

CIAC AW-305 Master Minimum Equipment List
Issue 01
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1. General

Cayman Islands Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements

1.1 Abbreviations used in this document

CAACI	Civil Aviation Authority of the Cayman Islands
CAMO	Continuing Airworthiness Management Organisation
CS	Certification Standard
EDTO	Extended Diversion Time Operations
ICA	Instructions for Continued Airworthiness
MEL	Minimum Equipment List
MMEL	Master Minimum Equipment List
MSN	Manufacturer’s serial number
NAA	National Aviation Authority
OSD	Operational suitability Data
OTAR	Overseas Territories Aviation Requirements
SB	Service Bulletin

2. Related Requirements

This Circular relates to OTAR Part 125.16/121.16/125.610/135.610/and AN(OT)O Article 37. Other references are noted in the cover page approval.

3. Change Information

First Issue

4. Enquiries

Enquiries regarding the content of this Circular should be addressed to Director Air Safety Regulation

5. Introduction

Aircraft being registered in the Cayman Islands or undergoing operator change will often not be able to produce a fully customised MEL due to simultaneous events that occur during the process that produce impractical time constraints.

- (a) The process of customising an MMEL for an operator MEL will typically involve customising the variables in a Master MEL. Such variables will contain, but not limited to, terms such as;
 - (1) "If installed"
 - (2) A '-' in place of the quantity
 - (3) MSN listings
 - (4) SB listings (pre or post)
 - (5) NAA Requirements
 - (6) Navigational items

A full customisation of the MMEL variables is not always practical for an aircraft as described above. Approved CAM organisations may use this process to utilise the MMEL provided the action is recorded and notified to the CAACI

6. Recommended Actions

This circular is to clarify how the MMEL can be utilised when these aircraft enter into service or are being positioned for other purposes in the absence of a fully customised MEL.

- (a) The MMEL to be used, is that of the state of type certification
- (b) In the absence of operational suitability data (OSD) not being provided by the state of type certification, the state of type design will take precedence.
- (c) The OSD (MMEL) is a document that lists the items which may be temporarily inoperative, associated with special operating conditions, limitations or procedures as applicable for a specific aircraft type or model.
- (d) The MMEL does not take into specific consideration;

- (1) Equipment quantities
 - (2) National requirements
 - (3) Flight planning
 - (4) Equipment installed by design changes
 - (5) Reliability programmes
 - (6) Associated Airworthiness Directives
- (e) The MMEL document is derived through a qualitative and quantitative process and certification standard (EASA CS MMEL.110). Essentially, risk has been assessed using these processes. Time limitations are also a fundamental part of this process to ensure the certification standard continues to meet failure criteria often expressed as a maximum probability per flight hour (operation without failure) of $10E9$ or in other cases a lower probability depending on criticality or system interdependence, pilot workload etc.

6.2 Applicability

- (a) The use of this procedure cannot be applied when;
- (1) Flight planning is based on EDTO. This is an operational approval, where a customised MEL, maintenance programme and reliability are central to operation. Transit aircraft, being non-operational are therefore not permitted to take advantage of EDTO operations and associated MMEL items.
 - (2) The aircraft is not in a suitable configuration for the intended flight
 - (3) A variation has already be granted on the system/component/configuration or maintenance item and referenced in the MMEL
 - (4) The applicant is an AOC applicant undergoing AOC assessment and operating VP-C aircraft

6.3 Risk Analysis

- (a) The risk analysis referred to in the flow chart is restricted to the intended flight and is not intended to be applied in re-evaluating the MMEL which has been produced using qualitative and quantitative risk probability computations. The most common tool for risk tolerability is the 'likelihood' model which is influenced by hypothesis and not mathematical computation. This is the primary reason the risk analysis is limited to the routing or environmental factors. These models can typically be found in Safety Management System manuals. A typical matrix is illustrated below.

Cayman Islands Aviation Circular

Severity of Consequences		
Aviation Definition	Meaning	Value
Catastrophic	Results in death or equipment destroyed	5
Hazardous	Serious injury or major equipment damage	4
Major	Serious Incident or injury	3
Minor	Results in minor incident	2
Negligible	Nuisance of little consequence	1

Likelihood of Occurrence		
Qualitative Definition	Meaning	Value
Frequent	Likely to occur many times (has occurred frequently)	5
Occasional	Likely to occur sometimes (has occurred infrequently)	4
Remote	Unlikely to occur but possible (has occurred already)	3
Improbable	Very unlikely to occur (not known to have occurred)	2
Extremely improbable	Almost inconceivable that the event will occur	1

