# CIVIL AVIATION AUTHORITY

# TECHNICAL GUIDANCE MATERIAL

# for

# Approval of Minimum Equipment List (MEL) and Configuration Deviation Lists (CDL) CA AOC-008

SUBJECT: APPROVAL OF MINIMUM EQUIPMENT LIST (MEL) AND CONFIGURATION DEVIATION LISTS

(CDL) CA AOC-008.

**EFFECTIVE DATE**: 02 December 2020

#### **APPLICABILITY**

This Guidance Material provides information and guidance on developing and seeking approval for the operator's Minimum Equipment List (MEL) and Configuration Deviation Lists (CDL).

#### **PURPOSE**

The SA-CAR of 2011, as amended stipulates that SACAA approved AOC Holders shall establish a Minimum Equipment List (MEL) for each type of aircraft for which a Master Minimum Equipment List (MMEL) has been approved by the State of Manufacture "State of Design" of such aircraft, provided the State of Manufacture "State of Design" is a Contracting State. The Minimum Equipment List (MEL) is intended to permit the operation of an aircraft with certain inoperative items for a limited period of time until repairs can be accomplished.

#### REQUIREMENTS

Part 93, 121; 127, 128 and 135 of the SACAR 2011, as amended.

#### 1. REFERENCE:

- i. CAR Part 93.07.16
- ii. CAR Part 121.07.19
- iii. CAR Part 127.07.28
- iv. CAR Part 128.07.22
- v. CAR Part 135.07.18
- vi. SA-CATS 43.02.3.1(1)(k)
- vii. SA-CATS 43.02.3.1(1)(m)

#### 2. TERMS AND ABBREVIATIONS:

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TERM	DEFINITION	
Aeroplane Flight Manual (AFM)/ Rotorcraft Flight Manual (RFM).	The approved flight manual is the document approved by the responsible CAA aircraft certification office (ACO) during type certification. The approved flight manual for the specific aircraft is listed on the applicable type certificate data sheet. The approved flight manual is the source document for operational limitations and performance parameters for an aircraft. The term, approved flight manual, can apply to either an AFM or an RFM The CAA requires an approved flight manual for aircraft type certification.	
Air Transport Association of America (ATA) Specification 100	ATA Specification 100, Manufacturer's Technical Data, is an international industry numbering standard developed to identify systems and components on different aircraft in the same format and manner.	
Aircraft Evaluation Group (AEG)	The AEG is the CAA point of contact for aircraft certification, and is responsible for the development, revision and publication of an MMEL for those aircraft within its area of responsibility.	
Aircraft Maintenance Manual (AMM)	The AMM is the source document for aircraft maintenance procedures. The term AMM can apply to either an aeroplane or a rotorcraft manual. The CAA requires an AMM for aircraft certification.	
Calendar Days	Includes all days, with no exclusion for weekends and holidays.	
Configuration Deviation List (CDL)	Aircraft certified under the provisions of a State's Civil Air Regulations and intended for use in air transport operations may be approved for operations with missing secondary airframe and engine parts. The aircraft source document for such operations is the CD The CAA grants approval of the CDL under an amendment to the type certificate. For U.S. certificated aircraft, the CDL is incorporated into the limitations section of the approved flight manual as an appendix.	
Deferred Maintenance	The postponement of the repair or replacement of an item of equipment or an instrument.	
Equipment List	An inventory of equipment installed by the manufacturer or operator on a particular aircraft.	
FAA Flight Operations Evaluation Board (FOES).	An FOEB is a board of FAA personnel assigned for each type of aircraft. The FOEB is composed of CAA personnel who are operations, avionics, airworthiness, and aircraft certification specialists. The FOEB develops an MMEL for a particular aircraft type.	
Inoperative	Inoperative means that a system or component has malfunctioned to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limits or tolerances.	
Instructions for Continuing Airworthiness (ICA)	The written instructions that specify requirements, procedures and standards for continuing airworthiness. Maintenance data is a subset of ICA.	
Master Minimum Equipment List (MMEL)	The MMEL is a list of equipment that the State of Design has determined may be inoperative under certain operational conditions and still provides an acceptable level of safety. The MMEL contains the conditions, limitations and procedures required for operating the aircraft with these items inoperative. The MMEL is used as a starting point in the development and review of an individual operator's MEL.	
Minimum Equipment List (MEL).	The MEL is derived from the MMEL and is applicable to an individual operator. The operator's MEL takes into consideration the operator's particular aircraft configuration, operational procedures and conditions. When approved and authorised for use, the MEL permits operation of the aircraft under specified conditions with certain inoperative equipment.	
Proposed Master Minimum Equipment List (PMMEL).	The PMMEL is a list developed by the manufacturer or operator that is submitted to, in the U.S, the FAA FOES as a basis for the development of an MMEL	
State of Design	means the State having authority over the organisation responsible for the type design	

TERM	DEFINITION
	of an aircraft.
State of Manufacture	means a State which has authority over an organisation responsible for the final assembly of an aircraft, engine or propeller.

ABBREVIATION	DESCRIPTION	
AD	Airworthiness Directive	
AFM	AFM Aircraft Flight Manual	
AME	Aircraft Maintenance Engineer	
AMM	Aircraft Maintenance Manual	
AOC	AOC Air Operator's Certificate	
ATA	ATA Air Transport Association	
AWI	Airworthiness Inspector	
CAR	Civil Aviation Regulations	
CDL	Configuration Deviation List	
CVR	Cockpit Voice Recorder	
DDG	Dispatch Deviation Guide	
DDL	Deferred Defect List	
DDPG	Dispatch Deviations Procedures Guide	
EASA	European Aviation Safety Agency	
FOI	Flight Operations Inspector	
ICA	Instructions for Continuing Airworthiness	
IFR	Instrument Flight Rules	
IMC	Instrument Meteorological Conditions	
LEP	List of Effective Pages	
MCM	Maintenance Control Manual	
MEL	Minimum Equipment List	
MMEL	Master Minimum Equipment List	
(M)	Maintenance Procedures	
NAA	National Aviation Authority	
(O)	Operations Procedures	
PIC	Pilot-in-Command	
SACAA	South African Civil Aviation Authority	
SA-CAR	South African Civil Aviation Regulations	
SA-CATS	South African Civil Aviation Technical Standard	
STC	Supplemental Type Certificate	
TCAS	Traffic Collision Avoidance System	

