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ENGINE ON-CONDITION MAINTENANCE

1. OBJECTIVE

This Airworthiness Notices is issued in order to align and provide in more detail requirements and guidance of compliance for engine On-Condition (OC) maintenance.

2. APPLICATION AND APPROVAL

2.1 The application for approval of engine OC maintenance programme, as combination or as a separate document of Aircraft Maintenance Programme, for Myanmar registered aircraft shall be submitted to DCA. The substantiating documentations shall be included.

2.2 The approved Continuing Airworthiness Management Organization (CAMO) shall prepare the proposed engine OC maintenance porgramme for which it is to be approved.

2.3 The engine OC maintenance programme shall be based upon the manufacturer recommended instructions and the Type Certificate holder's Maintenance Planning Document (MPD) and/or any appropriate chapter in the engine Maintenance Manuals.

2.4 After the evaluation, DCA will approve an AMP containing an engine OC maintenance programme for Myanmar registered aircraft in the combination of aircraft AMP or as a separate document of aircraft AMP.

3. ON-CONDITION MAINTENANCE REQUIREMENTS

3.1 General Requirements

3.1.1 The content of the engine OC maintenance programme substitute the specific instructions from the TC-holder and all other instructions shall be complied with.

3.1.2 In the preface section, all deviations from TC-holder instructions, which include the use of On-Condition, must be specifically stated.

3.1.3 The additional instructions that replaced the TC-holder's instructions must be included in the relevant task lists.

3.1.4 The engine OC maintenance programme must be included in the list of source documents.

3.1.5 Any limitations or conditions specified in the engine OC maintenance porgramme must be incorporated. Airworthiness Directives and Limitations shall not be replaced by engine OC maintenance programme. Engine Life Limited Parts specified by the OEM must be monitored.

3.1.6 The condition determination must be, with a reasonable certainty, established if the component will remain airworthy until the next periodic condition determination.

3.1.7 If, during application of the engine OC maintenance programme, it cannot be established with a reasonable certainty that the component will remain airworthy

until the next periodic condition determination, then maintenance action is required to:

(i) ensure, through additional maintenance action,

(ii) the airworthiness until the next periodic condition determination, or

(iii)to replace the component.

3.1.8 When the component deterioration cannot be attributed to anything other than normal wear, then the engine OC maintenance programme shall be terminated. Component Deterioration shall be checked and repaired as per Engine Maintenance Manual although that is other than normal wear. And after repaired, engine should be in service as OC Maintenance program depends on life limited parts condition.

3.2 Technical Requirements

The following failure conditions shall be accounted for:

3.2.1 Fatigue;

3.2.2 Wear and Tear;

3.2.3 Material Degradation (corrosion, drying out, hardening, etc.).

3.3 Trend Monitoring and Analysis Requirements

3.3.1 Trend analysis shall be carried out by a person with adequate experience and familiarity with turbine engine who has undergone the ECTM training provided by the OEM or OEM recognized organization.

3.3.2 Data analysis shall be carried out at intervals specified by the manufacturer and finding recorded.

3.3.3 Policies on resetting the base lines, acceptable ECTM data for loan/lease engines etc shall be specified.

3.3.4 If the ECTM analysis is contracted out to OEM designated analysis center, the communication of analysis findings, feedback and measures to ensure the quality of ECTM must be documented. The operator shall monitor and assess the contracted analysis centers.

3.3.5 The data analysis shall include review of engine parameter exceedances where such data is available from automatic data acquisition systems.

3.3.6 The operator shall take appropriate corrective action when required based on the trend data. The following elements are to be considered:

(i) There shall be clear procedures on how the recommended corrective actions emerging from the ECTM analysis are to be communicated for maintenance action shall be established.

(ii) There shall be feedback on when the recommended actions have been carried out.

(iii) The corrective actions, when carried out are to be recorded and the impact of these actions assessed.

3.3.7 The minimum (qualification and experience) requirements of respective personnel for Engine OC maintenance shall:

(i) have one year experience in Trend Analysis under supervision of Designated Qualified personnel, after completed the ECTM training provided by the OEM or OEM recognized organization.

(ii) have (10) times experience in Borescope Inspection on gas path of engine under supervision of Designated Qualified personnel, after completed the Borescope Inspection training provided by the OEM or OEM recognized organization.

(iii) have (10) times experience in Engine Power Assurance Check under supervision of Designated Qualified personnel, after completed the Engine ground run training. (if applicable)

(iv) undergo the recurrent training (up-to-date knowledge of relevant technology)

3.3.8 The authorization procedures and authorization privileges for personnel as mentioned in paragraph 3.3.7 must be entered in the appropriate Exposition of the operator. The authorizations granted shall only be used, subject to their conditions of validity.

3.4 Responsibility for Usage of Engine On-Condition Maintenance

3.4.1 All of responsibilities for the use of engine OC maintenance including decision upon monitoring and data analysis results must totally rely on Head of CAMO (Head of Engineering/ Maintenance).

3.4.2 The responsibility of Head of Quality (Engineering/ Maintenance) is to monitor the safety related matters. Whenever found any non-compliance which could lower the safety standards and possibly hazard the flight safety, the engine OC maintenance programme shall be terminated.