

DEPARTMENT OF CIVIL AVIATION

Male' Republic of Maldives

MALDIVIAN AIRWORTHINESS REQUIREMENTS

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Subject:- Minimum Equipment List

1. Introduction

- 1.1 Pursuant to the provisions of the Civil Aviation Regulation, Maldives, for the time being in force, an aircraft may not commence a flight if any of the equipment required by the regulations to be carried is unserviceable unless the Director has expressly granted a permission for such operations.
- 1.2 Such arrangements can only be accepted if operation with specified equipment unserviceable meets the requirements of the Civil Aviation Regulation and the level of safety achieved is not less than the minimum standard either implied or specified by the Certification Basis (defined in the Type Certificate)
- 1.3 Each aircraft type with a MTWA exceeding 2730 kg will have a Master Minimum Equipment list (MMEL) or equivalent approved by the Authority of the country of manufacture and accepted by the DCA. Any aircraft of a type which does not have an approved MMEL, (or equivalent document), cannot be dispatched with unserviceable equipment unless such unserviceabilities are expressly permitted by the Director or by special limitations and procedures in the Approved Flight Manual.
- 1.4 The MMEL will deal with significant items of equipment which may safely be permitted to be unserviceable under certain conditions. It will not include those items which are essential for safety under all conditions. Minor unserviceabilities with no safety implications will be left to the discretion of the Commander. All items which affect the airworthiness of aircraft or safety of those carried on board are therefore, required to be operative.
- 1.5 The MMEL is applicable to an aircraft type but does not take into account the operating circumstances of individual operators of that type; therefore, it can not in itself be regarded as providing operational permission. In order to establish whether or not it is acceptable to dispatch with particular equipment unserviceable it will be necessary for each operator to prepare and seek DCA approval to their own Minimum Equipment List (MEL).

1.6 The MEL can not be less restrictive than the appropriate Approved MMEL and may have to be more restrictive to reflect operators circumstances and capabilities.

2. Applicability

2.1 This Airworthiness Requirement specifies the procedure for the framing, approval and use of MEL for aircraft operated for public transport.

3. Definition

3.1 A Minimum Equipment List is a document, approved by the Department of Civil Aviation, containing those units and systems which may be in-operative in service for a very limited period without adversely effecting the safety and airworthiness of the aircraft under certain conditions.

4. Purpose

- 4.1 Defects are encountered during operations of an aircraft, for which repair facilities may not exist at route stations and even at the main engineering base in some cases.
- 4.2 Transport aircraft of today have, however, inherent safe guards introduced into them at the design stage in the form of duplicated systems and components etc. so that safe operations of aircraft is possible even with the existence of certain defects. Transport aircraft are, therefore, permitted to continue their flights from transit station to bases where maintenance facilities are available. This practice not only reduces unnecessary engineering costs but also avoids passenger discomforts associated with delays to services.

5. Contents of MEL

- 5.1 A Minimum Equipment List shall be so drawn as to contain.
- 5.1.1 A general preamble covering the following aspects
 - a) The operator's basic policies regarding operations of an aircraft, components or equipment including the outside repair/overhaul agencies where the aircraft or components will be overhauled in case the facilities are not available at the main base.
 - b) The aircraft captain's responsibility to report such defects or damage. The aspects to be considered by him deciding whether to continue a flight without rectification action being taken.
 - c) The responsibility of engineering staff regarding the deferment of rectification action and their notification and advice to the aircraft commander.

- d) The certification required for the deferment of rectification action and notification within the company that deferment has been authorised.
- 5.1.2 List of in-operative aircraft systems, items of equipment or components including the number installed, with which an aircraft can be operated, provided an acceptable level of safety is maintained by following appropriate operating limitations, by a transfer of the function to another operating component or by reference to other instruments and components giving the required information.
- 5.1.3 The limits and conditions applicable in authorising a deferment together with the notification and advice to flight crew of deferment.
- 5.1.4 The bases where rectification of defects on specific items shall be accomplished.
- 5.1.5 Any limitations imposed on the operation of an aircraft with
 - a) unserviceable or in-operative components/equipment, parts or systems,
 - b) missing components or parts,
 - C) minor damage

6. Approval of Minimum Equipment List

- 6.1 MEL or an amendment to MEL will be compiled by the holder of an Air Operator's Certificate and submitted for approval to the Director of Civil Aviation accompanied with justification for the acceptance of each item and the proposal should include the following.
 - a) Manufacturer's name of each unit and total number of units installed on the aircraft.
 - b) Evidence of prior approval by the aircraft manufacturer or Airworthiness Authority of the country of manufacture, eg. Configuration Deviation List etc.
 - c) In respect of amendments, a statement of the failure rate of each item submitted and action taken by the organisation to improve its reliability.
 - d) A statement that the organisation's "Chief Pilot" and "Chief Engineer" have agreed on the proposed MEL or its amendment.

7. Use of MEL

7.1 As a normal practice the defects carried forward under MEL shall be rectified and deficiencies made good at the first available opportunity where facilities exist and in any case such repairs/replacement must be carried out when the aircraft returns to the main base. The MEL is not intended to provide for continued operation of the aircraft for an indefinite period with in-operative items but to permit the operation of an aircraft with in-operative equipment within the framework of a controlled and sound programme of repairs and parts replacement.

- 7.2 The chief engineer of the organisation shall be responsible for exercising necessary control to ensure that no aircraft is dispatched with multiple items inoperative, thus resulting in reduction in the level of safety and/or increase in crew work-load.
- 7.3 Notwithstanding the MEL an Aircraft Maintenance Engineer need not issue certificate of release to service or a Pilot need not accept the aircraft for flight if it is considered that it is unsafe to do so.
- 7.4 The AME responsible for releasing the aircraft, after invoking the provisions of MEL, shall inform the Pilot of the aircraft accordingly, make a mention of it in the Technical Log and placard the in-operative unit/system suitably.
- 8. Operation of an aircraft with either unserviceable or in- operative components or equipment that are not specified in the MEL, or damage exceeding that specified in the MEL may only be authorised provided.
 - a) the "Chief Pilot" and the "Chief Engineer" of an the Air Operator's Certificate holder concury after ensuring that airworthiness of the aircraft and safety of its operation will not be jeopardised by such action, and
 - b) that approval of the Director of Civil Aviation or his authorised Airworthiness personnel is obtained.

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