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ABBREVIATION	DESCRIPTION
TCDS	Type Certificate Data Sheet
VFR	Visual Flight Rules
VMC	Visual Meteorological Condition

#### 3. GENERAL

#### 3.1 Background

Operational and airworthiness requirements (including aircraft type design approval requirements) require that every item of equipment installed in the aircraft must be operational at the beginning of a flight. However, because of the various levels of redundancy designed into aircraft MEL procedures were developed to allow the continued operation of an aircraft with specific items of equipment inoperative under certain circumstances. The SACAA has found that for particular situations, an acceptable level of safety can be maintained with specific items of equipment inoperative for a limited period of time, until repairs can be made. The MEL document describes the limitations that apply when an operator wishes to conduct operations when certain items of equipment are inoperative

#### 3.2 Purpose of MEL

The MEL is a joint operations and maintenance document prepared for or by an 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.
- d. The operator's MEL takes into consideration the operator's particular aircraft configuration, operational procedures, conditions and limitations contained in an approved MEL. When approved and authorized for use, the MEL permits operation of the aircraft under specified conditions with certain inoperative equipment.
- e. A MEL is for a specific make and model of aircraft and for a specific configuration and is approved by a stamp and/or signature from the SACAA authorising its use by the operator.

#### 3.3 MEL Definition

While the MMEL is for an aircraft type, the MEL is 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 standard terms such as "As required by Regulations". It is for these reasons that a MMEL cannot be approved for use as a MEL. It falls on the operator to develop Operations "O" and Maintenance "M" procedures, or to use a DDPG or DDG, where these documents are available.

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Note:

"(M)" procedures based on Type Certificate holder (TC) or Supplemental Type Certificate holder (STC) approved data. Documents issued by the Type Certificate holder, STC holder or Dispatch Deviations Guides, pre-approved maintenance and operational procedures etc, should also be reviewed during development of the MEL where these documents are available.

#### 3.4 Equipment Required by Operating Regulation

When an item of equipment is required to be installed and operative under particular circumstances by the SA-CARs such equipment maybe defined in the remark's column of the MEL by the description of the regulation extract rather than words "As required by Regulation".

It is not acceptable to reference the SA-CARs 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 are to proceed. Where the MMEL column 4 states "as required by Regulation", this wording shall not appear in the MEL; rather, a synopsis of the Regulation shall appear.

#### 3.5 MEL Content

- a. The operator's MEL must reflect the current source MMEL limitations unless otherwise authorized. When a revision is issued to a MMEL the operator's MEL need not be revised if the change is less restrictive than the existing MEL.
- b. Except as noted above, all items installed in an operator's aircraft which are addressed in the most recent accepted version of the source MMEL shall be included in the MEL. At the same time, an operator or pilot retains the option to refuse any alleviation, and may choose not to dispatch with any particular MEL item inoperative

**Note:** For items covered by the MEL, the aircraft should not be operated with the items removed unless the MEL explicitly allows for the removal of equipment detailed in the MEL, or the removal is approved as a modification under SA-CAR Part 21.03.1.

#### 3.6 Items listed on the MEL.

#### a. Categories of Items

There are three categories of items that may be contained in the operator's MEL:

- i. MMEL items
- ii. Passenger convenience items
- iii. Administrative control items

#### b. MMEL Items.

- i. The MEL will list all of the items for which the operator seeks relief and that are appropriate for its operation. The operator may be more restrictive than permitted by the MMEL by not listing certain items in its MEL or adding operational restrictions or using a more restrictive repair category or increasing the number required for dispatch.
- ii. For Items listed on the MMEL but not installed on the operator's aircraft, the operator may elect to simply omit the item from the MEL altogether, renumbering individual items within an ATA category as necessary to provide proper continuity. (It

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should be noted that individual item numbers on a page are not necessarily ATA code numbers but are simply sequential item numbers within an ATA category).

(Or the operator may list the item as shown on the MMEL and to show the number installed as zero. In this case, the "number required for dispatch" would also be zero, and the remark "not installed".)

iii. Triple asterisk symbol (\*\*\*). The triple asterisk symbol is used in an MMEL to indicate that an item is not installed on some models of the aircraft. Operators shall not produce or use this symbol in the MEL.

#### c. Passenger Convenience Items.

The passenger convenience items, as contained in the operator's approved MEL, are those related to passenger convenience, comfort, or entertainment, such as, but not limited to, galley equipment, movie equipment, in-flight phones, ashtrays, stereo equipment, and overhead reading lamps. It is incumbent on the operator to develop procedures to ensure that those inoperative passenger convenience items are not used. Passenger convenience items do not carry a specific repair interval, and need not be listed in an operator's MEL, if they are not addressed in the MMEL. The exceptions to this rule are:

- i. Where passenger convenience items serve a second function, such as movie equipment being used for cabin safety briefings, operators must develop and include operational contingency procedures in case of an equipment malfunction.
- ii. Where passenger convenience items are part of another aircraft system, for example the electrical system, procedures must be developed and included in the MEL for deactivating and securing in case of malfunction.

#### d. Administrative Control Items.

Administrative control item means an item listed by the operator in the MEL for tracking and informational purposes. The operator may use MEL as a comprehensive document to control items for administrative purposes. In such cases, the operator's MEL may include items not listed in the MMEL; however, relief may not be granted for these items unless conditions and limitations are contained in approved documents (such as structural repair manual or directive) other than the MMEL or meet SA-CAR requirements. Examples of items considered to be administrative control items would be cockpit procedure cards, medical kits, delaminated windshields, and life vests. These items should appear in the appropriate ATA chapter and would not have a repair category.

When the operator chooses this course of action, the following conditions shall be met:

- i. no item is included as an administrative control item if it is included elsewhere in the MMEL
- ii. administrative items are not included as a subsystem of items listed in the MMEL
- iii. administrative items are not granted relief in the MEL unless the release conditions or limitations are contained in another approved document.

