

AIRCRAFT MINIMUM EQUIPMENT LIST (MEL)

This list is a tool for checking a MEL for aeroplanes and helicopters.

This list is based on EU-OPS 1(20.9.2008), JAR-OPS 3 1.7.2007), JAR-MMEL/MEL(01.08.2005), JAA Administrative & Guidance Material; Section Four: Operations, Part Three: Temporary Guidance Leaflet (JAR-OPS) , LEAFLET No: 26: Guidance Document for MEL Policy (01.06.2008).

MEL - GENERAL	
Aircraft registration:	
Operator AOC:	
Aircraft Type:	
MEL revision number:	
This MEL has been checked (date):	
Reference number and date (by Authority):	

General instructions concerning MEL check and use of this tool:

- 1) Internet address for FAA approved MMEL is www.opspecs.com and for JAA MMEL/MEL <http://www.jaa.nl/operations/secured/mmel/mmels.html>.
- 2) **JAA MMEL means the MMEL** approved by JAA and recommended by it for use by National Authorities.
- 3) All items related to the airworthiness of the aircraft and not included in the list (MEL) are automatically required to be operative.
- 4) An operator shall establish, for each aeroplane, a Minimum Equipment List (MEL) approved by the Authority. This shall be based upon, but no less restrictive than, the relevant Master Minimum Equipment List (MMEL) (if this exists) accepted by the Authority. (JAR-OPS 1.1030 (a)).
- 5) If MMEL contains an item (component) not included in MEL, the item (component) must always be operative if installed in the aircraft.
- 6) The "Guidance Document for MEL Policy" has the same order of equipment as JAR-OPS.
- 7) **Column "Status" :**
 - N/A** → not applicable for this MEL
 - NO** → applicable requirement is not fulfilled
 - PARTLY** → applicable requirement is fulfilled only partly and amendment or change must be done before MEL acceptance
 - OK** → applicable requirement is fulfilled
- 8) **TGL 26 = JAA Administrative & Guidance Material; Section Four: Operations, Part Three: Temporary Guidance Leaflet (JAR-OPS), LEAFLET NO.26: Guidance Document for MEL Policy**

CHECK OF MEL PREAMBLE

The check shall be performed in accordance with the following items, comparing MEL Preamble to Appendix 1 to ACJ-MMEL/MEL.065. Other requirements concerning the applicable item are shown in the reference column.

OPS (and TGL) reference	REQUIREMENT	COMMENTS	APP	ITEM CONCERNED	Status
OPS 1.630 (a)(1)	An operator shall ensure that a flight does not commence unless the instruments and equipment required under this Subpart are Approved, except as specified in subparagraph (c), and installed in accordance with the requirements applicable to them, including the minimum performance standard and the operational and airworthiness requirements;				
OPS 1.030 TGL 26 1.1	An operator shall establish, for each aeroplane, a Minimum Equipment List (MEL) approved by the Authority.		AP		
JAR-MMEL/MEL.001 (b) TGL 26 1.1 c.	Where there is a conflict between the MMEL or MEL and an Airworthiness Directive or any Mandatory Requirement, it is the data or information contained in the Airworthiness Directive or any Mandatory Requirement which shall override. The MEL does not deviate from any applicable Airworthiness Directive or any other Mandatory Requirement.				
OPS 1.030 JAR-MMEL/MEL.060 (a) TGL 26 1.1 c.	This shall be based upon, but no less restrictive than, the relevant Master Minimum Equipment List (MMEL) (if this exists) accepted by the Authority.		AC		
JAR-MMEL/MEL.060 (b) ACJ-MMEL/MEL.060 (b) TGL 26 1.1	If no such MMEL exists, the MEL may be based upon an alternative MMEL in agreement with the Authority .		AC		
JAR-MMEL/MEL.065 (a)	The MEL shall contain a relevant Preamble, Definitions and, if appropriate, clarifying Notes which shall adequately reflect the scope, extent and purpose of the List.				
JAR-MMEL/MEL.065 (b)	The MEL shall indicate the revision status of the MMEL, upon which it is based				
OPS 1.1045 Appendix 1 A 0.1.(c) JAR-MMEL/MEL.065 (c)	A list and brief description of the various parts, their contents, applicability and use. The Preamble shall contain guidance for flight crews and maintenance personnel using the MEL.				
JAR-OPS 1.1040 (l) TGL 26 2.8.9	An operator must ensure that the contents of the Operations Manual (including MEL) are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles.				

