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# **Administration and Control of Manual Chapter 0**

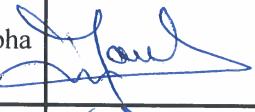
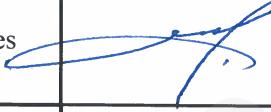
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**Chapter 0 Administration and Control of Manual****0.1 Record of Approval**

This Manual complies with the requirements of the ECAA of Egypt and is issued under the authority of the Director of Operations.

|             | Name                   | Signature  | Position                     | Date     |
|-------------|------------------------|--|------------------------------|----------|
| Prepared by | Mr. Mouadh Mustapha    |   | Operations Library in Charge | OCT 23   |
| Prepared by | Capt. Sherif Elmessiri |   | Director of Operations       | OCT 23   |
| Reviewed by | Eng. Bahey Metkies     |   | Safety & Quality Director    | OCT 23   |
| Approved By | Mr. Karim Baky         |  | Accountable Executive        | OCT 2023 |

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| Issue No.: 04         | Revision No.: 07         | Doc. No.: NMA – OMA.GOM – 1001 |
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## 0.2 Foreword

This Operations Manual is produced by Nesma airlines Flight Operations. It is a guide to Nesma Airlines Operation personnel based on ECAA requirements. It is Operations personnel responsibility to make themselves familiar with applicable laws, rules, procedures, limitations and/or restrictions pertinent to the performance of duties in areas and conditions where operations are conducted.

Its content does not supersede any requirements mandated by the ECAA nor does it supersede or amend fleet type specific documentations such as AFM, FCOM, MMEL or any other approved documentation.

**In case of conflict with the applicable ECAA regulations, the latter apply.**

This manual contains guidelines, regulations and examples that adapted to Nesma Airlines' policies and regulations.

Use and duplication (in whole or part, in all media) of this manual is authorized for internal purposes of Nesma Airlines departments only. Any commercial use is strictly excluded.

**No references to ILS CAT III approaches and Cargo are applicable until Nesma Airlines crew and Aircraft be approved for such an operation.**

Should any part(s) of this Manual that would necessitate a change, kindly fill in the form (see "Forms" Section), and submit it to Director Flight Operations.

Nesma Airlines is certified and authorized to function in the commercial air transport for passengers under the Companies Law No.159/81 and its complimentary supporting directives and Sub-Laws under Commercial License No. 308313-ELGEIZA provided:

Nesma Airlines shall operate in compliance with the ECARs Part 121 and its approved Operation Specifications under IFR Day / Night Operation.

The Ministerial Orders granting the permissions to practice the above functions

a. Order No. 466/T for the year 2009 (Passengers)

Nesma Airlines is an Egyptian Company based and registered in Cairo, Egypt, a Member State. The fleet consists of Three A320 aircrafts registered under:

**SU-NMG, SU-NML and SU-NMR.**

**Nesma Airlines Head Office is located at: -**

5 El Madina St., El Nozha El Gedida, Cairo, Egypt.

**Nesma Airlines Base Operations is located at: -**

Nesma Airlines OCC, Terminal 1, Cairo International Airport, Cairo, Egypt.

**TELEFAX** + (202) 26 23 97 72

**E-mail** info@nesmaairlines.com

Any change(s) to the above location is to be advised to the civil aviation authority at least 15 days prior to propose shifting.

## 0.2.1 Means of Compliance with Air Operator Certificate (AOC)

An Air Operator's Certificate (AOC) is a certificate authorizing Nesma Airlines to carry out specified commercial air transport operations. Nesma Airlines shall not operate an airplane for the purpose of commercial air transportation not in accordance with, the terms and conditions of an AOC.

Nesma Airlines shall ensure that it complies with the terms and conditions of the ECAA issued AOC (Certificate Number: AOC 070). For this, Nesma Airlines will employ qualified personnel and provide equipment and procedures to meet the defined tasks in order to limit the inherent risks to the lowest level possible.

Nesma Airlines will monitor its performance continuously to detect discrepancies in the earliest possible stage and shall, once a discrepancy has been found, take action to re-establish the desired standards. Nesma Airlines must also ensure that the administrative requirements of an AOC shall be maintained as per the ECAA requirements.

**The contents of an AOC specify the following:**

- 1) Operator Identification (Name and location);
- 2) Date of issue and period of validity (one year);
- 3) Description of the type of operations authorized;
- 4) Type(s) of aircraft authorized for use;
- 5) Authorized areas of operation or routes;
- 6) Exemptions, deviations and waivers (listed by name);
- 7) Special authorizations to include, as applicable:
  - Low visibility takeoff (LVTO);
  - CAT II and/or III approaches;
  - Head-up displays (HUD) and enhanced vision systems (EVS) operations (if such systems are used to gain operational benefit);
  - GPS approaches;
  - RVSM operations;
  - MNPS operations;
  - RNAV/RNP operations, to include approved applications and, when applicable, the associated approved RNP levels required to operate within a defined airspace;
  - Transport of dangerous goods (if AOC authorization is required for the transport of dangerous goods);

**Note:** The Original copy of the current AOC issued to Nesma Airlines will be held by the Company.

The AOC shall be kept on-board the aircraft in 'Aircraft Certificate and Documents folder',

**0.3 Reserved**

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## 0.4 List of Effective Pages (LEP)

The List of Effective Pages (LEP) lists all the pages that are in the manual. The manual after revision shall comply with the LEP.

| Chapter (0) - Administration & Control |           |            |              |               |
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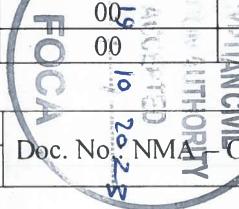
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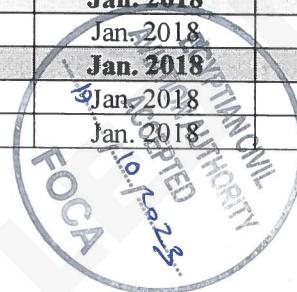
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| Chapter (1) Organization and Responsibilities |           |            |              |               |
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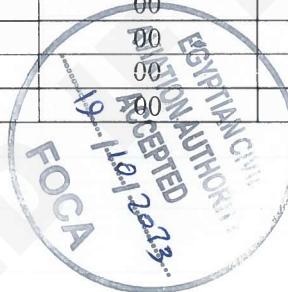


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| Chapter (2) Operational Control and Supervision |           |            |              |               |
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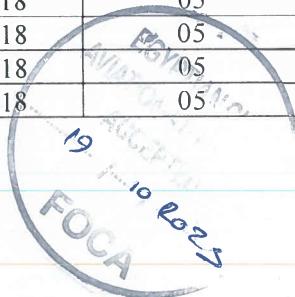
## Chapter (3) Quality System

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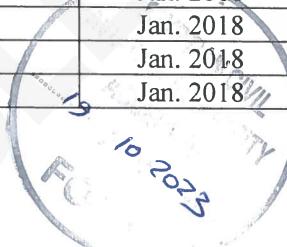
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| Chapter (4) Crew Management |           |            |              |               |
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| Chapter (5) Qualification Requirements |           |            |              |               |
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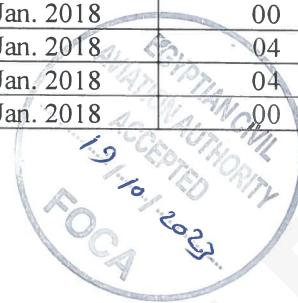
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| Issue No.: 04         | Revision No.: 06         | Doc. No.: NMA – OMA.GOM – 1001 |
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| Chapter (6) Crew Health Precautions |           |            |              |               |
|-------------------------------------|-----------|------------|--------------|---------------|
| Page No.                            | Issue No. | Issue Date | Revision No. | Revision Date |
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| Issue Date: Jan. 2018 | Revision Date: Dec. 2022 |                                |

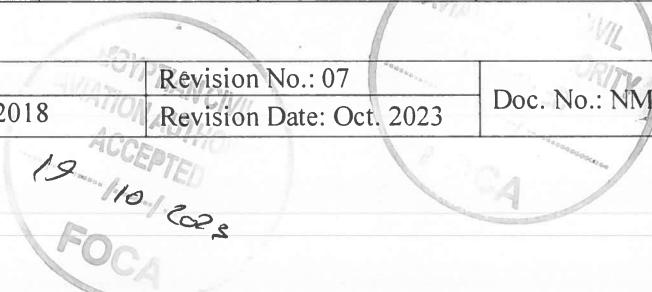
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| Page No.                            | Issue No. | Issue Date | Revision No. | Revision Date |
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| Issue Date: Jan. 2018 | Revision Date: Dec. 2022 |                                |

