

A stylized paper airplane icon is positioned on a dashed line that represents a flight path. The path starts from the left, curves upwards, then downwards, and then upwards again towards the right. The background features large, light grey, abstract wavy shapes.

CIVIL AVIATION GUIDANCE MATERIAL – 6803

MINIMUM + EQUIPMENT LIST

MEL

CIVIL AVIATION AUTHORITY OF MALAYSIA

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Introduction

This Civil Aviation Guidance Material 6803 – Minimum Equipment List (CAGM 6803 – MEL) is issued by the Civil Aviation Authority of Malaysia (CAAM) to provide guidance for the Minimum Equipment List of aircraft pursuant to CAD 6801 – Continuing Airworthiness of Aircraft (CAAM Part M).

Organisations may use these guidelines to ensure compliance with the respective provisions of the relevant CAD's issued. Notwithstanding the Regulation 204 and Regulation 205 of the Malaysian Civil Aviation Regulations 2016 (MCAIR 2016), when the CAGMs issued by the CAAM are complied with, the related requirements of the CAD's may be deemed as being satisfied and further demonstration of compliance may not be required.

A handwritten signature in black ink, appearing to read 'Chester Voo Chee Soon', written in a cursive style.

(Captain Chester Voo Chee Soon)
Chief Executive Officer
Civil Aviation Authority of Malaysia

Civil Aviation Guidance Material components and Editorial practices

This Civil Aviation Guidance Material is made up of the following components and are defined as follows:

Standards: Usually preceded by words such as “*shall*” or “*must*”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where uniform application is necessary for the safety or regularity of air navigation and to which Operators must conform. In the event of impossibility of compliance, notification to the CAAM is compulsory.

Recommended Practices: Usually preceded by the words such as “*should*” or “*may*”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where the uniform application is desirable in the interest of safety, regularity or efficiency of air navigation, and to which Operators will endeavour to conform.

Appendices: Material grouped separately for convenience, but forms part of the Standards and Recommended Practices stipulated by the CAAM.

Definitions: Terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.

Tables and Figures: These add to or illustrate a Standard or Recommended Practice, and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

Notes: Included in the text, where appropriate, Notes give factual information or references bearing on the Standards or Recommended Practices in question but not constituting part of the Standards or Recommended Practices;

Attachments: Material supplementary to the Standards and Recommended Practices or included as a guide to their application.

It is to be noted that some Standards in this Civil Aviation Guidance Material incorporates, by reference, other specifications having the status of Recommended Practices. In such cases, the text of the Recommended Practice becomes part of the Standard.

The units of measurement used in this document are in accordance with the International System of Units (SI) as specified in CAD 5. Where CAD 5 permits the use of non-SI alternative units, these are shown in parentheses following the basic units. Where two sets of units are quoted it must not be assumed that the pairs of values are equal and interchangeable. It may, however, be inferred that an equivalent level of safety is achieved when either set of units is used exclusively.

Any reference to a portion of this document, which is identified by a number and/or title, includes all subdivisions of that portion.

Throughout this Civil Aviation Guidance Material, the use of the male gender should be understood to include male and female persons.



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1 General

1.1 Purpose

- 1.1.1 This CAGM sets forth an acceptable means, but not the only means, of establishing a Minimum Equipment List acceptable to CAAM.
- 1.1.2 Material in this CAGM is neither mandatory nor regulatory in nature and does not constitute a regulation.

1.2 Applicability

- 1.2.1 This CAGM is applicable to all owner and operator of Malaysian registered aircrafts. The term '*operator*' in this document shall refer to the Continuing Airworthiness Management Organisation (CAMO) and Flight Operations (FO) of that aircraft.
- 1.2.2 A MEL may indicate that it applies to several aircraft registrations as long as the MEL clearly identifies the applicability in the respective ATA chapter.
- 1.2.3 Where Malaysia is the State of Operator, the organisation shall refer to this CAGM as a guidance to develop the MEL.

