



MEL/CDL & DDL

- AIC-N 17/09
- MEL – Minimum Equipment List
- CDL – Configuration Deviation List
- DDL - Deferred Defect List

EASA MAST Finding 2008

- It was noted that the NO CAA did not ensure that operators correctly made use of the Minimum Equipment List in the management of aircraft defects. A similar finding was noted during the previous MAST inspection in April 2007.
- Several findings

Aircraft defects (M.A.403)

- (a) Any aircraft defect that hazards seriously the flight safety shall be rectified before further flight.
- (b) Only the authorised certifying staff, according to M.A.801 (b) 1, M.A.801 (b) 2 or Part-145 can decide, using M.A.401 maintenance data, whether an aircraft defect hazards seriously the flight safety and therefore decide when and which rectification action shall be taken before further flight and which defect rectification can be deferred. However, this does not apply when:
1. the approved MEL as mandated by the competent authority is used by the pilot; or,
 2. aircraft defects are defined as being acceptable by the competent authority.

EU-OPS 1.030 MEL Operator's responsibilities

- **(a)** An operator shall establish, for each aeroplane, a minimum equipment list (MEL) approved by the Authority. This shall be based upon, but no less restrictive than, the relevant MMEL (if this exists) accepted by the Authority.
- **(b)** An operator shall not operate an aeroplane other than in accordance with the MEL unless permitted by the Authority.
- Any such permission will in no circumstances permit operation outside the constraints of the MMEL.

AMC M.A.301 – 2

Continuing airworthiness tasks

- *In the case of commercial air transport the operator should have a system to ensure that all defects affecting the safe operation of the aircraft are rectified within the limits prescribed by the approved MEL or CDL as appropriate.*



AMC M.A.201 Responsibilities

- An operator should establish adequate co-ordination between flight operations and maintenance

Joint Operations Evaluation Board (JOEB)

2003

Since the establishment of the European Aviation Safety Agency (EASA) in late 2003 under the scope of the EC Regulation 1592/2002, responsibility for Airworthiness and Continued Airworthiness is with EASA.

Joint Operations Evaluation Board (JOEB)

2006

On 1 February 2006, a further step was taken to transfer the responsibilities of the JOEB activity management from the JAA Operations and Licensing Directors to the Certification Flight Standards Manager within the EASA Certification Directorate. This comprises JOEB report activities including MMEL and expertise which are now accredited by the EASA Certification Flight Standards Manager according to the JOEB Joint Implementation Procedure (JIP) document and JOEB Terms of Reference (ToR).



Joint Operations Evaluation Board (JOEB)

1st July 2009,
please consult EASA's Certification Flight
Standard website:

http://www.easa.europa.eu/ws_prod/c/c_flightstandards.php

MEL REQUIREMENTS

- MMEL Procedure Manual
- TGL 26 (MEL Policy)
 - ◆ Section 1: General principles for the development of the MEL
 - ◆ Section 2: MEL Procedures
 - ◆ Section 3: MEL Alleviation for JAR-OPS 1 Subparts K, L and S
 - ◆ Section 4: MEL Alleviation for JAR-OPS 3 Subparts K and L
 - ◆ Section 5: Additional MEL Policy

MMEL - General

The MMEL is a document that lists the equipment which may be temporarily inoperative, subject to certain conditions, while maintaining an acceptable level of safety as intended in the applicable JAR or equivalent Requirement. Each MMEL is specific to an Aircraft type.

MMEL/MEL 0.10 - GENERAL

(a)

The MMEL is a document that lists the equipment which may be Temporarily inoperative, subject to certain conditions, while maintaining an acceptable level of safety as intended in the applicable JAR or equivalent Requirement. Each MMEL is specific to an aircraft type.

(b)

All items related to the airworthiness of the aircraft and not included in the list are automatically required to be operative.

(c)

Non-safety related equipment such as galley equipment and passenger convenience items, need not be listed

Preparation of MEL

JAR-MMEL/MEL.060

When a MMEL revision is issued, an operator will have 90 days from the date of revision to submit the revised MEL to the Authority.

Rectification Interval

- The operator shall take account of the Rectification Interval given in the MMEL when preparing an MEL. The Rectification Interval in the MEL shall not be less restrictive than the corresponding Rectification Interval in the MMEL.
- The operator may grant a one time extension of the applicable Rectification Interval(RIE). Extension may be granted by CAA-N only if given in applicable MMEL.



Operational and Maintenance Procedures

Operational and Maintenance Procedures are necessary to support certain MMEL items. These Procedures shall be produced and published by the TC Holder or the STC Holder, as appropriate.

(M)-Procedures

Maintenance Procedures shall be accomplished prior to operating with the listed item inoperative. Normally these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorised to perform certain functions. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the operator.

Eks: MMEL S-92

24-1 Generator AC Cat: B, Number installed: 2, required for dispatch: 1

(O) (M) May be inoperative for VFR operations only provided:

- a) Generator is deactivated and secured.
- b) Conditions do not require rotor ice protection, and
- c) APU Generator is operational and ON.

Aircraft Technical Log

- ATL procedures must be established
- Complaint: AC GEN #1 warning
- Action: C/B #1 AC GEN WARN pulled and tie wrapped and # 1 AC GEN switch to position Off/reset in accordance to M-procedure. Helicopter released in acc with MEL 24-1 as Cat B. AC GEN #1 placarded INOP and transferred to seq xxx.
- Complaint; MEL 24-1 Cat B: #1 AC GEN switch set to Off/reset and placarded INOP. C/B #1 GEN WARN pulled and tied up

AMC M.A.301 - 2- Continuing airworthiness tasks

In the case of commercial air transport or large aircraft, a system of assessment should be in operation to support the continuing airworthiness of an aircraft and to provide a continuous analysis of the effectiveness of the M.A. Subpart G approved continuing airworthiness management organisation's defect control system in use. The system should provide for:

(d) unscheduled removals and system performance: analyse unscheduled component removals and the performance of aircraft systems for use as part of the maintenance programme efficiency. When deferring or carrying forward a defect the cumulative effect of a number of deferred or carried forward defects occurring on the same aircraft and any restrictions contained in the MEL should be considered. Whenever possible, deferred defects should be made known to the pilot/flight crew prior to their arrival at the aircraft.



Continuing airworthiness management

M.A.708.

6. ensure that all defects discovered during scheduled maintenance or reported are corrected by an appropriately Approved MO

Deferred Defect List(DDL)

- Deferred defects should be transferred on to worksheets at the next appropriate maintenance check, and any deferred defect which is not rectified during the maintenance check, should be re-entered on to a new deferred defect record sheet. The original date of the defect should be retained.
- M.A.403 (b)
Only the authorised certifying staff, according to M.A.801 (b) 1, M.A.801 (b) 2 or Part-145 can decide, using M.A.401 maintenance data, whether an aircraft defect hazards seriously the flight safety and therefore decide when and which rectification action shall be taken before further flight and which defect rectification can be deferred.

Configuration Deviation List (CDL)

- Applicable to aircraft designed in acc. CS-25
- CS AMC 25.181
Operation of the aeroplane without certain secondary airframe and engines parts is allowed through the use of an approved CDL. The CDL should be included in the AFM as a separate appendix. The following guidance should be followed when preparing the CDL.
- Appendix 1 to EU-OPS 1.1045
CDL, if provided by the manufacturer, taking account of the aeroplane types and variants operated including procedures to be followed when aeroplane is being dispatched under the terms of its CDL