#### 3.7 MEL Audits

a. Whenever an audit is conducted, the operator's MEL shall be reviewed. The review shall ensure that the MEL conforms to applicable SA-CAR, current policies and procedures.

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b. Special attention should be given to operating rules that may have been amended since the MEL was last approved. It shall be confirmed that the latest revisions to the MMEL - if more restrictive, have been incorporated into the MEL.

#### 3.8 Timely Repair off Items that are Inoperative.

#### 3.8.1 Operator's Responsibility

The MEL is intended to permit the operation of an aircraft with certain inoperative items for a limited period of time until repairs can be accomplished. The operator is responsible for establishing a controlled and effective repair program.

#### 3.8.2 Repair Interval

Operators must make repairs within the time period specified by the MEL. Although the MEL might permit multiple days of operation with certain inoperative equipment, operators must repair the affected item as soon as possible.

#### 3.8.3 Day of Discovery

The day of discovery is the calendar day an equipment malfunction was recorded in the flight folio or record approved by the Director. This day is excluded from the calendar days or flight days specified in the MMEL for the repair of an inoperative item of equipment. This provision is applicable to all MMEL items, such as categories "A," "B," "C," and "D." The operator must establish a reference time in which the calendar day or flight day begins and ends 24 hours later. This reference time is established to ensure compliance with timely repair of equipment and items.

#### 3.8.4 MMEL Definitions.

More than one set of MMEL definitions exist due to years of evolving changes during which not all MMELs have been updated to the latest revision of the definitions. However, only the most up-to-date set of definitions may be used with a specific MMEL. Only certain portions of the latest definitions may be appropriate for a specific air operator's MEL.

#### 3.8.5 Continuing Authorisations.

Approval of a MEL authorises an operator to use a continuing authorisation to approve extensions to the maximum repair interval for category "B" and "C" items, provided that the SACAA Office is notified within 24 hours of the operator's exercise of extension authority. The certificate holder is not authorised to extend the maximum repair time for category "A" and "D" items, as specified in the approved MEL. Under no circumstances will the operator be permitted to extent the MEL repair interval in the absence of an approved MEL extension program. (See to Section: 2 paragraph 4.8.1 for the development of the MEL extension program).

NOTE: Continued authorization is a privilege and not the operator's right to have, therefore the misuse of it will result in the privileges withdrawn by SACAA.

#### 3.9 RECORD KEEPING.

When an item of equipment becomes inoperative, the operator must report it by making an entry in the flight folio or record approved by the Director, as prescribed by SA-CAR: 91.03.5(3).

#### 3.10 MULTIPLE ITEMS THAT ARE INOPERATIVE.

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While many individual MEL requirements are designed to provide coverage for single failures, its interface with other instruments, equipment, or systems may be dependent upon the now inoperative item. This now may render another system inoperative required for a specific operation. When operating with multiple inoperative items, the operator should consider the interrelationships between those items and the effect on aircraft operation, crew workload, particular aircraft equipment configuration, operational conditions, including consideration of a single additional failure occurring en-route.

#### 3.11 FLEET APPROVAL.

An operator who has a single MEL for multiple aircraft may reflect equipment in its MEL that is not installed on all aircraft in its fleet. However, differences (if any) must be identified in the operator's approved MEL by registration marks or aircraft manufacturer's serial numbers. The installed number of items must be identified for each airframe (the remarks column of the MEL can be used for that). The list of aircraft for which the MEL is applicable should be part of the MEL content.

#### 3.12 ACCESS TO MEL.

The SA-CAR requires that the MEL is carried aboard the aircraft or that the flight crew have direct access to the MEL information prior to flight. Other means of direct access requires approval.

#### 3.13 CONFLICT WITH OTHER SACAA APPROVED DOCUMENTS.

The MEL may not conflict with other SACAA approved documents such as the approved flight manual limitations and airworthiness directives. The operator's MEL may be more restrictive than the MMEL, but under no circumstances may the operator's MEL be less restrictive.

#### 4. MEL APPROVAL PROCESS

- a. The operator will develop their MEL and all subsequent amendments, as a joint operations and maintenance document. The MEL should be developed from the latest issue of the applicable MMEL on an item-by-item basis and keeping in view the relevant regulatory requirements. In general, a MEL should not be less restrictive than the applicable MMEL for the type of aircraft.
- b. The operator's MEL shall be approved by at least one senior company official from each respective department (Operations and Maintenance) prior to the MEL application being submitted to SACAA.
- c. The operator must provide adequate substantiating documents to support their MEL submissions to their FOI/AWI. 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.
- d. The operator must submit at least two copies of the proposed MEL document to the responsible FOI/AWI for consideration of approval.
- e. An approved MEL for an aircraft is a non-transferable document and should be notated to this effect. If an aircraft moves from one Air Operator's Certificate (AOC) holder to another, the new AOC holder cannot automatically use the approved MEL for the aircraft. The new AOC holder will be authorised by SACAA only if they have acceptable associated application procedures contained in their MCM and/or operations manual.

#### 4.1 Application for amendment to the MEL

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Amendments of the approved MEL shall be submitted to the operator's responsible FOI/AWI for approval. The operator provides the list of changes and identify the affected pages and adequate substantiating documents to support the amendment. The operator shall amend the MEL;

- i. when the applicable MMEL is amended
- ii. when required by SACAA in light of in-service experience.
- iii. as required by the operator, provided the proposed change is no less restrictive than the MMEL; or
- iv. regulatory changes occur

#### 4.2 MEL approval time

Provided that the operator submits a MEL that complies with this Technical Guidance Material, SACAA will endeavour to approve the document within 60 days.

#### 4.3 Interim Approvals

SACAA will not grant an operator interim approval while the MEL is undergoing the review process, nor will approval be given to use a MMEL as a MEL. Provided an applicant submits an MEL for approval and can provide the SACAA with evidence that the aircraft already holds a current and approved MEL for the same aircraft but by a different operator, and the developer of the approved MEL is the same person or company, the MEL may be permitted for use during the time that it takes to approve the submitted MEL but not more than 30 calendar days may be exceeded from the date of permission being granted.