1.3 Related Publications

- 1.3.1 This CAGM must be read in conjunction with the publications listed in 1.3.2.
- 1.3.2 Copies of the latest versions of the following publications are also available on the CAAM websites.
 - a) CAD 6801.
 - b) CAD 6802.
 - c) CAD 6004.
 - d) CAD 6014
 - e) CAGM 6004.



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2 MEL Requirement

2.1 Introduction

2.1.1 The MEL is a joint operations and maintenance document prepared by operator to:

- a) identify the minimum equipment and conditions for an aircraft to maintain the Certificate of Airworthiness in force and to meet the operating rules for the type of operation;
- b) define operational procedures necessary to maintain the required level of safety and to deal with inoperative equipment; and
- c) define maintenance procedures necessary to maintain the required level of safety and procedures necessary to secure any inoperative equipment.

2.1.2 Whilst the MMEL is typically for an aircraft type, the MEL is however tailored to the operator's specific aircraft and operating environment and may be dependent upon the route structure, geographic location, and number of airports where spares and maintenance capability are available etc. The MMEL cannot address these individual variables, nor the standard terms such as "As required by Regulations".

2.1.3 It is for these reasons that a MMEL cannot be approved for use as a MEL. It falls on the operator to develop, Operation "O" and Maintenance "M" procedures, or to use a Despatch Deviation Procedure Guide (DDPG) or Despatch Deviation Guide (DDG), where these documents are available to develop the MEL.

Note. – Air Operators currently using an approved MEL or in the process of amending or developing a new MEL must ensure that all regulatory references are in accordance with CAR 2016.

2.2 Equipment Required By Operating Regulation

2.2.1 When an item or equipment is required to be installed and operative under particular circumstances by CAR 2016, such item or equipment shall be defined in the MEL remark's column where it mentioned the wording "As required by Regulation".

2.2.2 The operator shall not leave the statement "As required by Regulation" in their MEL unattended.

2.3 MEL Intent

2.3.1 All commercial air transport aircrafts are required to have an MEL.

2.3.2 Unless expressly authorised by the Chief Executive Officer, operation of an aircraft with aircraft equipment inoperative or removed is prohibited unless an operator does so in compliance with an approved MEL.



2.4 MEL Limitation

- 2.4.1 The content of an operator's approved MEL cannot be less restrictive than the content of the source MMEL for that aircraft type.

2.5 Audit Of Operator's MEL

- 2.5.1 CAAM will audit the operator's conformance to MEL requirements on an ongoing basis, and as part of any organisation audit either for AOC audit, CAMO audit or continuous surveillance. Significant non-conformances may result in the MEL approval being withdrawn under the rules.

2.6 Applicability

- 2.6.1 Regulation 42(2)(a) of CAR 2016 states that where a MEL has been approved with respect to the operator of an aircraft, no person shall conduct a take-off in that aircraft with equipment that is unserviceable or removed unless the aircraft is operated in accordance with the conditions or limitations specified in the minimum equipment list. The utilisation of MEL and the procedures developed for its application must not be in conflict with either the Aircraft Flight Manual Limitations, Emergency Procedures, or with Airworthiness Directives (AD), all of which will take precedence over the MEL and its procedures.

3 MEL Approval Procedures

3.1 Approval Authority

In accordance with CAR 2016 the authority and responsibility for MEL approval rests with the Chief Executive Officer.

3.1.1 Initial Application Information

When an operator expresses the intent to operate an aircraft eligible to use an MEL, the operator shall follow the procedure set forth in this CAGM. Operators are required to complete and submit to Airworthiness Division the application form CAAM/AW/6803-01 and checklist CAAM/AW/6803-03 together with all the necessary documents and publications (MMEL latest) as a package for CAAM MEL approval.

3.1.2 MMEL Status

The operator must ensure that they use the latest version of the source MMEL to develop their MEL. CAAM may add overriding limitations as it sees fit.