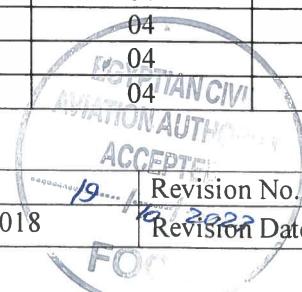
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| Issue No.: 04         | Revision No.: 07         | Doc. No.: NMA – OMA.GOM – 1001 |
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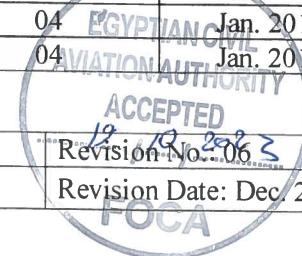


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| Issue No.: 04         | Revision No.: 06         | Doc No.: NMA - OMA.GOM - 1001 |
| Issue Date: Jan. 2018 | Revision Date: Dec. 2022 | FOCA<br>19/10/2023<br>mala    |

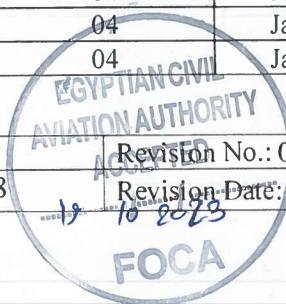
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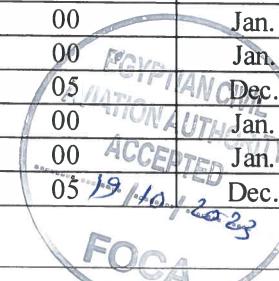
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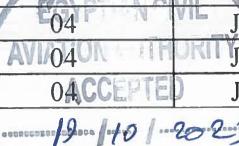
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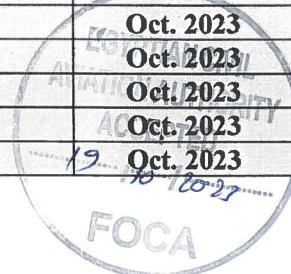
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| Chapter (9) Dangerous Goods and Weapons |           |            |              |               |
|---|-----------|------------|--------------|---------------|
| Page No.                                | Issue No. | Issue Date | Revision No. | Revision Date |
| 1.                                      | 04        | Jan. 2018  | 07           | Oct. 2023     |
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| 19.                                     | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 20.                                     | 04        | Jan. 2018  | 02           | Nov. 2018     |

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**Chapter (10) Security**

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|----------|-----------|------------|--------------|---------------|
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| 44.      | 04        | Jan. 2018  | 02           | Nov. 2018     |

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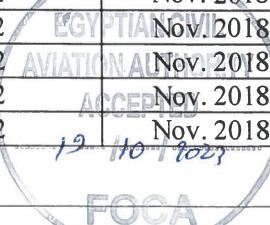
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| 58.      | 04        | Jan. 2018  | 02           | Nov. 2018     |



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| Chapter (11) Safety Management System |           |            |              |                                       |
|---------------------------------------|-----------|------------|--------------|---------------------------------------|
| Page No.                              | Issue No. | Issue Date | Revision No. | Revision Date                         |
| 1.                                    | 04        | Jan. 2018  | 06           | Dec. 2022                             |
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| 15.                                   | 04        | Jan. 2018  | 02           | Nov. 2018                             |
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| 42.                                   | 04        | Jan. 2018  | 02           | AVIATION AUTHORITY Nov. 2018          |
| 43.                                   | 04        | Jan. 2018  | 02           | ACCEPTED Nov. 2018                    |
| 44.                                   | 04        | Jan. 2018  | 02           | 12/10/2018 Nov. 2018                  |

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| 45.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
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| 64.      | 04        | Jan. 2018  | 02           | Nov. 2018     |



| Chapter (12) Rules of the Air |           |            |              |               |
|-------------------------------|-----------|------------|--------------|---------------|
| Page No.                      | Issue No. | Issue Date | Revision No. | Revision Date |
| 1.                            | 04        | Jan. 2018  | 02           | Nov. 2018     |
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| 6.                            | 04        | Jan. 2018  | 02           | Nov. 2018     |



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| Chapter (13) Forms |           |            |              |               |
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| Page No.           | Issue No. | Issue Date | Revision No. | Revision Date |
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| 32.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 33.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 34.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 35.                | 04        | Jan. 2018  | 06           | Dec. 2022     |
| 36.                | 04        | Jan. 2018  | 06           | Dec. 2022     |
| 37.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 38.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 39.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 40.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 41.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 42.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 43.                | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 44.                | 04        | Jan. 2018  | 02           | Nov. 2018     |

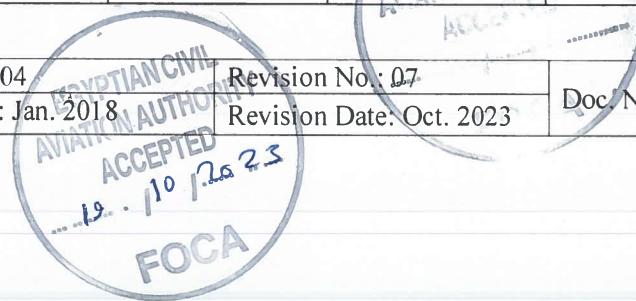
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Issue Date: Jan. 2018

Revision Date: Oct. 2023

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| 45.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 46.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 47.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 48.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 49.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 50.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 51.      | 04        | Jan. 2018  | 02           | Nov. 2018     |
| 52.      | 04        | Jan. 2018  | ACCEPTED 02  | Nov. 2018     |



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| Issue No.: 04         | Revision No.: 06         | Doc. No.: NMA – OMA.GOM – 1001 |
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| Chapter (14) Performance Engineering |           |            |              |               |
|--------------------------------------|-----------|------------|--------------|---------------|
| Page No.                             | Issue No. | Issue Date | Revision No. | Revision Date |
| 1.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 2.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 3.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 4.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 5.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 6.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 7.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 8.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 9.                                   | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 10.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 11.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 12.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 13.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 14.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 15.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 16.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 17.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 18.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 19.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 20.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 21.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 22.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 23.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 24.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 25.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 26.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 27.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 28.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 29.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 30.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 31.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 32.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 33.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 34.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 35.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 36.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 37.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |
| 38.                                  | 04        | Jan. 2018  | 00           | Jan. 2018     |



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| Chapter (15) Aircraft Leasing |           |            |              |   |
|-------------------------------|-----------|------------|--------------|---|
| Page No.                      | Issue No. | Issue Date | Revision No. | Revision Date                               |
| 1.                            | 04        | Jan. 2018  | 00           | Jan. 2018                                   |
| 2.                            | 04        | Jan. 2018  | 00           | Jan. 2018                                   |
| 3.                            | 04        | Jan. 2018  | 00           | EGYPTIAN CIVIL AVIATION AUTHORITY Jan. 2018 |
| 4.                            | 04        | Jan. 2018  | 00           | Jan. 2018                                   |



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## Appendix A

| Page No. | Issue No. | Issue Date | Revision No. | Revision Date |
|----------|-----------|------------|--------------|---------------|
| 1.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 2.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 3.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 4.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 5.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 6.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 7.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 8.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 9.       | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 10.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 11.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 12.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 13.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 14.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 15.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 16.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 17.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 18.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 19.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 20.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 21.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 22.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 23.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 24.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 25.      | 04        | Jan. 2018  | 05           | Dec. 2019     |
| 26.      | 04        | Jan. 2018  | 05           | Dec. 2019     |

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## 0.5 Introduction

### 0.5.1 Operations Manuals

**OPERATIONS MANUAL** is issued on the authority of the Director of Operations. It complies with Egyptian Civil Aviation Regulations (ECAR) and Air Operator (Nesma Airlines) Operations Certificate (AOC) as well as with the applicable National Regulations and Laws.

It has been prepared in the English and Arabic language as a common language prescribed in. The Operations Manual is developed in a manner that ensures they are useable, identifiable and consistent with manufacture specifications. Any differences from procedures and checklists provided by manufacture are not applicable in Nesma airlines operations unless mentioned and approved by the manufacture itself.

