdf](https://www.caam.gov.my/wp-content/uploads/2022/11/CAD-8601-Maintenance-Organisation-Approval-CAAM-Part-145-ISS01_REV01.pdf)
- 2) [https://www.caam.gov.my/wp-content/uploads/2022/11/CAGM-8601-Maintenance-Organisation-Approval-CAAM-Part-145-ISS01\\_REV01.pdf](https://www.caam.gov.my/wp-content/uploads/2022/11/CAGM-8601-Maintenance-Organisation-Approval-CAAM-Part-145-ISS01_REV01.pdf)

# Error Capturing Method

## Independent Inspection

## Re-inspection

### *What is an independent inspection?*

An independent inspection is an **inspection performed by an 'independent qualified person' of a task carried out by an 'authorised person'**, taking into account that:

- a) the **'authorised person'** is the person **who performs the task or supervises** the task and they assume the **full responsibility for the completion of the task** in accordance with the applicable maintenance data;
- b) the **'independent qualified person'** is the person who **performs the independent inspection and attests the satisfactory completion of the task and that no deficiencies have been found**. The 'independent qualified person' does not issue a maintenance release, therefore they are not required to hold certification privileges;

### *What to do in unforeseen cases when only one person is available?*

#### **REINSPECTION:**

- a) Reinspection is an error-capturing method subject to the same conditions as an independent inspection is, except that the 'authorised person' performing the maintenance task is also acting as 'independent qualified person' and performs the inspection.

***What is an independent inspection?(cont'd)***

- c) the 'authorised person' issues the maintenance or signs off the completion of the task after the independent inspection has been carried out satisfactorily;
- d) the work card system used by the organisation should record the identification of both persons and the details of the independent inspection as necessary before the certificate of release to service or sign-off for the completion of the task is issued.

**REINSPECTION: (Cont'd)**

- b) Reinspection, as an error-capturing method, should only be performed in unforeseen circumstances when only one person is available to carry out the task and perform the independent inspection. The circumstances cannot be considered unforeseen if the person or organisation has not assigned a suitable 'independent qualified person' to that particular line station or shift.
- c) The certificate of release to service is issued after the task has been performed by the 'authorised person' and the reinspection has been carried out satisfactorily. The work card system used by the organisation should record the identification and the details of the reinspection before the the certificate of release to service for the task is issued.

***Qualifications of persons performing independent inspections***

The organisation should have procedures to demonstrate that the 'independent qualified person' has been trained and has gained experience in the specific inspection to be performed. The organisation could consider making use of, for example:

- a) staff holding a certifying staff or equivalent necessary to release or sign off the critical maintenance task;
- b) staff holding a certifying staff or equivalent necessary to release or sign off similar task in a product of similar category and having received specific practical training in the task to be inspected; or

- c) a commander holding a limited certification authorisation in accordance with paragraph 5.2(j)(4) of CAD 8601 and having received adequate practical training and having enough experience in the specific task to be inspected and on how to perform independent inspection.

### ***How to perform an independent inspection?***

An independent inspection should ensure correct assembly, locking and sense of operation. When inspecting control systems that have undergone maintenance, the independent qualified person should consider the following points independently:

- a) all those parts of the system that have actually been disconnected or disturbed should be inspected for correct assembly and locking;
- b) the system as a whole should be inspected for full and free movement over the complete range;
- c) cables should be tensioned correctly with adequate clearance at secondary stops;
- d) the operation of the control system as a whole should be observed to ensure that the controls are operating in the correct sense;
- e) if different control systems are interconnected so that they affect each other, all the interactions should be checked through the full range of the applicable controls; and
- f) software that is part of the critical maintenance task should be checked, for example: version, compatibility with aircraft configuration.

**Reference: CAGM 8601 Maintenance Organisation Approval Part 145, Para 9.**

  
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