3.1.3 MMEL Acquisition

Approved MMELs may be acquired from the authority of the State of Design of that specific aircraft. Alternatively, operator may obtain MMELs directly from the manufacturer, who normally provides MMELs along with a revision service. It is the responsibility of the operator to provide a complete set of source MMEL document to the CAAM and also ensure a proper revision service.

3.1.4 Operator MEL Development

a) Development

- 1) The operator will develop their MEL and all subsequent amendments, as a joint operations and maintenance document; based on the current MMEL revision
- 2) The MEL shall be approved by recognised senior officer from each respective department in the operator's organisation (Operations and Maintenance) prior to the MEL initial or amendment approval application being submitted to CAAM.

b) Substantiation

The operator must provide adequate substantiating documents to support their MEL submissions to CAAM. These documents will provide additional information relating to the operator's MEL program. Any additional MEL items which do not appear in the MMEL will require substantiation for consideration, and must be accompanied by a description of the appropriate Operational or

Maintenance procedures. The Airworthiness Division and Flight Operation Division will review the request, and if valid, will approved the MEL.

c) Copies

Each copy of MEL shall be provided to the responsible Primary Maintenance Inspector (PMI) and Primary Flight Operation Inspector (POI).

3.1.5 MEL Meetings

CAAM may decide to conduct a MEL meeting to discuss the content of the MEL in the initial approval stage and/or the subsequent review or amendment stages. The operator shall accommodate these meetings as and when required by CAAM.

3.2 MEL Updating And Amendments

3.2.1 It is the operator's responsibility to ensure that their MEL is reviewed and updated as required. The MEL should be reviewed by the operator at least annually to ensure that it incorporates any changes to the operation, aircraft or to the regulation. A revision to the MMEL, will require that operator review and amend their MEL, as necessary. The MEL development, processing and approval procedures should be reviewed as part of the operator's quality monitoring programme.

3.2.2 Amendments to MELs will be handled according to the process outlined in this document for initial approval. Where a source MMEL revision is more restrictive, the operator must submit an appropriate amendment to the MEL for approval immediately on receipt of the MMEL revision. Priority is to be accorded when dealing with such revisions.

3.2.3 Where a Dispatch Deviation Procedures Guide (DDPG) or equivalent document is available; or where a MMEL revision does not affect a procedure, the time for MEL amendment remains at 120 days. Where a DDPG or equivalent document is not available; or where the MMEL revision affects a procedure ((M) or (O)), the MEL amendment time is 60 days.

3.3 MEL Development Procedures

3.3.1 MEL Basic Format

a) The MEL must include the following: a List of Effective Pages, a Table of Contents, the Minimum Equipment List Preamble, Notes and Definitions, a section for each aircraft system addressed (ATA 100), and amendment record page. Operator must specify the MMEL revisions and any other documents such as a DDPG, used in the development of their MEL.

b) MEL Page Format

1) MEL format is at the discretion of the operator, provided that it is clear and unambiguous. However, it is recommended that the MEL page

format follow the MMEL page format of four columns. The page numbering, and individual MEL items, however, must be in accordance with the ATA 100 code system.

- 2) The MEL may incorporate only one item per page or as considered appropriate by the operator when operations and/or maintenance procedures are required. If no procedures are required, or the required action is simple, multiple items may appear on a single page.

c) List of Effective Pages

- 1) A List of Effective Pages (LEP) will be used to ensure that each MEL is up-to date.
- 2) It must list the date of the last amendment for each page of the MEL. CAAM will stamp and initial the List of Effective Pages to indicate the approval status of the contents of the MEL. The date and revision status of each page of the MEL must correspond to that shown on the List of Effective Pages.
- 3) The CAAM stamped and initialled LEP must be retained on file. Operators may reproduce copies of the approved MELs however, the operator shall reflect in the MEL the detail of the locations where within the organisation the approved MEL is retained.

d) Table of Contents

The Table of Contents page shall list the section for each aircraft system utilising the ATA 100 listing as found in the MMEL. Pages will be numbered with the ATA system number followed by the item number for that system (e.g., the page following 27-2-1 would be 27-2-2).