#### 4.4 Periodic review of MEL contents

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 SA-CARs. A revision to the MMEL, will require that the 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 assurance program.

#### 4.5 MEL DEVELOPMENT PROCEDURES

The operator's MEL shall not be less restrictive than appropriate aircraft MMEL. If items listed on the MMEL are not listed on the MEL, there is no relief.

#### 4.5.1 MEL Basic Format

The MEL must include the following:

- i. a List of Effective Pages (LEP)
- ii.a Table of Contents
- iii. the Minimum Equipment List Preamble,
- iv. Notes and Definitions

v.a section for each aircraft ATA Chapter and the items covered within those chapters.

- vi. the appropriate (O) and (M) procedures
- vii. the appropriate repair intervals (usually stated in the MEL preamble).
- viii. the letter of approval and amendment record page.
- ix. Operators must specify the MMEL revisions and any other documents such as a DDPG, used in the development of their MEL.

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#### 4.5.2 MEL Page Format

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.

- a. The page numbering, and individual MEL items, however, must be in accordance with the ATA 100 code system.
- b. 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. It is recommended that standardized format of operational and maintenance procedures should be located immediately below the inoperative item of equipment to reduce error in cross referencing.

#### 4.5.3 List of Effective Pages

The LEP is used to ensure that each MEL is up to date. It must list the date of the last revision for each page. SACAA will stamp and initial the LEP 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 LEP. The LEP is also referred to as the "control page". At a minimum, the control page must contain the following:

- a. the operator's name
- b. aircraft type, model and serial number(s)
- c. aircraft Registration Mark(s)
- d. a listing of all of the pages in the MEL (including the date of each page and its page number or revision number)
- e. the MMEL revision number on which the MEL is based;
- f. a signature block containing space for SACAA approval signature and for the date of approval
- g. highlights of change page (optional). This page contains a synopsis of the changes made by the operator in each revision.

Note: When using an aircraft in relation to which the MEL is in force, the operator must comply with the preamble and the conditions and limitations specified in the MEL.

#### 4.5.4 Table of Contents

The table of contents page shall list the section for each aircraft system utilising the ATA numbering system, as found in the MMEL.

#### 4.5.5 Chapter and page numbering

Operators shall use the standard ATA numbering system, similar to the manner used in the MMEL, for numbering individual pages in this section. An example of this numbering system would be the communications page: the first page would be 23-1; the second page would be 23-2'.

#### 4.5.6 MEL Preamble

The purpose of the MEL Preamble is to provide direction to company personnel on the philosophy and use of the MEL. The standard MMEL preamble section must be reproduced word for word in each MEL, without modification. Except where other NAA Operational Regulation are referenced, they shall be substituted with the relevant SA-CAR Operational procedures.

#### 4.5.7 Notes and Definitions

Notes and Definitions are required to allow the user to interpret the MEL properly. The standard MMEL definitions section must be reproduced word for word in each MEL, without modification. Except where definitions are clearly not applicable to the specific MEL for instance "\*\*\*" that is not allowed to be transferred to the MEL. Where another NAA Operational Regulation are referenced, they shall be substituted with the relevant SA-CAR Operational procedures.

#### 4.6 MEL ACCEPTABILITY.

The general criteria for MEL acceptability are as follows:

- a. Equally or More Restrictive: The operator's MEL must not be less restrictive than the MMEL, the South African Civil Aviation Regulations, the operations specifications, the approved flight manual limitations, certification maintenance procedures, or airworthiness directives (AD).
- b. Appropriate: The MEL must be appropriate to the individual aircraft make and model. It should take into account the service bulletins implemented and the equipment installed.
- c. Specific: The operator's operations ("O") and maintenance ("M") procedures must be specific to the aircraft and the operations conducted.
- d. Applicability: A MEL should be applicable for the SA-CAR under which the operator is certificated.

#### 4.7 OPERATING AND MAINTENANCE PROCEDURES

- a. Dispatch with inoperative items is often acceptable only with the creation of special operating or maintenance procedures.
- b. Where the MMEL indicates that this is the case, the operator must establish, publish and obtain approval for appropriate procedures. Procedures recommended by the Type Certificate Holder 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.
- c. The operator, when comparing the MEL against the MMEL must insure that where the (O) or (M) symbols appear, operational 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 right below the applicable ATA section to prevent further cross reference error.
- d. The only exception is when the procedure is contained in another document that is available to the flight crew on the flight deck, such as an Aircraft Flight manual, Aircraft Operating Manual, or the Company Operations Manual.
- e. It is not acceptable to only reference the SA-CARs or similar documents, as these documents may not be carried on board the aircraft and could be subject to misinterpretation. The objective is to provide personnel with clear, concise direction on how they are to proceed. Where the MMEL column 5 states "as required by Operating Requirements", this wording shall not appear in the MEL; rather, a synopsis of the Regulation shall appear.

#### 4.7.1 Approval of Operating and Maintenance Procedures

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Type Certificate Holder 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. However, Dispatch Deviation Procedures Guides, Dispatch Deviation Guides, and other similar documents cannot be approved by SACAA, 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 SACAA for approval.

Note: The operator must establish procedures in the Operations Manual for the use and guidance of crew members when using the MEL. The procedures must align with those in the Maintenance Control Manual. The procedures must agree with those in the Maintenance Control Manual. The operator should consider including all procedures/instructions in the MEL itself; in which case the Operations Manual will only be required to cross reference this document.

#### 4.8 Repair Interval Categories

The maximum time an aircraft may be operated between the deferral of an inoperative item and its rectification will be specified in the MEL. Non-safety related equipment "Passenger convenience items" such as reading lights and entertainment need not be listed. However, if they are listed, they must include a rectification interval category. These items may be given a "D" category rectification interval provided any applicable (M) procedure (in the case of electrically supplied items) is applied.

#### The Rectification Interval Categories are defined as follows:

#### Category A

No standard interval is specified, however, items in this category shall be rectified in accordance with the conditions stated in the MMEL. Whenever the time interval is specified in calendar days, it shall start at 00:01 on the calendar day following the day of discovery.