OPS 1.1045 Appendix 1 A 0.1.(e)	A list of effective pages.			
JAR-MMEL/MEL.060 (c) TGL 26 2.7.2	When a MMEL revision is issued, an operator will have 90 days from the date of revision submitted the revised MEL to the Authority.			
JAR-MMEL/MEL.001 (a) ACJ-MMEL/MEL.001 (a)	Limit of MEL Applicability. The operator's MEL should include procedure to deal with any failures which occur between the start of taxi and take-off brake release.			
JAR-MMEL/MEL.065 (c) ACJ-MMEL/MEL.065 Appendix 1 to ACJ-MMEL/MEL.065 TGL 26 – SECTION 1 1.	MEL Preamble shall include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 1.INTRODUCTION.		INTRODUCTION	
JAR-MMEL/MEL.065 (c) ACJ-MMEL/MEL.065 Appendix 1 to ACJ-MMEL/MEL.065 JAR MMEL/MEL.050 (c) TGL 26 – SECTION 1 2.	MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 2.CONTENTS OF MEL. Text in paragraph JAR MMEL/MEL.050 (c) "ALL ITEMS WHICH ARE RELATED TO THE AIRWORTHINESS OF THE AIRCRAFT AND NOT INCLUDED IN THE LIST ARE AUTOMATICALLY REQUIRED TO BE OPERATIVE" should be included in Preamble with conspicuous (e.g. block) letters.		CONTENTS OF MEL	
JAR-MMEL/MEL.065 (c), ACJ-MMEL/MEL.065 Appendix 1 to ACJ-MMEL/MEL.065 ACJ-MMEL/MEL.055 TGL 26 - SECTION 2.1.1	MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 3.CRITERIA FOR DISPATCH. The MEL should include the dispatch conditions associated with flights conducted in accordance with the Special Authorisations list shown in the Air Operator's Certificate e.g. RVSM, RNAV, ETOPS etc.		CRITERIA FOR DISPATCH	

JAR-MMEL/MEL.065 (c) ACJ-MMEL/MEL.065 Appendix 1 to ACJ-MMEL/MEL.065	MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 4. MAINTENANCE ACTION. Text in Appendix 1 to ACJ-MMEL/MEL.065 4.should define in the end of the chapter where the relevant Operational and Maintenance Procedures are contained in (identify the particular Manual, Section, Chapter or Part etc. authorised by the appropriate Authority.			MAINTENANCE ACTION	
JAR-MMEL/MEL.075 (a) ACJ-MMEL/MEL.075 (a) TGL 26 – SECTION 2 2.8.7	The Authority may request presentation of specific (o) and/or (m) procedures in the course of the MEL approval process.				
JAR-MMEL/MEL.070	The operator shall ensure that the MEL, including the Preamble, reflects the guidance given in the MMEL on the effects of multiple unserviceabilities.				
JAR-MMEL/MEL.075 (f)	Unless specifically permitted, an inoperative item may not be removed from the aircraft.				
JAR-MMEL/MEL.065 (c) ACJ-MMEL/MEL.065 Appendix 1 to ACJ-MMEL/MEL.065 JAR-MMEL/MEL.080 (a) TGL 26 – SECTION 2 2.9	MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 5. RECTIFICATION INTERVALS. The rectification Interval given in the MEL shall not be less restrictive than the corresponding Rectification Interval in the MMEL.			RECTIFICATION INTERVALS	