e) MEL Preamble

- 1) The purpose of the Minimum Equipment List Preamble is to provide direction to operator's personnel on the philosophy and use of the MEL.
- 2) An operator may choose to develop the preamble based on the MMEL or a standard preamble as per Appendix 1 of this CAGM.

f) Notes and Definitions

Notes and Definitions are required to allow the user to interpret the MEL properly. As a minimum, the notes and definitions contained in MMEL will be used in the MEL. Additions to the notes and definitions may be applied to the operator's MEL as required.

g) Operating and Maintenance Procedures

- 1) Dispatch with inoperative items is often acceptable only with the creation of special operating or maintenance procedures.
- 2) Where the MMEL indicates that this is the case, the operator must establish, publish and obtain approval for appropriate procedures. Procedures recommended by the aircraft manufacturer in most cases can

be adopted for this purpose, but the ultimate responsibility for providing acceptable procedures to be approved in the MEL rests with the operator. These procedures will ensure that a satisfactory level of safety will be maintained

- 3) When comparing the MEL against the MMEL, operators must ensure that where the (O) or (M) symbols appear, an operating or maintenance procedure has been developed that provides clear direction to the crew members and maintenance personnel of the action to be taken. This procedure must be included in the MEL.
- 4) The only exception is when the procedure is contained in another document that is available:
 - 5) to the flight crew on the flight deck, such as an Aircraft Flight Manual, Aircraft Operating Manual, or the operator's Operations Manual;
 - 6) to the maintenance crew, such as an Aircraft Maintenance Manual, Continuing Airworthiness Management Exposition (CAME), etc.
- 7) In these cases, the MEL may refer to a section of the appropriate document.
- 8) It is not acceptable to reference the *Civil Aviation Regulations* or similar documents, as these are not carried on board the aircraft and could be subject to misinterpretation. The objective is to provide personnel with clear, concise direction on how they can proceed with the operations under such circumstances. Where the MMEL column 4 states "as required by Regulation or NAA", this wording shall not appear in the MEL but be replaced with the detail of the specific regulation or requirements.

h) Approval of Operating and Maintenance Procedures

Manufacturers may choose to produce operating and maintenance procedures such as Dispatch Deviation Procedure Guides, for use by operators. These procedures may be inserted into the appropriate MEL pages, and submitted by the operator, to form part of the MEL. Dispatch Deviation Procedures Guides, Dispatch Deviation Guides, and other similar documents cannot be approved by CAAM, nor can they replace the MEL. If the aircraft manufacturer has not published operating or maintenance procedures, the operator must develop appropriate procedures and submit them to CAAM for approval.

i) Manual Procedures

The operator must establish procedures for the use and guidance of crew members when using the MEL. The procedures must agree with those in the Continuing Airworthiness Management Exposition (CAME). The operator may choose to include all procedures/instructions in the MEL itself.

4 MEL Programme

4.1 Repair Interval Categories.

4.1.1 The maximum time an aircraft may be operated between the deferral of an inoperative item and its repair will be specified in the MEL and where the MMEL has been categorised. Passenger convenience items such as reading lights and entertainment units must include a category. Most of these items will be a “D” category.

Category A

Items in this category shall be repaired within the time interval specified in the “Remarks and Exceptions” column of the operator's approved MEL. Whenever the provision in the “Remarks or Exceptions” column of the MMEL states cycles or flight time, the time interval begins with the next flight. Whenever the time interval is listed as flight days, the time interval begins on the flight day following the day of discovery.

Category B

Items in this category shall be repaired within three (3) consecutive calendar days, excluding the day of discovery.

Category C

Items in this category shall be repaired within ten (10) consecutive calendar days, excluding the day of discovery.

Category D

Items in this category shall be repaired within hundred and twenty days (120) consecutive calendar days, excluding the day of discovery.

