SAFETY ALERT 2018-04

Issue 01

Date of Issue: April 05, 2018

SUBJECT:
AIRCRAFT ELECTRICAL WIRING SYSTEMS: LICENCE HOLDER PRIVILEGES AND ASSOCIATED EWIS TRAINING REQUIREMENTS

REFERENCE PUBLICATIONS:
CAR 145.30(e)
CAR 66.20(a)
AMC 001
EASA CS.25
FAA AC.25

REASON:
In August 2015, the GCAA promulgated AMC-001 related to AEROPLANE ELECTRICAL WIRING INTERCONNECTED SYSTEM (EWIS) TRAINING PROGRAM that has became applicable on 1st January 2017. However, it has become evident since 1st January 2017 that there is a degree of misunderstanding throughout industry of the (1) certification privileges granted to GCAA CAR 66 licence holders in respect of aircraft electrical and avionic systems and consequently the associated EWIS training requirements and (2) the applicability of AMC-001.

This Safety Alert is issued to:

a) Remind the privileges of B1 and B2 licence holders in respect of aircraft electrical and avionic systems and ensure EWIS training requirements are implemented accordingly;

b) Clarify the applicability of EWIS training requirements to B and C rated AMO organisations.

RECOMMENDATIONS:

Recommendation No. 1:
AMOs with GCAA CAR-145 A rating are reminded that, as per CAR 66.20(a)\(^1\), the inspection and subsequent repair to electrical systems could be carried out and signed-off/released to service by either a category B1 or B2 licence holder without limitations and if found competent and authorized by its AMO.

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\(^1\) It is stated that:
A category B1 aircraft maintenance engineers licence shall permit the holder to issue certificates of release to service and to act as B1 support staff following:
— Maintenance performed on aircraft structure, powerplant and mechanical and electrical systems,
— Work on avionic systems requiring only simple tests to prove their serviceability and not requiring troubleshooting.

A category B2 aircraft maintenance engineers licence shall permit the holder:
to issue certificates of release to service and to act as B2 support staff for the following:
— maintenance performed on avionic and electrical systems, and
— electrical and avionics tasks within powerplant and mechanical systems, requiring only simple tests to prove their serviceability.
EWIS training commensurate with certification privilege is therefore mandatory for both B1 and B2 personnel (Target Group 1 and 2 as referred to in AMC 001 Appendix A).

Recommendation No. 2:
AMOs with GCAA CAR-145 B and C ratings should categorize staff involved in EWIS maintenance activities against the different groups mentioned in AMC-001 (in particular groups 1 and 2) and ensure that their assess against the applicable training requirements. Such categorization should facilitate the demonstration of compliance with CAR 145.30(e) and associated Guidance Material which requires EWIS training to be carried out “when relevant”. Therefore an organization may determine that Certifying Staff releasing to service a complete engine following shop visit (AW Form 1 signatory) does not require EWIS training, however those personnel involved in wiring loom inspection and repair and authorized to make task sign-offs are trained according Target Groups 1 and 2 (as per AMC 001 Appendix A) syllabus.

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\(^2\) EASA CS-25 and FAA FAR-25 define EWIS as any wire, wiring device, or combination of these, including termination devices, installed in any area of the aeroplane for the purpose of transmitting electrical energy, including data and signals between two or more intended termination points.