#### Category B

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

#### Category C

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

#### Category D

Items in this category shall be repaired within 120 consecutive calendar days, excluding the day of discovery.

#### 4.8.1 MEL Item Repair Interval Extension Program

- a. Extensions of repair intervals are permitted if rectification was not possible due to circumstances beyond the operator's control (e.g. unavailability of spare parts). Such authorisations are generally limited to one-time extensions of category B and C repair intervals.
- b. 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.

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c. Extensions will only be considered valid and justifiable when events beyond the operator's control have precluded rectification. It is recognized 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.

#### These factors include:

- i. Parts shortages from manufacturers that affect all operators equally. Parts shortages can result from material, labour, or shipping problems but must be clearly outside the operator's control.
- ii. 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 unserviceabilities may be encountered that cannot be directly controlled by the operator for the specified MEL item.
- iii. the operator has a prior approved procedure documented on MCM.
- iv. the extension of the repair interval is within the scope of the MMEL for the aircraft type.
- v. the extension of the repair interval is, as a maximum, of the same duration as the repair interval specified in the MEL.
- vi. the extension of the repair interval is technically justifiable in a manner described in paragraph ii below.
- vii. a description of specific duties and responsibilities for controlling extensions is established by the operator.

An unwillingness on the part of the operator to obtain parts or equipment to rectify the defect in the most timely manner possible will be grounds for review of extension. Misuse, as determined by the operator's AWI and FOI will result in withdrawal of extension privileges

#### 4.8.2 Program Compliance

Attempts have been made to define misuse of this program in quantitative terms. Misuse 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. The number of times this privilege is given is expected to be low. 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.

Misuse of the continuing authorisation may result in removing the operator's authority to use a MEL.

#### 4.8.3 Repair Extension Applicant Risk Analysis

Prior to applying for an extension, the operator have to perform brief safety analysis (based on the AOC operator's approved SMS risk analysis process) which will give justification that the risk will be within acceptable level of safety (e.g. within Low and Medium likelihood and consequences). No extension should be allowed to a higher risk.

i. A copy of the completed form (or the equivalent document) shall be retained on file by the operator in accordance with their approved record retention procedure, for auditing purposes.

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ii. A review may result in changes to the period of the extension or may be used to determine abuse of the process; prior to the approval or amendment of the operator's MEL to include this policy, the SACAA inspector's must ensure that the provisions of this section have been fully addressed.

#### 4.8.4 Extension Program Procedures

To ensure that operators obtain extensions on MEL repair intervals only when necessary, the following elements must be adequately addressed in the MCM. Some of the elements listed below are already required as part of an operator's maintenance program. They are restated here to emphasize their importance with respect to the MEL Interval Extension Program. This list is not all inclusive and 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 (Person Responsible Aircraft office) 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 authorized operations and maintenance manager will indicate his/her approval for seeking the extension in writing.

#### b. Communications

Operator's maintenance 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, and that these established procedures are acted upon in the most timely manner possible.

#### d. Maintenance Control

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

#### 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.

#### 4.9 Procedures for the use and guidance of flight crews and maintenance personnel

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The operator must establish procedures for the use and guidance of flight crews and maintenance personnel, in relation to the MEL. These procedures must agree with those in the operator's MCM, Operations Manual, and other operating documents. These procedures should include, but are not limited to, procedures for:

- i. deferring rectification action or invoking MEL item(s) for inoperative equipment
- ii. placarding requirements as per the MEL
- iii. ensuring that a dispatched aircraft with an invoked MEL item(s) complies with the limits and conditions of the MEL
- iv. controlling categorised repair intervals
- v. the training of company personnel who are responsible for compliance with MEL procedures.

#### 4.9.1 Deferral of Items

Procedures for the deferral of MEL items will be included as part of the operator's MCM. The operator must ensure that the aforementioned procedures in the MCM are referenced or copied in the MEL and/or Operations Manual.

When invoking a MEL item, the person responsible must:

- i. identify, in the aircraft technical log or appropriate company document, that this action has occurred
- ii. identify the item with its MEL number
- iii. ensure that an inoperative label is placed in an appropriate location.

#### 4.9.2 Review of Deferred Items

The operator must establish procedures whereby the Maintenance and Flight Departments 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 categorization 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.

#### 4.10 Placarding

All inoperative items must be placarded to inform crew members of equipment condition of equipment condition as appropriate. While the MEL for some items may require specific wording, the majority of items leave the placard wording and location to be determined by the operator, unless otherwise specifically mentioned in the applicable MMEL. However, to the extent practicable, placards must be located as indicated in the MEL, or adjacent to the affected item.

#### 4.10.1 Requirements to Placard/Placard Control

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

#### 4.10.2 Placard Criteria

Placards should be self-adhesive. The placards may vary in size and shape. Use of embossed 'Dymo'-type tape as a placard is not considered acceptable because of its unreliable adhesive characteristics on various surfaces and in various operating conditions. The placard may be in two parts.

 Part 1 - should list a description of the defect and the defect control number and should be attached to the log book for crew reference.

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ii. Part 2 - should list the system affected and the defect control number and be fixed in the appropriate location. A MEL control sheet attached to the log book could serve the same purpose as Part 1.

#### 4.10.3 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.

#### 4.10.4 Temporary Placards

If a defect occurs at a base where maintenance personnel are not available, the flight or cabin crew may install a temporary placard as required by the MEL. The aircraft may continue on a planned itinerary to a base where maintenance will rectify or re-defer in accordance with the approved deferral system.

#### 4.11 Dispatch

"Dispatch" for the purpose of the 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 equipment will be operative for take-off unless the appropriate MEL procedures have been carried out.

The operator's MEL should 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 should be dealt with as an in-flight failure, by reference to the appropriate section of the Aircraft Flight Manual, if necessary.

#### 4.11.1 Operational and Maintenance Items

a. Any item of equipment in the MEL which when inoperative would require an operational or maintenance procedure to ensure an acceptable level of safety, should 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.

#### b. (O) Items

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

#### c. (M) Items

Aircraft with inoperative equipment requiring a maintenance procedure may be returned to service following completion of the required MEL procedure for deferral.