4.2 MEL Item Repair Interval Program

4.2.1 Purpose

Under certain conditions, such as a shortage of parts from manufacturers, or other unforeseen, situations, air operators may be unable to comply with specified repair intervals. This may result in the grounding of aircraft. To preclude that from happening, a MEL Item Repair Interval Extension Program has been instituted that will allow operators, under controlled conditions, to obtain extensions to MEL repair interval categories.

4.3 Approval

4.3.1 Operator shall notify their PMI and POI within two working days any time it becomes necessary to continue or extend the item repair interval period beyond the expiry date.

- 4.3.2 For all extensions, the operator shall provide the information to CAAM in an equivalent and acceptable format. A copy of the completed package must accompany the journey log entry as follows:
- a) “This aircraft is operating on a MEL item repair interval extension as specified in the attached documents”;
 - b) a copy of the completed repair interval extension documents (or the equivalent document) shall be retained on file by the operator for auditing purposes. A review may result in changes to the period of the extension, or may be used to determine abuse of the process; and
 - c) the operator shall ensure that the provisions of this section have been fully addressed in the policy prior to the approval or amendment of the operator's MEL.

Note. – Certain items qualify for time-limited dispatch as specified in the Type Certificate Data Sheets. The notation “And no extensions are authorised” will appear in the MEL for such items.

4.4 Program Procedures

4.4.1 Organisation exposition

To ensure that operators obtain extensions on MEL repair intervals, only when necessary, the following elements must be adequately addressed in the organisation exposition. Some of the elements listed below are already required as part of an operator's maintenance program.

They are restated here to emphasise their importance with respect to the MEL Interval Extension Program. This list is not all inclusive and continuing airworthiness personnel should take any other appropriate factors into account as necessary:

a) Authority

The operator must assign authority to the appropriate level of the maintenance department for seeking approval of interval extensions. Procedures must be established and implemented to ensure that extensions are not sought without approval from the assigned operations and maintenance management level. The authorised operations and continuing airworthiness manager will indicate his/her approval for seeking the extension in writing.

b) Communications

Operator's continuing airworthiness and operations divisions must establish clear lines of communication to show that a MEL item repair extension will not be sought unless both parties agree that the extension is clearly warranted.

c) Parts/Equipment Control

The operator must establish and implement procedures that will ensure where parts and/or equipment are needed to rectify a MEL defect, these established procedures will be acted upon in the timeliest manner.

d) Maintenance Control

The operator must establish and implement procedures to ensure that where required, all maintenance actions to rectify a defect are initiated in the timeliest manner.

e) Records

In addition to the existing maintenance record keeping requirements, operators must indicate what records will be used for this program. Of primary interest will be records that convey maintenance approval for seeking a MEL item interval extension and any other records that indicate maintenance, parts, or equipment control actions. A control sheet or other similar means should be used to track all events related to the extended MEL item up to and including rectification. The operator must be able to provide all records necessary to clearly justify a MEL interval extension, when requested.

f) Audits

The operator must include the MEL Item Interval Extension Program in their system of internal audits at an initial frequency of 12 months or less.

4.4.2 Communication with authority

PMI and POI responsible for each operator requesting this extension must establish clear lines of communication throughout the approval and ongoing surveillance of this program. Communication should ensure that where an operator requests an extension, both the PMI and the POI are made aware of this report on an urgent basis. The operator has a requirement to report the request of a MEL item repair interval extension to the PMI or POI at least two days in advance.

4.5 Program Administration

4.5.1 Events beyond the Operator's Control

The core of this program is to ensure that operators do not substitute MEL item repair interval extensions as a means to reduce or eliminate the need to repair MEL defects in accordance with the established category limit. Operators are not to use the extension program as a normal means of conducting MEL item repairs. Extensions will only be considered valid and justifiable when events beyond the operator's control have precluded rectification.

It is recognised that while MEL item repair interval categories have been established, it may not be possible in every case to repair aircraft in the time

allotted for each MEL item. Several factors may influence the operator's ability to comply with the specified interval.