The procedures and instructions contained in the operations manual are based on the latest technical data and operational experience. They have been established to plan and execute commercial air transport flights in accordance with Nesma Airlines policy & it shall:

- i) Contains legible and accurate information;
- ii) Is written in language(s) understood by flight operations personnel (English & Arabic);
- iii) Is presented in a format that meets the needs of flight operations personnel;
- iv) Approved by the ECAA Authority if mandated by regulations
- v) Designed in accordance with the human factor's principles (ref. corp. manual ch.2)

### 0.5.2 Operations Manual Basis

Nesma Airlines provides commercial air transportation and hence it ensures that all parts of Operations Manuals must be prepared in accordance with the requirements given in ECARs Part

121. In addition, the Operations Manuals shall also contain the applicable National rules and regulations as well as applicable ICAO Standards and Procedures as far as they apply.

The Operations Manual directs and guides the conduct of all relevant operation duties within Nesma Airlines in order to assure Safe, Economic and Effective conduct of all Flight Operations activities.

The Operations Manuals are published in English, which is recognized operating language of Nesma Airlines.

**Note:** As the matter of simplicity, the Male gender is used throughout Operations Manuals, but the contents apply as well to Female as to Male employees of Nesma Airlines.

Human Factors principles shall be observed in the design of Operations Manuals, in order to create a high degree of user friendliness and shall be achieved by:

- Clearly laid out policies and procedures, checklists and other guidance or information necessary for compliance with applicable regulations, laws, rules and Nesma Airlines standards;
- Providing a comprehensive Table of Contents;
- Discouraging the repetition of information;
- Providing cross-references;
- Providing a comprehensive Index;
- Being easily accessible; and
- Being responsive to the end user by encouraging all manual holders to provide feedback on any errors or anomalies contained within.

### 0.5.3 Operations Manuals Structure and Content

The **Operations Manual** consists of the following parts:

**Part A: General / Basic (Operations Manual or Flight Operations Manual –'OM-A')**

**Part A** defines all non-type and some type related operational policies, procedures, instructions and guidance necessary for Nesma Airlines flight operations personnel to perform their duty and needed for a safe operation. Part A is made of this Operations Manual.

In case of Operations Manual Part B, Nesma Airlines exclusively utilizes the manufacturer's checklist and procedures. Should there be a requirement to customize any checklist and procedures, Nesma Airlines shall ensure that such customization is based on operational considerations and be controlled in accordance with the 'Documentation and Records Management' process detailed in the Document Control Procedure Manual.

OM- Part A divided into four volumes as follow:

**Volume 1:** Flight Operations Manual.

**Volume 2:** Operational Control& Flight Dispatch Manual. (OCDM)

**Volume 3:** Stations Operations Manual. (SOM)

**Volume 4:** Cabin Crew Manual (CCM)

**Part B: Airplane Operating Matters (Aircraft Operations Manual – AOM 'OM-B')**

**Part B** comprises all type-related instructions and procedures needed for a safe operation. It takes account of any differences between types, variants or individual aircraft used by Nesma Airlines, if any.

Material produced by Nesma Airlines for this Part is supplemented or substituted by applicable parts of the following manuals for the operated aircraft:

- Airplane Flight Manual (AFM) including the Configuration Deviation List (CDL) and Applicable Airworthiness Directives (AD).
- Customized Minimum Equipment List (CMEL).
- Flight Crew Operating Manual (FCOM)
- Quick Reference Handbook(QRH)
- Weight and Balance Manual (WBM).
- Flight Crew Techniques Manual (FCTM)

**Part C: Route and Airport Instructions and Information ('OM-C')**

**Part C** comprises all instructions and information needed for the area of operation.

Material produced by Nesma Airlines for this Part is supplemented or substituted by applicable Route Guide material produced by specialized professional company as follows:

- Jeppesen Airways Manual including airport/En-route data/charts and applicable ICAO annex's
- National AIP's and relevant NOTAM's

**Part D: Training ('OM-D')**

**Part D** comprises all training instructions as required by Egyptian CAA.

All flight crewmembers will have their personal digital controlled copy of the Operations Manual OM-A volume 1 and OM-B. All other operations personnel will have easy access to the parts relevant to their respective duties.

The Authority has been provided with a controlled copy of the Operations Manual and received all the amendments and revisions.

All operating staff is required to adhere to instructions laid down in this manual and any deviations should be reported, the reasons for such deviation being given.

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Nothing contained in the Operations Manual shall keep personnel from exercising their own best judgment during any irregularity for which the Operations Manual gives no provisions or emergencies.

Should any individual consider that all or any part(s) of a procedure or instruction requires to be amended, he should notify Operations (through 'Amendment Request Form', [refer to Chapter 13 Forms](#))

#### 0.5.4 Editorial Convention

- For conciseness, the pronoun "he" is used throughout the text. Where appropriate, "she" should be added to or substituted for "he"
- When used in the Operations Manual, the following terms shall have the following meaning:
  - "**Shall**", "**will**", "**must**" or an action verb in the imperative sense means that the application of a rule or procedure or provision is mandatory.
  - "**Should**" means that the application of a procedure or provision is recommended.
  - "**May**" means that the application of a procedure or provision is optional.
  - "**No person may...**" or "**a person may not...**" mean that no person is required, authorized, or permitted to do the act concerned.
  - "**Approved**" means the Authority has reviewed the method, procedure or policy in question and issued a formal written approval.
  - "**Acceptable**" means the Authority or the airline has reviewed the method, procedure or policy and has neither objected to nor approved its proposed use or implementation.
  - "**Prescribed**" means the Authority or the airline has issued a written policy or methodology which imposes either a mandatory requirement, if it states "shall", "will"
  - "**Must**" or an action verb in the imperative sense, are commended requirement if it states "should" or a discretionary requirement if it states "may".
  - "**Note**" is used when an operating procedure, technique, etc., is considered essential to be emphasized.
  - "**Caution**" is used when an operating procedure, technique, etc., may result in damage to equipment if not carefully followed.
  - "**Warning**" is used when an operating procedure, technique, etc., may result in personnel injury or loss of life if not carefully followed.

#### 0.5.5 Operations Manual Priority

The procedures and instructions contained in the Operations Manuals are based on the latest technical data and accumulated operational experience at the time of publication. They have been established to plan and execute commercial air transport flights in accordance with policies and regulations.

When a conflict exists between Operations Manuals concerning operational policy or procedural matters, the Operations Manual Part A, volume 1 shall take precedence over all others but does not supersede or amend Nesma Airlines aircraft type documentation or any other approved documentation.

**0.5.6 Acronyms**

|       |   |       |   |
|-------|---|-------|---|
| AAL   | Above Aerodrome Level                               | AC    | Advisory Circular, Alternating Current              |
| ABM   | Abeam   | A/C   | Aircraft  |
| AC    | Advisory Circular, Alternating Current              | ACARS | ARINC Communication Addressing and Reporting System |
| A/C   | Aircraft.   | ACAS  | Airborne Collision Avoidance System                 |
| ACARS | ARINC Communication Addressing and reporting System | ACJ   | Advisory Circular Joint                             |
| ACAS  | Airborne Collision Avoidance System                 | ACMS  | Aircraft Condition Monitoring System                |
| ACJ   | Advisory Circular Joint                             | ACN   | Aircraft Classification Number                      |
| ACMS  | Aircraft Condition Monitoring System                | AD    | Airworthiness Directive                             |
| ACN   | Aircraft Classification Number                      | ADC   | Air Data Computer                                   |
| AD    | Airworthiness Directive                             | ADD   | Acceptable Deferred Defect                          |
| ADC   | Air Data Computer                                   | ADI   | Attitude Director indicator                         |
| ADD   | Acceptable Deferred Defect                          | ADIRS | Air Data Inertial Reference System                  |
| ADI   | Attitude Director indicator                         | ADF   | Automatic Direction Finder                          |
| ADIRS | Air Data Inertial Reference System                  | ADS   | Automatic Dependent Surveillance                    |
| ADF   | Automatic Direction Finder                          | ADV   | Advisory  |
| ADS   | Automatic Dependent Surveillance                    | AEA   | Association of European Airlines                    |
| ADV   | Advisory  | AFM   | Airplane Flight Manual                              |
| AEA   | Association of European Airlines                    | AFM   | Automatic Flight System                             |
| AFM   | Airplane Flight Manual                              | AFTN  | Aeronautical Fixed Telecommunication Network        |
| AFS   | Automatic Flight System                             | AGL   | Above Ground Level                                  |
| AFTN  | Aeronautical Fixed Telecommunication Network        | AH    | Alert Height  |
| AGL   | Above Ground Level                                  | AIP   | Aeronautical Information Publication                |
| AH    | Alert Height  | AIRS  | Aircrew Incident reporting System                   |
| AIP   | Aeronautical Information Publication                | AIS   | Aeronautical Information Service                    |
| AIRS  | Aircrew Incident reporting System                   | ALS   | Approach Light System                               |
| AIS   | Aeronautical Information Service                    | ALT   | Altitude  |
| ALS   | Approach Light System                               | ALTN  | Alternate   |
| ALT   | Altitude  | AMC   | Acceptable Means of Compliance                      |
| ALTN  | Alternate   | AMJ   | Advisory Material Joint                             |
| AMC   | Acceptable Means of Compliance                      | AMM   | Aircraft Maintenance Manual                         |
| AMJ   | Advisory Material Joint                             | AMSL  | Above Mean Sea Level                                |
| AMM   | Aircraft Maintenance Manual                         | AOA   | Angle Of Attack                                     |
| AMSL  | Above Mean Sea Level                                | AOC   | Air Operator Certificate                            |
| AOA   | Angle Of Attack                                     | AOC   | Airline Operations Communications                   |

