SAFETY ALERT 2018-12
Issue 01
Date of Issue: 29th August 2018

SUBJECT:
AGUSTA AW 169 HELICOPTER ENGINE UN-COMMANDED CRANK DURING MAINTENANCE

REFERENCE PUBLICATIONS:
GCAA MANDATORY OCCURRENCE REPORTING SYSTEM (ROSI)

REASON:
The GCAA has received a report related to un-commanded engine crank during maintenance of Agusta AW 169 Helicopter, while trouble shooting a defect of the nose wheel centering lock mechanism.

During trouble shooting, the maintenance staff needed to access the Landing Gear Control Panel (P/N 6F3230V00432) that necessitated the removal of the connectors from Engine Start Panel (P/N 6F7610V00152), Autopilot Control Panel (P/N 4F2210V00251) and Landing Control Panel (P/N 6F3230V00432), all located on the same console. during the reconnection, the maintenance staff erroneously cross-connected the identical connectors on the Engine Control Panel and Landing Gear Control Panel thereby causing an un-commanded engine crank during power-up.

The purpose of this Safety Alert is to alert CAMO managing Agusta AW 169 and AMO maintaining the same helicopter type to be vigilant since there is a high likelihood of cross-connection of connectors onto different panels on the same console.

RECOMMENDATIONS:

Recommendation No.1:
CAMO managing the continuing airworthiness of Agusta AW 169 registered in the UAE should immediately bring the content of this Safety Alert to the attention of the AMO’s responsible for the maintenance of their aircraft where the cross-connection of identical connectors to a wrong panel connector caused an un-commanded engine crank.

Recommendation No. 2:
AMOs conducting the maintenance of Agusta AW 169 registered in the UAE should:

a) Immediately bring the content of this Safety Alert to the attention of their staff to ensure they apply human factor principles when disconnecting and re-connecting electrical connectors of identical key ways to prevent cross-connections, for example by tagging;

b) Apply provisions specified under CAR 145.48 Performance of maintenance when a maintenance task requires re-connection of more than one connector with similar terminal design;
c) Report to the CAMO and TC/STC Holders when a connector design terminal has caused a maintenance error.

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