4.5.2 These factors include:

- a) Parts shortages from manufacturers that affect all operators equally. Parts shortages can result from material, labour, or shipping problems but must be clearly beyond the operator's control.
- b) Inability to obtain equipment necessary for proper troubleshooting and repair. Operators must, to the maximum extent possible, have the necessary equipment available to perform troubleshooting and repair of MEL items. Equipment shortages or un-serviceability may be encountered that cannot be directly controlled by the operator for the specified MEL item.
- c) Abuse of the extension program, as determined by the CAAM will result in withdrawal of extension privileges.

4.6 Program Compliance

4.6.1 Attempts have been made to define abuse of this program in quantitative terms. Abuse can be determined based on the correct application of approved procedures. Airworthiness and Operational personnel must ensure that operators establish and implement a sound program and that ongoing surveillance ensures compliance with approved procedures.

4.6.2 The actual number of MEL interval extensions will vary from one operator to another due to individual circumstances. Emphasis should not be placed on how many MEL item repair interval extensions are given, but rather on the correct application of approved procedures for the issue of the extension.

4.6.3 The operator **may** be granted with internal approval of one-time repair interval extension for category B, C and D of MEL if the operator has demonstrated an effective control of this program and CAAM has satisfied that the operator is fit to hold that privilege.

4.7 Deferral Of Items

4.7.1 Procedures for the deferral of MEL items will be included as part of the operator's approved organisation exposition. The operator must ensure that the Operations Manual and the MEL reference the aforementioned procedures in the organisation exposition.

4.7.2 Requirements

These procedures comprise a method for:

- a) deferral and/or rectification of inoperative equipment;
- b) placarding requirements as per the MEL;

- c) dispatching of aircraft with deferred MEL item(s);
- d) a remote deferral system;
- e) controlling categorised times; and
- f) the training of operator personnel who are responsible for MEL compliance procedures.

4.8 Review Of Deferred Items

The operator must establish procedures to periodically review the deferred items, in order to ensure that any accumulation of deferred items neither conflict with each other nor present an unacceptable increase in flight or cabin crew workload. Notwithstanding the categorisation of item repair intervals, it should be the aim of each MEL document holder to ensure that inoperative items are repaired as quickly as possible.



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5 Placarding

All inoperative items/equipment must be placarded to inform crew members of the condition of the items/equipment. While some MEL items may require specific wording, the majority of the placard wording and location is left to the discretion of the operator. The operator shall ensure that the placard is in place prior to the aircraft being dispatched.

Note. – The exclusion of an asterisk in a MMEL does not preclude the requirement for placarding.

5.1 Requirements To Placarding And Placard Control

- 5.1.1 Placarding will be carried out in accordance with the placarding procedures established and set out in the operator's approved organisation exposition. The method of placarding control must ensure that all inoperative items are placarded and that placards are removed and accounted for when the defect is cleared.

5.2 Procedures

- 5.2.1 To the extent practicable, placards must be located as indicated in the MEL, or adjacent to the control or indicator affected.

5.3 Placard Criteria

- 5.3.1 Placards should be acceptable to CAAM requirements. The placard may be in two parts. Part One should list a description of the defect and the defect control number and should be attached to the Journey log book for crew reference. Part Two should list the system affected and the defect control number and be fixed in the appropriate location. A MEL control sheet attached to the Journey log book could serve the same purpose as Part One above.

5.4 Multiple Placards

If more than one placard is required for a MEL item, provision must be made to ensure that all placards are removed when the defect is cleared.

5.5 Temporary Placards

If a defect occurs at a remote location where maintenance personnel are not available, the authorised flight crew may install a temporary placard as required by the MEL only for deferral with (O) item. The aircraft may continue on a planned itinerary to a base where maintenance will rectify the defect or defer the rectification in accordance with the approved MEL deferral system.