|              |  |              |  |
|--------------|--|--------------|--|
| <b>AOC</b>   | Air Operator Certificate               | <b>AOG</b>   | Aircraft On Ground                     |
| <b>AOC</b>   | Airline Operations Communications      | <b>AOM</b>   | Airplane Operations Manual             |
| <b>AOG</b>   | Aircraft On Ground                     | <b>AOT</b>   | All Operators Telex                    |
| <b>AOM</b>   | Airplane Operations Manual             | <b>A/P</b>   | Auto-Pilot                             |
| <b>AOT</b>   | All Operators Telex                    | <b>APA</b>   | Accident Prevention Adviser            |
| <b>A/P</b>   | Auto-Pilot                             | <b>APQ</b>   | Airline Pre-qualification              |
| <b>APA</b>   | Accident Prevention Adviser            | <b>APU</b>   | Auxiliary Power Unit                   |
| <b>APQ</b>   | Airline Pre-qualification              | <b>ARINC</b> | Aeronautical Radio Inc.                |
| <b>APU</b>   | Auxiliary Power Unit                   | <b>ARPT</b>  | Airport                                |
| <b>ARINC</b> | Aeronautical Radio Inc.                | <b>ASAP</b>  | As Soon As Possible                    |
| <b>ARPT</b>  | Airport                                | <b>ASDA</b>  | Accelerate-Stop Distance Available     |
| <b>ASAP</b>  | As Soon As Possible                    | <b>ASI</b>   | Air Speed Indicator                    |
| <b>ASDA</b>  | Accelerate-Stop Distance Available     | <b>ASR</b>   | Airport Surveillance Radar             |
| <b>ASI</b>   | Air Speed Indicator                    | <b>ASR</b>   | Air Safety Report                      |
| <b>ASR</b>   | Airport Surveillance Radar             | <b>ASU</b>   | Air Starter Unit                       |
| <b>ASR</b>   | Air Safety Report                      | <b>ATA</b>   | Actual Time of Arrival                 |
| <b>ASU</b>   | Air Starter Unit                       | <b>ATA</b>   | Aeronautical Transport Association     |
| <b>ATA</b>   | Actual Time of Arrival                 | <b>ATC</b>   | Air Traffic Control                    |
| <b>ATA</b>   | Aeronautical Transport Association     | <b>ATD</b>   | Actual Time of Departure               |
| <b>ATC</b>   | Air Traffic Control                    | <b>ATHR</b>  | Auto-thrust                            |
| <b>ATD</b>   | Actual Time of Departure               | <b>ATIS</b>  | Automatic Terminal Information Service |
| <b>ATHR</b>  | Auto-thrust                            | <b>ATM</b>   | Air Traffic Management                 |
| <b>ATIS</b>  | Automatic Terminal Information Service | <b>ATN</b>   | Aeronautical Telecommunication Network |
| <b>ATM</b>   | Air Traffic Management                 | <b>ATPL</b>  | Airline Transport Pilot License        |
| <b>ATN</b>   | Aeronautical Telecommunication Network | <b>ATS</b>   | Air Traffic Services                   |
| <b>ATPL</b>  | Airline Transport Pilot License        | <b>ATS</b>   | Auto Thrust System                     |
| <b>ATS</b>   | Air Traffic Services                   | <b>ATSU</b>  | Air Traffic Services Unit              |
| <b>ATS</b>   | Auto Thrust System                     | <b>ATT</b>   | Attitude                               |
| <b>ATSU</b>  | Air Traffic Services Unit              | <b>AVGAS</b> | Aviation Gasoline                      |
| <b>ATT</b>   | Attitude                               | <b>AWO</b>   | All Weather Operations                 |
| <b>AVGAS</b> | Aviation Gasoline                      | <b>AWY</b>   | Airway                                 |
| <b>AWO</b>   | All Weather Operations                 | <b>CMS</b>   | Crew Management System                 |
| <b>AWY</b>   | Airway                                 | <b>CMSM</b>  | Crew Management System Manual          |
| <b>EEP</b>   | ETOPS Entry Point                      | <b>GPWS</b>  | Ground Proximity Warning System        |
| <b>EFIS</b>  | Electronic Flight Instrument System    | <b>GS</b>    | Ground Speed                           |
| <b>EFOB</b>  | Estimated Fuel On Board                | <b>G/S</b>   | Glide Slope                            |
| <b>EGPWS</b> | Enhanced GPWS                          | <b>GW</b>    | Gross Weight                           |
| <b>EGT</b>   | Exhaust Gas Temperature                | <b>H</b>     | Hour                                   |
| <b>EIS</b>   | Electronic Instrument System           | <b>HDG</b>   | Heading                                |

|                 |  |               |   |
|-----------------|--|---------------|---|
| <b>ELEC</b>     | Electrical   | <b>HF</b>     | High Frequency (3 to 30 MHz)              |
| <b>ELEV</b>     | Elevator, Elevation                                | <b>HF</b>     | Human Factors                             |
| <b>ELT</b>      | Entry Level Training                               | <b>HG</b>     | Mercury                                   |
| <b>ELT</b>      | Emergency Locator Transmitter                      | <b>HI</b>     | High (altitude or intensity)              |
| <b>EMER</b>     | Emergency  | <b>HIALS</b>  | High Intensity Approach Light System      |
| <b>ENG</b>      | Engine   | <b>HIL</b>    | Holding Items List                        |
| <b>EFB</b>      | Electronic Flight Bag                              | <b>HIRL</b>   | High Intensity Runway Lights              |
| <b>ENGG</b>     | Engineering  | <b>HMU</b>    | Height Monitoring Unit                    |
| <b>EO</b>       | Engine Out   | <b>HP</b>     | High Pressure                             |
| <b>EOSID</b>    | Engine Out SID                                     | <b>HPA</b>    | hector Pascal                             |
| <b>EPR</b>      | Engine Pressure Ratio                              | <b>HSI</b>    | Horizontal Situation Indicator            |
| <b>EST</b>      | Estimated  | <b>HUD</b>    | Head Up Display                           |
| <b>ETA</b>      | Estimated Time of Arrival                          | <b>HYD</b>    | Hydraulic                                 |
| <b>ETD</b>      | Estimated Time of Departure                        | <b>HZ</b>     | Hertz (cycles per second)                 |
| <b>ETOPS</b>    | Extended Twin Engine Operations                    | <b>IAF</b>    | Intermediate Approach Fix                 |
| <b>ETP</b>      | Equip-Time Point                                   | <b>IAP</b>    | Instrument Approach Procedure             |
| <b>EUROC AE</b> | European Organization for Civil Aviation Equipment | <b>IAS</b>    | Indicated Air Speed                       |
| <b>EXP</b>      | Exit Point (ETOPS)                                 | <b>IATA</b>   | International Air Transport Association   |
| <b>EXT</b>      | External   | <b>ICAO</b>   | International Civil Aviation Organization |
| <b>F</b>        | Fahrenheit   | <b>ID</b>     | Identity (Number)                         |
| <b>FAA</b>      | Federal Aviation Administration                    | <b>IDENT</b>  | Identification                            |
| <b>FADEC</b>    | Full Authority Digital Engine Control              | <b>IDG</b>    | Integrated Drive Generator                |
| <b>FAF</b>      | Final Approach Fix                                 | <b>IEM</b>    | Interpretation/Explanation Material       |
|                 |  | <b>IFS</b>    | In-flight services                        |
| <b>FANS</b>     | Future Air Navigation System                       | <b>IFR</b>    | Instrument Flight Rules                   |
| <b>FAP</b>      | Final Approach Point                               | <b>IFSD</b>   | In-Flight Shut Down                       |
| <b>FAR</b>      | Federal Aviation Regulations                       | <b>IFTB</b>   | In-Flight Turn Back                       |
| <b>FBS</b>      | Fixed Base Simulator                               | <b>IL</b>     | Information Leaflet                       |
| <b>F/C</b>      | Flight Crew  | <b>ILS</b>    | Instrument Landing System                 |
| <b>FCL</b>      | Flight Crew Licensing                              | <b>IMC</b>    | Instrumental Meteorological Conditions    |
| <b>FCOM</b>     | Flight Crew Operating Manual                       | <b>in, IN</b> | Inch(ES)                                  |
| <b>FCTM</b>     | Flight Crew Training Manual                        | <b>INFO</b>   | Information                               |
| <b>FCU</b>      | Flight Control Unit                                | <b>INIT</b>   | Initialization                            |
| <b>FD</b>       | Flight Director                                    | <b>INOP</b>   | Inoperative                               |
| <b>FF</b>       | Fuel Flow  | <b>INS</b>    | Inertial Navigation System                |
| <b>FFS</b>      | Full Flight Simulator                              | <b>IOE</b>    | Initial Operating Experience              |
| <b>FIR</b>      | Flight Information Region                          | <b>IRS</b>    | Inertial Reference System                 |
| <b>FL</b>       | Flight Level                                       | <b>ISA</b>    | International Standard Atmosphere         |
| <b>FLT</b>      | Flight   | <b>ISO</b>    | International Standard Organization       |
| <b>FM</b>       | Flight Manual                                      | <b>ISA</b>    | International Standard Atmosphere         |
| <b>FMA</b>      | Flight Mode Annunciator                            | <b>JAA</b>    | Joint Aviation Authorities                |
| <b>FMGS</b>     | Flight Management and Guidance System              | <b>JAR</b>    | Joint Aviation Regulations                |
| <b>FMGES</b>    | Flight Management, Guidance and (flight)           | <b>kg, KG</b> | kilogram                                  |