<p>Appendix 1 to ACJ-MMEL/MEL.065</p> <p>JAR-MMEL/MEL.081</p> <p>TGL 26 – SECTION 2 2.10</p> <p>ACJ-MMEL/MEL.081</p>	<p>MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 6. RECTIFICATION INTERVAL EXTENSIONS.</p> <p>The operator may use a procedure for the extension of the applicable Rectification Intervals (RIE) B, C and D, for the same duration as specified in the MEL, provided :</p> <p>Description of specified duties and responsibilities for controlling extensions is established by the operator and accepted by the Authority.</p> <p>The operator only grants one time extension of the applicable Rectification Interval.</p> <p>The Authority is notified of any extensions granted within a timescale acceptable to the Authority, not to exceed one month.</p> <p>Rectification is accomplished at earliest opportunity.</p> <p>The Authority may reject any application for the use of RIEs made by an operator who they consider not to have the necessary operational and engineering competence.</p> <p>The operator should provide the Authority with details of the name and position of the nominated person responsible for the control of the company RIE procedure and details of the specific duties and responsibilities established by the operator to control the use of RIEs.</p> <p>Authorising personnel, who must be adequately trained in technical and/or operational disciplines, should be listed by appointment and name.</p>		AP	RIE	
<p>Appendix 1 to ACJ-MMEL/MEL.065</p> <p>JAR-MMEL/MEL.065 (c)</p> <p>ACJ-MMEL/MEL.065</p> <p>JAR-MMEL/MEL.005</p> <p>TGL 26 1.1</p>	<p>MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 7. DEFINITIONS.</p> <p>Note: Operators should include in their MELs any definition which is considered to be relevant.</p> <p>Terminology: terms and abbreviations used in MEL have meaning introduced in JAR-MMEL/MEL.005 (and / or OPS 1, OPS M1-1, appropriate MMEL)</p>			DEFINITIONS	
<p>Appendix 1 to ACJ-MMEL/MEL.065</p> <p>JAR-MMEL/MEL.065 (c)</p> <p>ACJ-MMEL/MEL.065</p> <p>TGL 26 – SECTION 2 2.12</p>	<p>MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 8. CENTRALISED MESSAGE SYSTEMS (if appropriate).</p>			CENTRALISED MESSAGE SYSTEMS (if appropriate)	

JAR-MMEL/MEL.090	MEL Preamble should include items introduced in Appendix 1 to ACJ-MMEL/MEL.065 9. OPERATIONS OUTSIDE THE SCOPE OF THE MEL.			OPERATIONS OUTSIDE THE MEL	
OPS 1.030 (b)	Notwithstanding JAR-MMEL/MEL.081, subject to the approval of the Authority, the operator may be exempted from compliance with the appropriate MEL provided such exemption complies with the applicable limitations in the MMEL. An operator shall not operate an aeroplane other than in accordance with the MEL unless permitted by the Authority. Any such permission will in no circumstances permit operation outside the constraints of the MMEL.				
Appendix 1 to ACJ-MMEL/MEL.065	Those operators which are authorised by the appropriate Authority in accordance with JAR-MMEL/MEL.090 to operate outside the conditions of the MEL should set out in the MEL Preamble the arrangements and procedures for such operations as agreed with their Authority.				
ACJ-MMEL/MEL.065 TGL 26 – SECTION 3 TGL 26 – SECTION 2 2.12	The ATA 100/2200 Specification numbering system is preferred. Inoperative items should be placarded to inform crew members of equipment condition as appropriate.				
JAR-MMEL/MEL.075 (b) TGL 26 – SECTION 2 2.8.7 c) and d)	Operational procedures (O) shall be accomplished in planning and/or operating with the listed item inoperative by the flight crew or other personnel authorized to perform certain function. Appropriate procedures are required to be published as a part of the operator's manual or MEL.			(O)-PROCEDURES	
JAR-MMEL/MEL.075 (c) TGL 26 – SECTION 2 2.13.1 a) and b)	Maintenance procedures (M) shall be accomplished prior to operating with the listed item inoperative by maintenance personnel or other personnel authorized to perform certain function. Appropriate procedures are required to be published as a part of the operator's manual or MEL.			(M)-PROCEDURES	
JAR-MMEL/MEL.075 (d) TGL 26 – SECTION 2 2.13.1 a)	The procedures themselves, or symbols indicating their need and reference to their location, are required in the operator's MEL. Any item of equipment in the MEL which, when inoperative would require an operational (O) or maintenance (M) procedure to ensure acceptable level of safety, should be so identified in the "remarks" or "exceptions" column of the MEL. (O)(M) means both procedures are required.				