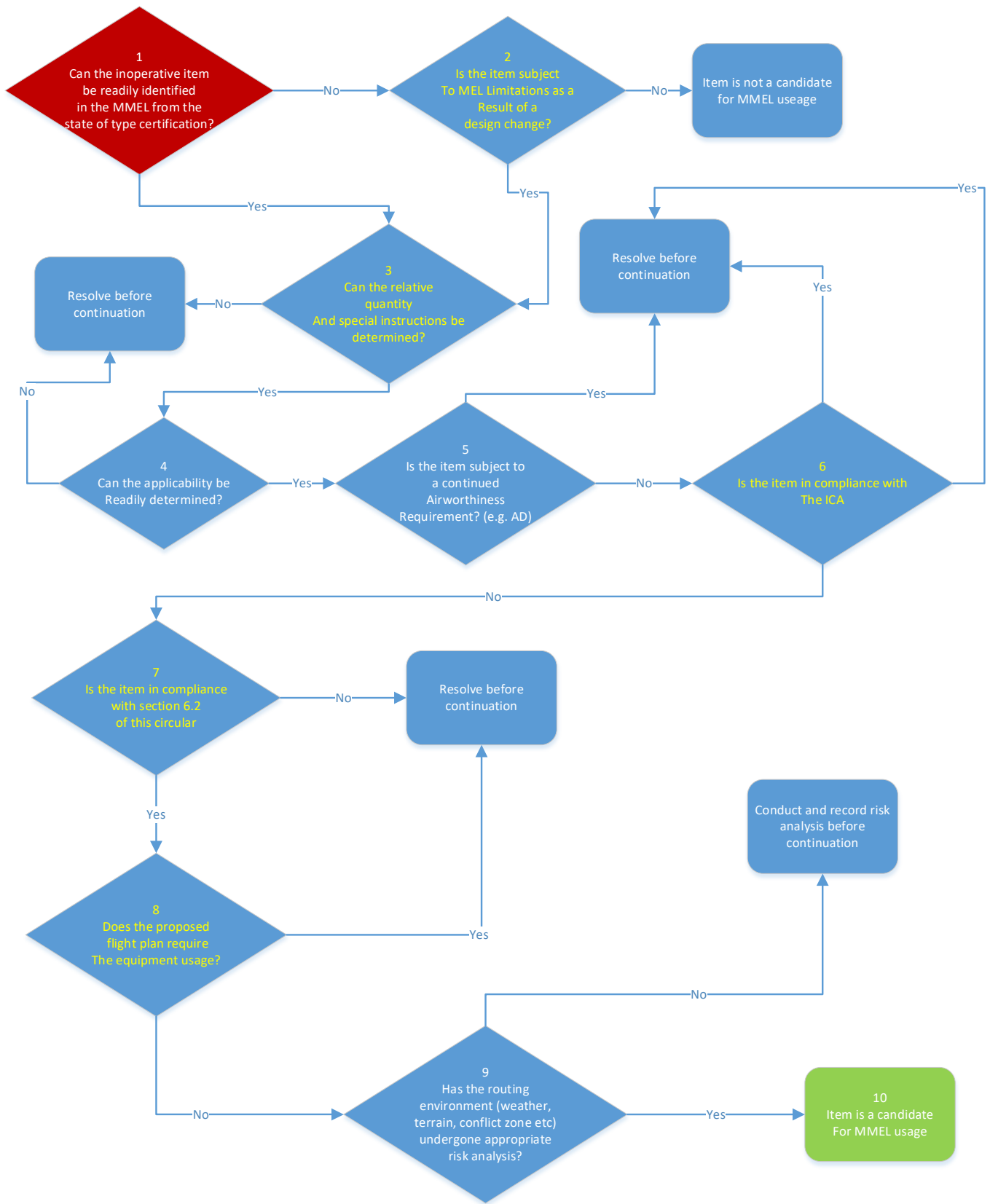
Cayman Islands Aviation Circular

Risk Likelihood	Risk Severity				
	Catastrophic 5	Hazardous 4	Major 3	Minor 2	Negligible 1
Frequent 5	Unacceptable	Unacceptable	Unacceptable	Review	Review
Occasional 4	Unacceptable	Unacceptable	Review	Review	Review
Remote 3	Unacceptable	Review	Review	Review	Acceptable
Improbable 2	Review	Review	Review	Acceptable	Acceptable
Extremely Improbable 1	Review	Acceptable	Acceptable	Acceptable	Acceptable

6.4 Flowchart Aid

(a) The flow chart below is provided as guidance to determine the use of the MMEL.

Cayman Islands Aviation Circular



Cayman Islands Aviation Circular

7. Template for users

(a) The template below can be utilised to assist in using this circular and reporting to the CAACI

Operator		
Aircraft Model		
MMEL State of Type Certification		
MSN		
MMEL Item Number	Process result	Customisation details