| Envelope        | (protection) System                         | kHz              | kilohertz                                |
|-----------------|---|------------------|--|
| <b>FMS</b>      | Flight Management System                    | <b>km, KM</b>    | kilometer                                |
| <b>F/O</b>      | First Officer                               | <b>kt, KT</b>    | knot                                     |
| <b>FOB</b>      | Fuel On Board                               | <b>L, L</b>      | Litre                                    |
| <b>FOD</b>      | Foreign Object Damage                       | <b>LAT</b>       | Latitude                                 |
| <b>FOM</b>      | Flight Operations Manual                    | <b>lb</b>        | pound (weight)                           |
| <b>FOQA</b>     | Flight Operations Quality Assurance         | <b>LCD</b>       | Liquid Crystal Display                   |
| <b>FOT</b>      | Flight Operations Telex                     | <b>LCN</b>       | Load Classification Number               |
| <b>F-PLN</b>    | Flight Plan                                 | <b>LDA</b>       | Landing Distance Available               |
| <b>FPV</b>      | Flight Path Vector                          | <b>LDG</b>       | Landing                                  |
| <b>FQI</b>      | Fuel Quantity Indication                    | <b>LEP</b>       | List of Effective Pages                  |
| <b>ft, FT</b>   | Foot (Feet)                                 | <b>L/G</b>       | Landing Gear                             |
| <b>FTL</b>      | Flight Time Limitation                      | <b>LH</b>        | Left Hand                                |
| <b>FU</b>       | Fuel Used                                   | <b>LLZ</b>       | Localizer                                |
| <b>FWD</b>      | Forward                                     | <b>LO</b>        | Low                                      |
| <b>g, G</b>     | Gram  | <b>LOAS</b>      | Line Operations Assessment System        |
| <b>GA</b>       | Go Around                                   | <b>LOC</b>       | Localizer                                |
| <b>GEN</b>      | Generator                                   | <b>LOFT</b>      | Line Oriented Flight Training            |
| <b>GLONA SS</b> | Global Orbiting Navigation Satellite System | <b>LONG</b>      | Longitude                                |
| <b>GMT</b>      | Greenwich Mean Time                         | <b>LOVT</b>      | Low Visibility Takeoff                   |
| <b>GMU</b>      | GPS (height) Monitoring Unit                | <b>LP</b>        | Low Pressure                             |
| <b>GNLU</b>     | Global Navigation and Landing Unit          | <b>LPC</b>       | Less Paper Cockpit (Airbus concept)      |
| <b>GNSS</b>     | Global Navigation Satellite System          | <b>LRNS</b>      | Long Range Navigation System             |
| <b>GPS</b>      | Global Positioning System                   | <b>LROPS</b>     | Long Range Operations                    |
| <b>GPU</b>      | Ground Power Unit                           | <b>LRU</b>       | Line Replaceable Unit                    |
| <b>LSK</b>      | Line Select Key                             | <b>SAE</b>       | Society of Automotive Engineers          |
| <b>LVL</b>      | Level                                       | <b>SARPS</b>     | Standards And Recommended Practices      |
| <b>LVP</b>      | Low Visibility Procedures                   | <b>SAT</b>       | Static Air Temperature                   |
| <b>LVTO</b>     | Low Visibility Take-Off                     | <b>SATCO M</b>   | Satellite Communication                  |
| <b>LW</b>       | Landing Weight                              | <b>SATVO ICE</b> | Satellite Voice Communication            |
| <b>M</b>        | Mach  | <b>SB</b>        | Service Bulletin                         |
| <b>m, M</b>     | meter                                       | <b>SEL</b>       | Selector                                 |
| <b>MABH</b>     | Minimum Approach Break off Height           | <b>SELCAL</b>    | Selective Calling                        |
| <b>MAC</b>      | Mean Aerodynamic Chord                      | <b>SFE</b>       | Seller Furnished Equipment               |
| <b>MAG</b>      | Magnetic                                    | <b>SI</b>        | International System of units            |
| <b>MAINT</b>    | Maintenance                                 | <b>SID</b>       | Standard Instrument Departure            |
| <b>MAN</b>      | Manual                                      | <b>SIGMET</b>    | Significant Meteorological report        |
| <b>MAP</b>      | Missed Approach Point                       | <b>SIL</b>       | Service Information Letter               |
| <b>MASPS</b>    | Min. Aviation Systems Performance Standards | <b>SITA</b>      | Société Int. de Telecomm. Aéronautiques  |
| <b>MAX</b>      | Maximum                                     | <b>SOP</b>       | Standard Operating Procedures            |
| <b>mb,</b>      | MB Millie-bar                               | <b>SOPAC</b>     | South Pacific                            |
| <b>MBOH</b>     | Minimum Break Off Height                    | <b>SPECI</b>     | Aviation selected special weather report |