Maintenance procedures are normally accomplished by maintenance personnel, but some elementary maintenance tasks which do not require maintenance procedures may be carried out by crew members or other qualified, approved personnel.

d. Flight crews may not perform maintenance procedures if the defect involves an item designated in the MEL with a (M#) - Maintenance Personnel Required. In this circumstance, the aircraft may not proceed until authorized maintenance personnel carry out the specified procedure (Not all MMELs use the annotation M#), this allow the pilot to depart with inoperative item where no maintenance procedures required.

#### 4.11.2 Elementary Work

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Some elementary work called for in the MEL may be accomplished by crew members, or others, who have been trained and approved to do so according to the Regulations and standards in Maintenance Standard.

#### 4.12 Training

The operator should establish initial and recurrent MEL training for crew members include pilots, maintenance personnel and cabin crew. The operator shall define an appropriate training cycle of the MEL recurrent training programme for crew members and maintenance personnel. Adequate company records must be developed to document MEL training (initial and recurrent) to be added to the employee's training records. If the flight crew is to exercise elementary maintenance privileges, training forms must include an area describing what is being certified, and a place for sign off by an AME.

#### 4.12.1 Training Programme — Maintenance Personnel

Operators should develop a MEL training programme for maintenance personnel, to be included in the MCM, which must be approved prior to an operator receiving approval to operate with a MEL. The training for maintenance personnel should include those sections of the MCM procedures dealing with:

- a. the use of, and compliance with, the MEL
- b. placarding of inoperative equipment
- c. return to service of an aircraft
- d. dispatching an aircraft
- e. any other MEL related procedures.

#### 4.12.2 Training Programme — Crew Members

Operators must also provide flight crew personnel with MEL training, which should be included as part of their route/line training. The details of such a training program must be stated in the operator's operations manual. Crew members include pilots, and cabin crews.

The flight crew training should include, but not be limited to, the following:

- iii. the purpose and use of a MEL
- iv. instruction on operator's procedures for the use and guidance of flight crew
- v. the PIC's responsibility with respect to the above procedures.

#### 4.13 MEL Library

- a. In order to manage MEL issues effectively, and in a timely fashion, the operator shall establish and maintain up-to-date files of all the operators' MELs including the initial approval documentation together with the MEL database. These documents must be retained with each subsequent revision of the MEL.
- b. The MEL libraries (document control) must also contain adequate reference documents such as Dispatch Deviation Guides, and so on, for the types of aircraft operated.

#### 5. MEL USE IN SERVICE

This section contains specific direction, guidance, and procedures on the revision, administration, and policy application for administering MELs that have been approved for use by operators operating under the provisions of the South African Civil Aviation Regulations (SA-CAR's).

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#### 5.1 Revision Procedures

Revisions to an operator's MEL may be initiated by either the operator or the SACAA. Operator initiated revisions may be equal to or more restrictive than the MMEL. It is not necessary for an operator to submit an entire MEL when requesting the approval of a revision. The minimum submission would consist of only the affected pages. These items are approved within a controlled process, and the operator will produce the final MEL document. If the revision results in individual pages either being added or deleted, a revised table of contents page is also required

#### 5.1.1 MEL Revision Initiated by an Operator

An operator-initiated MEL revision will normally fit into one of the following three categories:

Items Not Requiring an MMEL Change
 Operators may propose changes to a MEL that are equal to, or more restrictive than, the MMEL.

#### b. Items Requiring an MMEL Change

Operators may request changes to a MEL that are less restrictive than the MMEL. However, the MEL cannot be revised until the MMEL has been revised to permit the proposed MEL change. The most common instance of a revision request of this type occurs when an operator installs additional equipment on an aircraft and provisions for that equipment are not included on the current MMEL.

#### c. Major Aircraft Modifications

Major aircraft modifications, such as a supplemental type certificate (STC), a major alteration or a type certificate (TC) amendment, may invalidate the MEL for that aircraft. Operators should review the MEL to assess the impact of any planned modification and should immediately notify the SACAA of these modifications and the impact on the MEL.

#### 5.1.2 MEL Revisions Initiated by the SACAA

#### a. Non-mandatory Revision

MMEL revisions that only provide additional relief are reflected by a lowercase letter suffix following the MMEL numeric revision number; for example, MMEL Revision No. 8 would become Non-mandatory Revision No. 8a. Any MMEL changes that are less restrictive than the operator's MEL may be ignored by the operator. An example of a non-mandatory revision is when the MMEL has been revised to provide for optional equipment normally not installed on all aircraft of a particular type, such as logo lights. Operators that operate aircraft with logo lights may choose to revise the MELs, while operators operating without logo lights would not.

#### b. Global Change

A global change is another type of non-mandatory revision. A global change generally, applies to items of equipment that are required to be installed by a new regulatory requirement, such as a cockpit voice recorder (CVR), or a traffic alert and collision avoidance system (TCAS). Items affected by SACAA policy decisions are also global changes. The global change does not replace the normal MMEL revision process. When a standard revision to an MMEL is issued, it will include all global changes issued to date. However, since the process for revising the MMEL can be lengthy, and the operator's MEL must be based on the MMEL, a global change will allow an operator to revise its MEL prior to the reasons why the revision is necessary.

#### c. FOI initiated revision

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The FOI may initiate a MEL revision that is not based on a revision to the MMEL. The FOI should make such a request to the operator in writing, stating specific reasons why the revision is necessary. The FOI initiated revision may be made upon the discovery that an operator has modified an aircraft or that faulty maintenance or operations procedures exist. The FOI should work closely with the operator and make every effort to resolve the matter in a mutually agreeable manner. The operator should be given a reasonable time period to make the required changes depending on whether safety of flight is affected. In the event that the operator declines to make the required change, the SACAA may rescind the MEL approval.

#### 5.1.3 Modifications Within a Fleet

If an operator has been granted approval to use the MEL for a fleet, and the operator installs a new piece of equipment in one or more aircraft, the operator may continue to operate that aircraft under the provisions of the currently approved MEL. The operator may not defer repair of the new item until an appropriate revision to the MEL has been approved.