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6 Dispatch

"Dispatch", for the purpose of MEL/MMEL refers to the moment the airplane starts its take-off roll. In the case of a helicopter, it refers to the moment the helicopter commences air or ground taxi. The MEL is approved on the basis that all equipment shall be operative for take-off unless the appropriate MEL procedures have been carried out. The operator's MEL shall include procedures to deal with any failures which occur between the start of taxi or push back and take-off brake release. Any failure which occurs after take-off commences shall be dealt with as an in-flight failure, by reference to the appropriate section of the aircraft flight manual. After take-off commences, no MEL action is required, until the completion of the next landing.

6.1 Operational And Maintenance Items

6.1.1 Any MEL item or equipment, which when inoperative would require an operating or maintenance procedure to ensure the required level of safety, shall be so identified in the "remarks" or "exceptions" column of the MEL. This will normally be "O" for an operating procedure, or "M" for a maintenance procedure. (O)(M) means both operating and maintenance procedures are required.

a) (O) Items

- 1) Aircraft with inoperative equipment requiring an operating procedure may be returned to service following completion of the required MEL procedure for deferral.
- 2) Operating procedures are normally carried out by qualified flight or cabin crew, but may be accomplished by other qualified, approved personnel.

b) (M) Items

- 1) Aircraft with inoperative equipment requiring a maintenance procedure may be returned to service following completion of the required MEL procedure for deferral.
- 2) Maintenance procedures are normally accomplished by authorised maintenance personnel.



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7 Training

7.1 Training Program — Ground Personnel

7.1.1 Operators shall develop a MEL training program for ground personnel, to be included in the organisation exposition and operations manual, as appropriate, which must be approved prior to an operator receiving approval to operate with a MEL. The training should include those sections of the organisation exposition /operations manual procedures dealing with the use of the MEL, placarding of inoperative equipment, deferral procedures, dispatching, and any other MEL related procedures. Ground personnel includes dispatchers and maintenance engineers.

7.2 Training Program — Crew Members

7.2.1 Operators shall provide crew members with MEL training and shall detail such training in their organisation manual. The training will include the purpose and use of a MEL, instruction on operator's MEL procedures, elementary maintenance procedures, and pilot-in-command responsibility. Crew members include pilots, flight engineers, and flight attendants.

7.3 Training Program — Recurrent

7.3.1 Recurrent training shall be conducted, annually, to refresh procedural knowledge and ensure operator's personnel are aware of any changes in MEL procedures



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8 Appendices

8.1 Appendix 1 – MEL Preamble - standard

All equipment installed on an aircraft in compliance with the Airworthiness Standards and the Operating Rules must be operative. However, Civil Aviation Regulation 2016 permits the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary under all operating conditions. Experience has shown that with the various levels of redundancy designed into aircraft, operation of every system or installed component may not be necessary when the remaining operative equipment can provide the required level of safety.

A Minimum Equipment List (MEL) is developed by the operator to improve aircraft utilisation and thereby provide more convenient and economic air transportation for the public. The approved MEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment CAAM finds may be inoperative and yet maintain the required level of safety by applying appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders. The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular aircraft equipment configuration and operational conditions. Operator MELs, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MEL. The individual operator's MEL, when approved, permits operation of the aircraft with inoperative equipment.

Equipment not required by the operation being conducted and equipment in excess of the requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Aircraft Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and operating regulations of the aircraft not listed on the MEL must be operative.

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that the required level of safety is maintained.

The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain the required level of safety and reliability the MEL establishes limitations on the duration of and conditions for operation with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Aircraft Maintenance Record/Journey Logbook. The item is then either repaired or deferred as per the MEL. Alternatively, the aircraft must be in compliance with CAD 8503 which specify the requirements for operating an aircraft subject to the Permit to Fly and flight condition or condition for flight and the subordinate position of a MEL with regard to an Airworthiness Directive (AD) for the same item. MEL conditions and limitations do not relieve the operator from determining that the aircraft is in a safe condition for operation with items of equipment inoperative.



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