|         |   |       |   |
|---------|---|-------|---|
| MCC     | Multiple Crew Co-operation                | SPD   | Speed                                       |
| MCC     | Maintenance Control Centre                | SRA   | Surveillance Radar Approach                 |
| MCDU    | Multipurpose Control and Display Unit     | SRE   | Survey. Radar Element of precision approach |
| MCT     | Maximum Continuous Thrust                 | SSR   | Secondary Surveillance Radar                |
| MDA/H   | Minimum Descent Altitude / Height         | STAR  | Standard Terminal Arrival Route             |
| MEL     | Minimum Equipment List                    | STD   | Standard                                    |
| MET     | Meteorological                            | STS   | Status                                      |
| METAR   | Meteorological Aerodrome Report           | SYS   | System                                      |
| MFF     | Mixed Fleet Flying                        | t, T  | Ton, Tone, Temperature                      |
| MHz     | Megahertz                                 | TA    | Traffic Advisory                            |
| MID     | Middle Runway Portion                     | TACAN | Tactical Air Navigation                     |
| MIALS   | Medium Intensity Approach Light System    | TAF   | Terminal Aerodrome Forecast                 |
| MIN     | Minimum, Minute                           | TAS   | True Air Speed                              |
| MIRL    | Medium Intensity Runway Light             | TAT   | Total Air Temperature                       |
| MLS     | Microwave Landing System                  | TAWS  | Terrain Awareness and Warning System        |
| MLW     | Maximum Landing weight                    | TBC   | To Be Confirmed                             |
| mm, MM  | Millimeter                                | TBD   | To Be Determined/Defined                    |
| MME     | Maintenance Management Exposition         | TCAS  | Traffic alert and Coll. Avoidance System    |
| MMEL    | Master Minimum Equipment List             | TDZ   | Touch Down Zone                             |
| MMO     | Maximum Operating Mach                    | TEMP  | Temperature                                 |
| MMR     | Multi-Mode Receiver                       | TEMPO | Temporary                                   |
| MNPS    | Min. Navigation Performance Specification | TERPS | (US) St. for Terminal Instrument Procedures |
| MOCA    | Minimum Obstruction Clearance Altitude    | TFU   | Technical Follow-Up                         |
| MOE     | Maintenance Organization Exposition       | THR   | Thrust                                      |
| MOR     | Mandatory Occurrence Reporting            | THS   | Trimble Horizontal Stabilizer               |
|         |   | TK    | Tank  |
| MORA    | Minimum Off-Route Altitude                | TLA   | Thrust Lever Angle                          |
| MRVA    | Minimum Radar Vectoring Altitude          | TMA   | Terminal Maneuvering Area                   |
| MSA     | Minimum Safe (or Sector) Altitude         | T/O   | Take-Off                                    |
| MSG     | Message                                   | TOC   | Top Of Climb                                |
| MSL     | Mean Sea Level                            | TOD   | Top Of Descent                              |
| MSN     | Manufacturer's Serial Number              | TODA  | Take-Off Distance Available                 |
| MTBF    | Mean Time Between Failure                 | TOGA  | Take-Off/Go-Around                          |
| MTOW    | Maximum Take Off Weight                   | TOGW  | Take-Off Gross Weight                       |
| MWE     | Manufacturer's Weight Empty               | TORA  | Take-off Run Available                      |
| MZFW    | Maximum Zero Fuel Weight                  | TOW   | Take-Off Weight                             |
| N/A     | Not Applicable                            | TR    | Temporary Revision                          |
| NAI     | Nacelle Anti Ice                          | TRE   | Type Rating Examiner                        |
| NAT     | North Atlantic                            | TRI   | Type Rating Instructor                      |
| NAV     | Navigation                                | TRK   | Track                                       |
| NAVAID  | (Radio) Navigation Aid                    | TRTO  | Type Rating Training Organization           |
| NCD Non | Computed Data                             | TWR   | Tower                                       |

|               |   |             |                                       |
|---------------|---|-------------|---------------------------------------|
| <b>ND</b>     | Navigation Display                            | <b>TWY</b>  | Taxiway                               |
| <b>NDB</b>    | Non Directional Beacon                        | <b>UHF</b>  | Ultra High Frequency (300 - 3000 MHz) |
| <b>NIL</b>    | No Item Listed (Nothing)                      | <b>UIR</b>  | Upper Information Region              |
| <b>NM</b>     | Nautical Miles                                | <b>ULD</b>  | Unit Load Device                      |
| <b>NORM</b>   | Normal  | <b>UM</b>   | Unaccompanied Minor                   |
| <b>NOPAC</b>  | North Pacific                                 | <b>US</b>   | United States                         |
| <b>NOTAM</b>  | Notice To Airmen                              | <b>U/S</b>  | Unserviceable                         |
| <b>NOTOC</b>  | Notice To Crew                                | <b>UTC</b>  | Universal Time Co-ordinated           |
| <b>NPA</b>    | Non Precision Approach                        | <b>V</b>    | Volt                                  |
| <b>NTO</b>    | NO Technical Objection                        | <b>V1</b>   | Critical engine failure speed         |
| <b>OAT</b>    | Outside Air Temperature                       | <b>V2</b>   | T/O safety speed                      |
| <b>OBRM</b>   | On Board Replaceable Module                   | <b>VAPP</b> | Final Approach Speed                  |
| <b>OCA/H</b>  | Obstacle Clearance Altitude / Height          | <b>VASI</b> | Visual Approach Slope Indicator       |
| <b>OCC</b>    | Operational Control Centre                    | <b>VDF</b>  | Very high frequency Direction Finding |
| <b>OCDM</b>   | Operational Control & Flight Dispatch Manual. | <b>VOR</b>  | VHF Omni-directional Range            |
| <b>OEB</b>    | Operations Engineering Bulletin               | <b>VDR</b>  | Very high frequency Data Radio        |
| <b>OEW</b>    | Operating Empty Weight                        | <b>VFE</b>  | Maximum Velocity Flaps/slats Extended |
| <b>OIT</b>    | Operator Information Telex                    | <b>VR</b>   | Rotation speed                        |
| <b>OM</b>     | Outer Marker                                  | <b>VREF</b> | Landing reference speed               |
| <b>OM</b>     | Operations Manual                             | <b>VS</b>   | Stall speed                           |
| <b>ONC</b>    | Operational Navigation Chart                  | <b>V/S</b>  | Vertical Speed                        |
| <b>OPS</b>    | Operations                                    | <b>VSI</b>  | Vertical Speed Indicator              |
| <b>OPT</b>    | Optimum                                       | <b>WAI</b>  | Wing Anti Ice                         |
| <b>OTS</b>    | Oceanic Track System                          | <b>WBM</b>  | Weight and Balance Manual             |
| <b>OXY</b>    | Oxygen  | <b>WGD</b>  | Windshield Guidance Display           |
| <b>PA</b>     | Passenger Address                             | <b>WGS</b>  | World Geodetic System                 |
| <b>PAC</b>    | Pacific                                       | <b>WPT</b>  | Waypoint                              |
| <b>PACOTS</b> | Pacific Oceanic Track System                  | <b>WX</b>   | Weather                               |
| <b>PANS</b>   | Procedures for Air Navigation Services        | <b>WXR</b>  | Weather Radar                         |
| <b>PAPI</b>   | Precision Approach Path Indicator             | <b>XCVR</b> | Transceiver                           |
| <b>PAR</b>    | Precision Approach Radar                      | <b>XFR</b>  | Transfer                              |
| <b>PAX</b>    | Passenger                                     | <b>XMTR</b> | Transmitter                           |
| <b>PB</b>     | Pushbutton                                    | <b>XTK</b>  | Cross track error                     |
| <b>PCN</b>    | Pavement Classification Number                | <b>Z</b>    | Zulu time (UTC)                       |
| <b>PERF</b>   | Performance                                   | <b>ZFCG</b> | Zero Fuel Centre of Gravity           |
| <b>PF</b>     | Pilot Flying                                  | <b>ZFW</b>  | Zero Fuel Weight                      |
| <b>PFD</b>    | Primary Flight Display                        |             |                                       |
| <b>PIREP</b>  | Pilot Report                                  |             |                                       |
| <b>PIC</b>    | Pilot In Command                              |             |                                       |
| <b>P/N</b>    | Part Number                                   |             |                                       |
| <b>PNR</b>    | Point of No Return                            |             |                                       |
| <b>PM</b>     | Pilot Monitor                                 |             |                                       |
| <b>PM</b>     | Position                                      |             |                                       |
| <b>PROC</b>   | Procedure                                     |             |                                       |

| PROF | Profile  |  |  |
|------|--|--|--|
| PPR  | Prior Permission Required                        |  |  |
| PSI  | Pounds per Square Inch                           |  |  |
| PT   | Point  |  |  |
| PTS  | Polar Track System                               |  |  |
| PVI  | Para visual Indicator                            |  |  |
| PWR  | Power  |  |  |
| QA   | Quality Assurance                                |  |  |
| QAR  | Quick Access Recorder                            |  |  |
| QDM  | Magnetic bearing to facility                     |  |  |
| QDR  | Magnetic bearing from facility                   |  |  |
| QFE  | Field elevation atmosphere pressure              |  |  |
| QFU  | Magnetic orientation of runway                   |  |  |
| QGH  | Procedure or facility to be used                 |  |  |
| QNE  | Sea level St. atmosphere (1013 hPa or 29.92" Hg) |  |  |
| QNH  | Sea level atmosphere pressure                    |  |  |
| QRH  | Quick Reference Handbook                         |  |  |
| RA   | Radio Altitude/Radio Altimeter                   |  |  |
| RA   | Resolution Advisory                              |  |  |
| RAIM | Receiver Autonomous Integrity Monitoring         |  |  |
| RAS  | Repair Approval Sheet                            |  |  |
| RAT  | Ram Air Turbine                                  |  |  |
| REF  | Reference  |  |  |
| REV  | Reverse  |  |  |
| RH   | Right Hand                                       |  |  |
| R/I  | Radio Inertial                                   |  |  |
| RMI  | Radio Magnetic Indicator                         |  |  |
| RNAV | Area Navigation                                  |  |  |
| RNP  | Required Navigation Performance                  |  |  |
| RPL  | Repetitive flight plan                           |  |  |
| RPM  | Revolutions Per Minute                           |  |  |
| RQRD | Required   |  |  |
| RSV  | Reserves   |  |  |
| RTA  | Required Time of Arrival                         |  |  |
| RTCA | Requirements and Technical Concepts for Aviation |  |  |
| RTO  | Rejected Take Off                                |  |  |
| RTOW | Regulatory Take Off Weight                       |  |  |
| RVR  | Runway Visual Range                              |  |  |
| RVSM | Reduced Vertical Separation Minima               |  |  |
| RWY  | Runway   |  |  |
| VFR  | Visual Flight Rules                              |  |  |
| VFTO | Velocity Final T/O                               |  |  |
| VHF  | Very High Frequency (30 - 300 MHz)               |  |  |

|             |                                  |  |  |
|-------------|----------------------------------|--|--|
| <b>VMC</b>  | Visual Meteorological Conditions |  |  |
| <b>VMCA</b> | Minimum Control Speed in the Air |  |  |
| <b>VMCG</b> | Minimum Control Speed on Ground  |  |  |
| <b>VMIN</b> | Minimum operating speed          |  |  |
| <b>VMO</b>  | Maximum operating speed          |  |  |