#### 5.2 Tracking of Revision Status

The operator shall maintain a copy of the current approved MEL for each aircraft type listed on its Operations Specification. The operator shall update the MMEL to record and track the revision status of the operator's MEL.

#### 5.3 Availability of MEL for Flight Crewmembers

Flight crewmembers must have direct access to the MEL at all times prior to flight. The easiest method of compliance with this requirement is for the operator to carry the MEL aboard each aircraft. The operator may choose to use some system of access to the MEL other than the MEL document. For example, the flight crew may obtain access to the MEL through an electronic flight bag where the operator is approved accordingly.

a. In a case where the operator is approved to carry an electronic MEL, the operator shall have adequate means in place to provide flight crews with the complete equivalent of the actual text of the MEL. This method must be described in detail in the operator's SACAA approved Operations Manual.

#### 5.4 Discrepancies Discovered During Flight

Use of the MEL is not applicable to discrepancies or malfunctions that occur or are discovered during flight. Once an aircraft moves under its own power, the flight crew must handle any equipment failure in accordance with the approved flight manual. A flight is considered to have departed when the aircraft moves under its own power for the purpose of flight. Discrepancies occasionally occur between the time the flight departs and the time it takes off.

If the flight manual contains procedures for handling that discrepancy, or if the pilot in command (PIC) deems that the discrepancy does not affect the safety of flight, the flight may continue. The discrepancy must be addressed prior to the next departure. For those operators who are required to use a dispatch or flight release, the PIC must handle a discrepancy that occurs after the issuance of the release, but before the flight departs, in accordance with the MEL. The PIC must obtain a new or amended dispatch or flight release, as well as any required airworthiness release. This new or amended release must contain any applicable flight restrictions necessary for operation with any item of equipment that is inoperative.

#### 5.5 Documentation of Discrepancies

Provisions of the MMEL preamble require that an airworthiness release be issued, or an entry be made in the aircraft technical log prior to conducting any operations with items of equipment that are inoperative.

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#### 5.6 Conflict with Airworthiness Directives

Occasionally an AD may apply to an item of equipment that may be authorized to be inoperative under the MEL. The item may not simply be deferred under the MEL in order to avoid or delay compliance with the AD. In all cases, when an AD has been issued, the operator must comply fully with the terms of the AD. In other cases, the provisions of an AD may allow operation of the aircraft on the condition that certain items of installed equipment be used or be operable. In those cases, the affected items must be operable even though the MEL may provide for deferral of repair.

#### 5.7 Interrelationships of Inoperative Components

When the MEL authorizes a component of a system to be inoperative, only that component may be affected. When a system is authorized to be inoperative, individual components of that system may also be inoperative. Any warning or caution systems associated with that system must be operative unless specific relief is authorized in the MEL. The operator must consider the interrelationship of inoperative components. This consideration must include the following:

- i. The interrelationship of one piece of equipment on another
- ii. The crew workload
- iii. The operation of the aircraft
- iv. The flight restrictions

#### 6. Configuration Deviation Lists

A configuration deviation list (CDL) is a list, established by the organization responsible for the type design with the approval of the State of Design, which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction. Evaluation and approval of CDLs are functions of the State of aircraft design. The CDL is usually a part of the Aircraft Flight Manual (AFM) or it can be standalone document.

- a. The CDL is a listing of regulator-approved non-structural external parts that may be missing but the airplane remains airworthy. To qualify an item onto the CDL, a restrictive set of conditions must be met, e.g.;
  - i. The effect of the missing part upon adjacent structure and systems must be evaluated.
  - ii. The effect upon airplane performance must be measured.
  - iii. The combined effect upon the aircraft when more than one CDL item is present must be determined (i.e. the effect of a combination of items missing).
- b. The CDL should not be confused with the MEL. The MEL describes the limitations of aircraft operation in case of a system being inoperative/having malfunctioned (e.g. transponder failure), the CDL deals with situations where external parts of an aircraft are missing/fallen off (e.g. fairings, aerodynamic seals or panels).
- c. If a CDL for an aircraft type does not exist, then flying with external parts missing means that the aircraft is not in its original certificated configuration, thus, it is not airworthy.

#### 6.1 Use of the CDL

Operators must follow the CDL limitations when operating with a configuration deviation. Operators are required to observe the following:

- a. The limitations in the CDL when operating with certain equipment missing (except as noted in the appendix to the approved flight manual).
- b. The flight operations, restrictions, or limitations that are associated with each missing airframe and engine part
- c. Any placard(s) required by the CDL describing associated limitations, which must be affixed in the cockpit in clear view of the pilot in command (PIC) and other appropriate crewmembers.

#### 6.2 Operational Control

The operator should develop appropriate procedures for the PIC and, if appropriate, procedures for notifying dispatch of the CDL missing parts by an appropriate notation in the aircraft technical logbook or other acceptable means.

#### 7. MEL FOR AIRCRAFT OPERATED BY MULTIPLE BY AOCs.

#### 7.1 General

Although the SA-CARs pertinent to the requirements of a MEL's stipulates that an operator shall establish a MEL for each type of aircraft for which a MEL has been approved by the State of Manufacture of such aircraft. An AOC holder may utilise a MEL for the aircraft which already holds a current and approved MEL for the same aircraft operated by another operator: Provided the operator complies with the following;

#### a. Risk Assessment

The risk assessment and mitigation shall be forwarded to the SACAA addressing all the items specified in the SA-CARs of 2011, as amended which stipulates that the holder of an AOC may add to its AOC an aircraft registered on another AOC:

- i. the aircraft is not registered on more than three AOCs;
- ii. the aircraft is maintained by only one AMO;
- iii. the manual of procedures or maintenance control manual, as applicable, for all operators and the Operations Specifications for each operator, specify the AMO responsible for the maintenance of each shared aircraft, by aircraft registration number;
- iv. he aircraft flight folio used is the same for all operators, such that there is but one continuous record of the aircraft's activities, and the flight crew members are trained in the procedures for completion of the flight folio;
- v. there is one method with respect to the entry, reporting and rectification of defect procedures and the flight crew members are trained in those procedures;
- vi. the flight crew members use the MEL approved for the aircraft and are trained in the MEL procedures for that particular aircraft, if applicable, and the operations manual specifies the procedures the flight crew are to follow in the event contact with maintenance personnel is needed; and
- vii. the flight crew members receive ground and flight training covering any differences between the model(s) operated by the operator and that being added to the AOC, including at least
- safety equipment contained on board;
- ancillary equipment such as navigational aids, auto flight system, flight director or FMS, ACAS, TAWS, weather radar, etc.; and
- systems differences, engine/airframe limitations, performance considerations and operating characteristics, and the results of such training are recorded on the flight crew member's training file.
- b. The second or third AOC holder shall conduct a risk assessment associated with the proposed operation. The risk assessment should seek to address all the items listed in paragraph (a). The completed risk assessment should be submitted to the SACAA

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prior to the aircraft being added to either the second or the third AOC. The risk assessment should meet the requirements of SA-CAR Part 140 as approved on the operator's Safety System Management Manual.

c. The second or third AOC holder shall perform a gap analysis on all the items listed in paragraph (a). Where gaps are identified hindering the AOC from complying with the regulatory requirements listed in paragraph (a). The AOC holder shall develop measurable steps and timelines to close all identified gaps.

#### 7.2 MEL Application

- a. In a case where the aircraft intended to be operated in more than one AOC holder but not exceeding 3 AOC holders is approved on a fleet MEL. The aircraft in question shall be removed from the approved fleet MEL and evidence of such shall be provided by the AOC holder submitting the application.
- b. It is the responsibility of the AOC holder submitting the application to ensure that the MEL meets its operational requirements including but not limited to, the utilisation of the aircraft, the type of operation, including the environment conditions where the aircraft will be operating.
- c. The AOC holders should develop procedures allowing for coordinated regulatory training for flight crew and these procedures should be approved in the individual operator's Operations Manual Part 4.
- d. The AOC holders should make provisions for special approvals endorsed on each operator Operations Specifications. This shall include but not limited to RVSM, Special Navigation and Low Visibility Operations endorsements. Considerations should be made as these are approved in accordance with operator specific procedures. The MEL should take these into account.
  - Note: The AOC holder seeking to operate an aircraft in accordance with paragraph 7.1 shall have the same endorsements on the Operations Specifications. The procedures regarding operations with these special approvals as approved on Operations Manual and MCM should align and shall form part of the risk assessment mentioned in 7.1(a)(b)(c).
- e. Each AOC holder shall ensure that MEL Extension Program procedure as required in 4.8.1 of this guidance materials, are not contradictory. The MEL Extension Program must be adequately addressed in the MCM as AOC holders are mandated to establish a MEL Extension Program in accordance with CATS 43.02.3.1(1) (I & m). This should address the authorities associated with the extensions. The descriptive procedure regarding the communication to all AOC holders when a MEL extension has been effected for a particular deferred MEL item.

#### 7.3 MEL Continuous Monitoring

- a. The AOC holders must employ appropriate means to assess and monitor the effectiveness of the MEL to ensure continuous compliance with the MMEL and SA-CARs. The procedure should explicitly indicate how the MEL shall be kept up to date in accordance with 5.1 and 5.2 of this guidance material.
- b. It should be further stated on the MEL who will be responsible for the original copy. Furthermore, each AOC holder's Operations Manual and/or MCM should have a procedure for MEL meetings between the operators and the contracted AMO. The procedure must detail how often should these meetings happen. The meetings shall be used to discuss but not limited to the following;
  - i. unserviceable deferred in accordance with the MEL
  - ii. extended deferred defects in accordance the MEL Extension Procedure
  - iii. recurring MEL defects

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The meetings in paragraph 7.2.b shall follow an official formal meeting format with a set agenda, required attendees and minutes.

#### 7.4 MEL Controls

- a. Even though it is permissible for multiple AOC holder to have a similar aircraft on its Operations Specifications, therefore using one MEL.
- b. Each AOC holder shall be required to have a copy the MEL. (in addition to the copy carried on the aircraft)
- c. This can be controlled through a distribution list, listing the AOC holders who are required to have copy the MEL.

#### 7.5 MEL Amendments

- a. Once the AOC holder has determined the above, the amendments shall be incorporated to the existing approved MEL.
- b. The application submission must be accompanied by Risk Assessment and Gap Analysis as reference in 7.1.
- c. All AOC holders shall be mandated to sign the MEL acceptance statement. The amendments application shall meet the requirements of paragraph 4.1 and 5.1.
- d. The MEL amendments shall be submitted to the SACAA for approval prior to the addition of the aircraft to a respective AOC holder Operations Specifications.

Note: The FOI and AWI will assess the aforementioned items, if found acceptable the aircraft may be added onto the AOC, provided the aircraft is not endorsed on more than 3 AOC's.

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REVIEWED & VALIDATED BY:				
	ERIC MATABA	02 DECEMBER 2020		
SIGNATURE OF SM: FOD	NAME IN BLOCK LETTERS DATE			
APPROVED BY:				
B	SIMON SEGWABE	02 DECEMBER 2020		
SIGNATURE OF E: ASO	NAME IN BLOCK LETTERS DATE			

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#### **APPENDIX 1**

## MEL Item Repair Interval Extension sample form

### PART 1 - MEL Defect

1. Operator (Name):	2. Date of Defect:			3. Aircraft Registration:
4. Aircraft Type:			8. Repair Inte	erval Extension Number:
9. Detail of Defect (ATA & Part Name):		7 Poason	for not rectifying:	
7. Detail of Defect (ATA & Fait Name).		7. Neason	101 Houreculying.	
				T
8. Rectification Interval Category:	Expiry date of Recti	fication Inte	rval:	10. MEL Reference No:
			ļ	
PART 2 - Repair Interval Extension App	olication			
11. Applicant's Name	12. Position:			
13. Reason for the extension:				
1				
PART 3 – Authorization				
14. Authorised Duration:		15. Def	15. Defect rectification due date:	
16. AME Comments:				

**END** 

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