CHECKING THE MELs LIST OF EQUIPMENT WHICH MAY BE INOPERATIVE

Use the TGL 26 Flow Diagram to check each item or component separately. JAA Administrative & Guidance Material, Section Four: Operations, Part Three: Temporary Guidance Leaflet (JAR-OPS), LEAFLET NO. 26 – SECTION 1: General Principles for the Development of the MEL. (01.06.08)

OPS (and TGL) reference	REQUIREMENT	COMMENTS	APP	ITEM CONCERNED	Status
ACJ MMEL/MEL.065 2	A proposal for a five column format for a all MELs is shown in Appendix 1 to ACJ-MMEL/MEL.025.				
JAR-MMEL/MEL.075 (a)	Operators shall take Operational and Maintenance procedures referenced in the MMEL into account when preparing an MEL				
JAR-MMEL/MEL.075 (d)	The procedures themselves, or symbols indicating their need and reference to their location, are required in the operator's MEL.				

CHECKING INDIVIDUAL ITEM OR COMPONENT

Use the TGL 26 Flow Diagram to check each item or component separately.

In case of any findings (e.g. item, remarks, definition, rectification category missing or wrongly entered) use column FINDINGS AND COMMENTS (e.g. ATA-33-11, Strobe Light Systems, no entry in remarks column).

ACJ MMEL/MEL.065 the ATA 100 Specification numbering system is preferred.

ATA-100 – CLASSIFICATION	FINDINGS AND COMMENTS	Status
ATA 07: Lifting and Shoring		
ATA 08: Leveling and weighing		
ATA 09: Towing and Taxing		
ATA 10: Parking, Mooring, storage and return to service		
ATA 11: Placards and Marking		

ATA 12: Servicing – routine maintenance		
ATA 20: Standard practices - Airframe		
ATA 21: Air conditioning		
ATA 22: Auto flight		
ATA 23: Communications		
ATA 24: Electrical power		
ATA 25 : Equipment/Furnishings		
ATA 26: Fire protection		
ATA 27: Flight controls		
ATA 28: Fuel		
ATA 29: Hydraulic power		
ATA 30: Ice and rain protection		
ATA 31: Indicating / recording systems		
ATA 32: Landing gear		
ATA 33: Lights		
ATA 34: Navigation		

ATA 35: Oxygen		
ATA 36: Pneumatic		
ATA 38: Water / Waste		
ATA 39: Electrical – electronic panels and multipurpose components		
ATA 41: Water ballast		
ATA 45: Central maintenance system (CMS)		
ATA 46: Information systems (EFP)		
ATA 49: Airborne auxiliary power		
ATA 51: Standard practices and structures - general		
ATA 52: Doors		
ATA 53: Fuselage		
ATA 54: Nacelles / Pylons		
ATA 55: Stabilizers		
ATA 56: Windows		
ATA 57: Wings		
ATA 60: Standard practices – propeller / rotor		

ATA 61: Propellers / Propulsors		
ATA 62: Main Rotor(s)		
ATA 63: Main rotor drive		
ATA 64: Tail rotor		
ATA 65: Tail rotor drive		
ATA 66: Rotor blade and tail pylon folding		
ATA 67: Rotors flight control		
ATA 70: Standard practices Engines		
ATA 71: Power Plant		
ATA 72: Engine		
ATA 73: Engine fuel and control		
ATA 74: Ignition		
ATA 75: Air		
ATA76: Engine controls		
ATA 77: Engine indicating		
ATA 78: Exhaust		

ATA 79: Engine oil		
ATA 80: Starting		
ATA 81: Turbines (reciprocating engines)		
ATA 82: Water injection		
ATA 83: Accessory gear boxes (engine driven)		
ATA 84: Propulsion augmentation		
Other		

This MEL has been checked in accordance to JAR-OPS 1, JAR-MMEL/MEL and JAA Administrative & Guidance Material; Section Four: Operations, Part Three: Temporary Guidance Leaflet (JAR-OPS), LEAFLET NO.26: Guidance Document for MEL Policy using this MEL CHECK TOOL and shall be approved in accordance to JAR-OPS 1.030 and JAR-MMEL/MEL-document

(enter only when checked and accepted in accordance to text above)

Other remarks concerning this inspection and/or approval: _____

Inspected by (Date and Name): _____

Appendix Flow Diagram for the use of TGL in a MEL