### 0.5.7 Definitions

- **Accountable Executive:** The person acceptable to the Authority who has corporate authority for insuring that all operations and maintenance activities can be financed and carried out to the standard required by the Authority and any additional requirements defined by the operator.
- **Accelerate-Stop Distance Available:** The length of the takeoff run available plus the length of stop way, if such stop way is declared available by the appropriate Authority and is capable of bearing the mass the airplane under the prevailing operating conditions
- **Aerodrome:** A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.
- **Aerodrome elevation:** The elevation of the highest point of the landing area.
- **Aeronautical Information Publication:** A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.
- **Aeronautical Information Circular (AIC):** A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters.
- **AIRAC:** An acronym (aeronautical information regulation and control) signifying a system aimed at advance notification, based on common effective dates, of circumstances that necessitate significant changes in operating practices.
- **Aircraft (Airplane) Flight Manual:** A manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crewmembers for the safe operation of the aircraft.
- **Aircraft identification:** A group of letters, figures or a combination thereof which is either identical to, or the coded equivalent of, the aircraft call sign to be used in air-ground communications, and which is used to identify the aircraft in ground-ground air traffic services communications.
- **Airline Pre-Qualification (APQ):** Training course designed to prepare pilots transition into advanced technology aircraft.
- **Air Operator Certificate (AOC):** A certificate authorizing an operator to carry out specified commercial air transport operations
- **Air proximity incident:** A situation in which, in the opinion of a pilot or controller, the distance between aircraft as well as their relevant positions and speed have been such that the safety of the aircraft involved was or may have been compromised.
- **Air traffic:** All aircraft in flight or operating on the maneuvering area of an aerodrome.
- **Air Traffic Control:** A service that promotes the safe, orderly, and expeditious flow of air traffic at aerodromes and during the approach, departure, and en route environments.
- **Air traffic control clearance:** Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.
- **Air traffic control instruction:** Directives issued by air traffic control for the purpose of requiring a pilot to take a specific action.
- **Air traffic control service:** A service provided for the purpose of preventing collisions between aircraft, and on the maneuvering area between aircraft and obstructions, Expediting and maintaining an orderly flow of air traffic.

- **Air traffic service:** A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).
- **Airway:** A control area or portion thereof established in the form of a corridor equipped with radio navigation aids.
- **Airworthiness release:** A certification signed by a licensed mechanic authorized by the AOC holder indicating that work was performed in accordance with the AOC holder's maintenance manual, was inspected by licensed mechanic, and the aircraft was found satisfactory for safe operation.
- **Alerting service:** A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.
- **Alternate aerodrome:** An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing. Alternate aerodromes include the following:
  - Take-off alternate: An alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.
  - En-route alternate: An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route.
  - Destination alternate: An alternate aerodrome to which an aircraft may proceed should it become impossible or inadvisable to land at the aerodrome of intended landing.
- Note: The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.
- **Altitude:** The vertical distance of a level, a point or an object considered as a point, measured from mean sea level.
- **Appropriate authority:** (see also Authority)
  - Regarding flight over the high seas: the relevant authority of the State of Registry.
  - Regarding flight other than over the high seas: the relevant authority of the State having sovereignty over the territory being over flown.
- **Approved:** The Authority has reviewed the method, procedure or policy in question and issued a formal written approval.
- **Apron:** A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fueling, parking or maintenance.
- **Aquaplaning:** is a situation where the tires of the aircraft are largely separated from the runway surface by a thin fluid film.
- **ATS route:** A specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services.  
**Note:** The term "ATS route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.
- **Authority:** The competent body responsible for the safety of civil aviation in the state of the applicant or operator.
- **Base training:** Flight training required by Airworthiness Authorities to obtain the aircraft type rating.
- **Braking action:** a report on the conditions of the airport movement areas, providing pilots the quality or degree of braking that may be expected. Braking action is reported in terms of good, medium to good, medium, medium to poor, poor, and nil or unreliable.

- **Calendar day:** The period of elapsed time, using Co-ordinate Universal Time or local time, that begins at midnight and ends 24 hours later in the next midnight
- **Cabin attendant:** A crewmember who performs, in the interest of safety of passengers, duties assigned by the operator or the Pilot in Command of the aircraft, but who shall not act as a flight crewmember.
- **Certifying staff:** Those personnel who are authorized by the Approved Maintenance Organization in accordance with a procedure acceptable to the Authority to certify aircraft or aircraft components for release to service.
- **Circling:** The visual phase of an instrument approach to bring an aircraft into position for landing on a runway, which is not suitably located for a straight-in approach.
- **Civil aircraft:** Any aircraft on the civil register of a state, other than those which that state treats as being in the service of the state, either permanently or temporarily.
- **Commercial air transport operation:** An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.
- **Contaminated runway:** A runway is considered to be contaminated when more than 25% of the runway surface area (whether in isolated areas or not) within the required length and width being used is covered by the following:
  - Surface water more than 3 mm (0.125 in) deep, or by slush, or loose snow, equivalent to more than 3mm (0.125 in) of water; or
  - Snow which has been compressed into a solid mass which resists further compression and will hold together or break into lumps if picked up (compacted snow); or
  - Ice, including wet ice
- **Contingency fuel:** A quantity of fuel carried to compensate for items such as:
  - Deviations of an individual Airplane from expected fuel consumption data
  - Deviations from forecast meteorological conditions
  - Deviations from planned routings and/or cruising levels/altitude
- **Co-pilot:** Pilot serving in any piloting capacity other than as pilot in command, but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction for a license or rating.
- **Course:** A program of instruction to obtain an airman license, rating, qualification, authorization, or currency.
- **Crewmember:** A person assigned by an operator to duty on an aircraft during flight time.
- **Crew Resource Management (CRM):** A program designed to improve the safety of flight operations by optimizing the safe, efficient, and effective use of human resources, hardware, and information through improved crew communication and co-ordination.
- **Critical phases of flight:** Those portions of operations involving taxiing, takeoff and landing, and all flight operations below 10,000 feet, except cruise flight
- **Cross Crew Qualification (CCQ):** An Airbus Industry term for applying the concepts of FAA AC 120-53 to related aircraft type like the A320, A330, and A340. The term is intended to provide for the carryover of credit from one aircraft type to another based on the common design characteristics, and if applicable to transition between types as well as mixed fleet flying of different types of aircraft.
- **Cruising level:** A level maintained during a significant portion of a flight.

- **Damp runway:** A runway is considered damp when the surface is not dry, but when the moisture on it does not give it a shiny appearance.

- **Dangerous good:** Articles or substances that are capable of posing significant risk to health, safety or property when transported by air, which are classified according to ICAO Technical Instructions.

- **Deadhead Transportation:** Time spent in transportation on aircraft (at the insistence of the AOC holder) to or from a crewmember's home station

- **Decision altitude/height (DA/DH):** A specified altitude or height (A/H) in the precision approach at which missed approach must be initiated if the required visual reference to continue the approach has not been established.

**Note 1:** "Decision altitude (DA)" is referenced to mean sea level (MSL) and "decision height (DH)" is referenced to the threshold elevation.

**Note 2:** The "required visual reference" means that section of the visual aids or of the approach area that should have been in view for sufficient time for the pilot to assess the aircraft position and rate of change of position, in relation to the desired flight path.

- **Dry lease:** Is when the airplane is operated under the AOC of the lessee.

