

Advisory Pamphlet

Aircraft Operating Manuals

AP 1.1.007A



Air Operator Certification

AP 1.1.007A	 <small>רשות התעופה האזרחית Civil Aviation Authority</small>	01 DEC 10
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1. Purpose

- 1.1. This Advisory Pamphlet describes the requirements for an Aircraft Operating Manual required under IANR.OPS.393, 394 and 397.
- 1.2. Developing an Aircraft Operating Manual (AOM) allows Operators to establish procedures specifically tailored to their operations.
- 1.3. Aircraft Operating Manual is required for every basic make, model and series of aircraft that the AOC holder intends to operate.

2. Reference Material

- 2.1. Israel Air Navigation Regulations, Operation of Aircraft. (IANR.OPS.) 393, 394, 395, 396 and 397.

3. Background – Aircraft Flight Manual (AFM)

- 3.1. **Aircraft Flight Manual (AFM)** - The approved Aircraft Flight Manual is the manufacturer's approved manual developed when a specific aircraft is certified.
- 3.2. AFMs for transport category aeroplanes contain three sections, which are reviewed and approved by the appropriate authority. These sections are:
 - 3.2.1. Procedures.
 - 3.2.1.1. The Procedures Section does not contain every procedure required to operate aircraft.
 - 3.2.1.2. Most manufacturers include only those procedures necessary to certify the aircraft.
 - 3.2.1.3. Procedural information is not required to be written in a step-by-step format suitable for publication in a checklist.
 - 3.2.1.4. The procedures section is often rewritten by Operators to make it suitable for flight crew use in air transportation.

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3.2.2. Performance Data.

3.2.2.1. The performance section contains extensive performance data developed by aircraft performance engineers.

3.2.2.2. This section typically is not suitable for flight crews and is usually rewritten by the Operator.

3.2.3. Limitations.

All aircraft limitations are required in this section.

4. Aircraft Operating Manual (AOM)

- 4.1. According to ANR.OPS.397(b), an Aircraft Operating Manual that contains the required information and is approved by the CAAI is equivalent to an Aircraft Flight Manual.
- 4.2. Developing an Aircraft Operating Manual allows an Operator to develop procedures specific to its operation.
- 4.3. The approved AOM is required to be on board the aircraft.
- 4.4. AFM is not required to be carried on board if AOM is approved and on board.

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5. Requirements for an AOM

- 5.1. Operators should rewrite AFM procedures to make them suitable for flight crew use appropriate to their operation.
- 5.2. The approved sections of the AOM shall contain all the information required by the flight crew to operate the aircraft.
- 5.3. All information required to be in the AOM shall be extracted accurately from the AFM.
- 5.4. AOM should be clearly marked as an *approved* Flight Manual for the specific Operator / operator.
- 5.5. Limitations Section shall include each limitation contained in the AFM.
- 5.6. The Operator should develop normal procedures in the AOM that are not in the AFM, when procedures are necessary to ensure an adequate level of safety:
 - 5.6.1. Instrument approach procedures.
 - 5.6.2. Adverse weather operations, etc.
- 5.7. The operator shall present evidence that newly developed procedures are effective by:
 - 5.7.1. Analysis.
 - 5.7.2. Documentation.
 - 5.7.3. Demonstration Tests.
- 5.8. Attachment A contains a summary of the requirements and an acceptable layout for the AOM.

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6. Procedures Section - General

- 6.1. The Procedures Section must contain all procedures required by the AFM and for each operation the Operator conducts.
- 6.2. As a minimum, the Operator must include sufficient detail to allow a trained crew to safely and effectively operate the aircraft.
- 6.3. Procedures should be tailored by the Operator to accommodate the appropriate Operator's type of operation.
- 6.4. Procedures should be standardised as much as possible as they, along with effective communication, are significant factors in reducing error in the cockpit.
- 6.5. Procedural information included in the AOM must be presented in a step-by-step format.

7. Normal Procedures

- 7.1. Normal Procedures Sections of an AOM must contain procedures for each normal operation that flight crewmembers are required to perform.
- 7.2. Normal operating checklists and an explanation of how to accomplish each step is found in the normal procedures section of AOM.
- 7.3. Guidance for operational procedures for which there are no checklists (for example the takeoff procedure) must be addressed.
- 7.4. Normal procedures must contain clearly specified crew duties.

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8. Emergency and Abnormal Procedures

- 8.1. Abnormal and Emergency procedures are usually presented in more detail than normal procedures in the AOM.
- 8.2. The steps and order of steps are usually more critical.
- 8.3. Any modification to AFM procedures must be proven safe and effective by analysis, documentation, or validation tests.
- 8.4. Immediate action items must be identified as such in the Operator's AOM and cannot be hidden in procedures or checklists.
- 8.5. Immediate action items must be strictly limited to only those actions necessary to stabilise the situation.
- 8.6. Remaining items other than immediate action items must be accomplished by Challenge-Do-Verify checklists.
- 8.7. Mandatory Confirmation Items - Operator's procedures must clearly identify critical procedural actions and crew members who are responsible for giving confirmation. Actions requiring confirmation are, but not limited to:
 - 8.7.1. Actions resulting in the shutting down of an engine.
 - 8.7.2. Actions resulting in the deactivation of flight controls.
 - 8.7.3. Actions that if performed incorrectly or in the wrong sequence or at the wrong time produce a catastrophic result, even if the incorrect action is not very likely.
 - 8.7.4. Actions where past experience or analysis has shown that there is a high probability for error or incorrect action and which creates a hazardous situation.

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9. Performance Data Section

- 9.1. Operator's performance data in an AOM must contain all the data from the AFM and instructions on how to use that data.
- 9.2. Performance data may be published under separate cover but must be identified as a portion of the AOM.

10. Limitations Section

- 10.1. Limitations sections of the AOM must be clearly identified as "approved."
- 10.2. Limitations sections must contain each limitation contained in the AFM.
- 10.3. Operator may add limitations to the AOM that are not in an AFM if the operator-imposed limitations are clearly distinguished from the AFM limitations.
- 10.4. The AOM shall contain a statement confirming that crewmembers are responsible for being aware of and for observing all limitations.

11. Accepted Section of the AOM

- 11.1. Other sections of the AOM may not require CAAI approval, but they must be accepted by the CAAI.
- 11.2. Accepted sections must conform to regulations and safe operating practices but need not conform to corresponding sections of the AFM, either in format or content.
- 11.3. Sections should contain sufficient explanation and guidance for flight crew use in the safe operation of the particular aircraft type.