- **Dry runway:** A dry runway is one which is neither wet nor contaminated, and includes those paved runways which have been specially prepared with grooves or porous pavement and maintained to retain "effectively dry" braking action even when moisture is present.

- **Electronic Flight Bag:** an electronic information management device that helps flight crews perform flight management tasks more easily and efficiently with less paper.

- **Elevation:** The vertical distance of a point or a level, on or affixed to the surface of the earth measured from mean sea level.

- **Exemption:** A formal authorization issued by the Authority providing relief from part or all of the provisions of the EGYPTIAN CAA. The authorization may or may not be conditional

- **Extended over-water operation:** An overwater operation at a horizontal distance further than 50 NM from the nearest shoreline.

- **Fail-Operational flight control system:** A flight control system is fail-operational if, in the event of a failure below alert height, the approach, flare and landing, can be completed automatically. In the event of a failure, the automatic landing system will operate as a fail-passive system.

- **Fail-Passive flight control system:** A flight control system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition or deviation of flight path or attitude but the landing is not completed automatically. For a fail-passive automatic flight control system the pilot assumes control of the airplane after a failure.

- **Filed flight plan:** The flight plan as filed with an ATS unit by the pilot or his designated representative, without any subsequent changes.

Note: When the word "message" is used as a suffix to this term, it denotes the content and format of the filed flight plan data as transmitted.

- **Final reserve fuel:** An amount of fuel for all turbine powered airplanes, calculated to fly 30 minutes at holding speed at 1500 ft. above the aerodrome elevation in standard conditions, calculated with the estimated mass on arrival at the alternate or the destination, when no alternate is required.

- **Flight control system:** A system which includes an automatic landing system

- **Flight crewmember:** A licensed crewmember charged with duties essential to the operation of an aircraft during flight time.

- **Flight level:** A surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.
- **Note 1:** A pressure type altimeter calibrated in accordance with the Standard Atmosphere:
  - When set to QNH altimeter setting, will indicate altitude
  - When set to QFE altimeter setting, will indicate height above the QFE reference datum
  - When set to a pressure of 1013.2 hectopascals (hPa) may be used to indicate flight levels.
- **Note 2:** The terms "height" and "altitude", used in Note 1 above, indicate altimetry rather than geometric heights and altitudes.
- **Flight plan:**
  - **ATC Flight Plan:** Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.
  - **Operational flight plan:** The operator's plan for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations, and relevant expected conditions on the route to be followed and at the aerodromes or heliports concerned.
- **Flow control:** Measures designed to adjust the flow of traffic into a given airspace, along a given route, or bound a given aerodrome, so as to ensure the most effective utilization of the airspace.
- **Friction coefficient:** Relationship between the friction force acting on the wheel and the normal force on the wheel. The normal force depends on the weight of the aircraft and the lift of the wings.
- **Glide path:** A descent profile determined for vertical guidance during a final approach.
- **Ground visibility:** The visibility at an aerodrome, as reported by an accredited observer.
- **Heading:** The direction, in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid).
- **Height:** The vertical distance of a level, a point or an object, measured from a specified datum.
- **Hydroplaning:** Refer to [Aquaplaning](#)
- **Infant:** A person who has not yet reached his second birthday.
- **Initial Operating Experience (IOE):** Operational support given to pilots newly type rated. The objective of IOE is to improve the efficiency of pilots in revenue operation, route and airport qualification using only the Airbus or the airline approved documents: FCOM, MEL and OEBs
- **Inspection:** The examination of an aircraft or aeronautical product to establish conformity with a standard approved by the Authority.
- **Instrument approach procedure:** An instrument approach, or instrument approach procedure (IAP), is a series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing or to a point from which a landing may be made visually
- **Instrument meteorological conditions:** Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

- **JAA operator:** An operator certificated under Egyptian CAA–OPS by one of the JAA Member States.
- **Journey log (Voyage Report):** A form signed by the Pilot In Command of each flight that records the airplane's registration, crewmember names and duty assignments, the type of flight, and the date, place, and time of arrival and departure.
- **Low Visibility Procedures:** Procedures applied at an aerodrome for ensuring safe operations during Category II and III approaches and Low Visibility Takeoffs.
- **Low Visibility Take-Off:** A take-off where the Runway Visual Range (RVR) is less than 400 m.
- **Maintenance:** Tasks required ensuring the continued airworthiness of an aircraft or aeronautical product including any one or combination of overhaul, repair, inspection, replacement, modification, and defect rectification.
- **Maintenance release:** A document containing a certification that inspection and maintenance work has been performed satisfactorily in accordance with the methods prescribed by the Authority.
- **Missed approach procedure:** The procedure to be followed if the approach cannot be continued.
- **Net flight path:** Is a flight path determined for engine(s) failure case. It is established in such a manner that it represents the actual climb performance diminished by a gradient of climb of:
  - Take-off (one engine failure): 0.8 % for two-engine aircraft 0.9 % for three-engine aircraft 1.0 % for four-engine aircraft
  - En-route (one engine failure): 1.1 % for two-engine aircraft 1.4 % for three-engine aircraft 1.6 % for four-engine aircraft
  - En-route (two engine failure): 0.3 % for three-engine aircraft 0.5 % for four-engine aircraft
- **Night:** The hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise. Civil twilight ends in the evening when the center of the sun's disc is 6 degrees below the horizon and begins in the morning when the center of the sun's disc is 6degrees below the horizon.
- **Non-precision approach:** Instrument approach with lateral guidance only from the FAF to the runway environment. Descent limit is the MDA, and obstacle clearance (including go-around) is guaranteed if the approach is discontinued no farther than the MAP. Approaches with lateral guidance from localizer, VOR, NDB or GPS are considered non-precision approaches. Although often a helpful tool for lateral and vertical navigation during approach, FMS guidance is not a certified approach aid.
- **NOTAM:** A notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
  - Class I distribution: Distribution by means of telecommunication
  - Class II distribution: Distribution by means other than telecommunication
- **Obstacle clearance altitude/height (OCA/H):** The lowest altitude (OCA), or alternatively the lowest height above the elevation of the relevant runway threshold or above the aerodrome elevation as applicable (OCH), used in establishing compliance with the appropriate obstacle clearance criteria.

- **Operational control:** The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.
- **Operator:** A person, organization or enterprise engaged in or offering to engage in an aircraft operation.
- **Pilot Flying (PF):** The pilot, who for the time being, is in charge of the controls of an aircraft.
- **Pilot-in-command:** The pilot designated by the operator responsible for the operation and safety of the aircraft during flight time. He may delegate the conduct of the flight to another suitable qualified pilot.
- **Pilot Monitor (PM):** The pilot who is assisting the pilot flying in accordance with the multi-crew co-operation concept, when the required flight crew is more than one.
- **Precision approach:** Instrument approach with lateral and vertical guidance from the FAP to the runway touchdown zone, with system accuracy, integrity and obstacle clearance (including go-around) guaranteed until the descent limit (decision altitude or decision height) is reached. ILS, MLS and PAR are considered precision approaches.
- **Pre-flight inspection:** The inspection carried out before flight to ensure that the aircraft is fit for the intended flight.
- **Pressure-altitude:** An atmospheric pressure expressed in terms of altitude, which corresponds to that pressure in the Standard Atmosphere.
- **Quality Assurance:** All those planned and systematic actions necessary to provide adequate confidence that operational and maintenance practices satisfy given requirements.
- **Quality System:** The organizational structure, responsibilities, procedures and resources for implementing quality management. (Refer to Chapter 3)
- **Rating:** An authorization entered on or associated with a license or certificate and forming part thereof, stating special conditions, privileges or limitations pertaining to such license or certificate.
- **Repair:** The restoration of an aircraft/aeronautical product to a serviceable condition in conformity with an approved standard.
- **Repetitive flight plan (RPL):** A flight plan related to a series of frequently recurring, regularly operated individual flights with identical basic features, submitted by an operator for retention and repetitive use by ATS.
- **Reporting point:** A specified geographical location in relation to which the position of an aircraft can be reported.
- **Required Navigation Performance (RNP):** A statement of the navigation performance accuracy necessary for operation within a defined airspace.
- **Runway:** A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
- **Runway visual range:** The range over which the pilot of an aircraft on the center line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centerline.
- **SIGMET information:** Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena that may affect the safety of aircraft operations.
- **Slush:** Water-saturated snow which with a heel-and-toe slap-down motion against the ground will be displaced with a splatter; specific gravity: 0.5 up to 0.8

- **Snow (on the ground):**
  - Dry snow: Snow which can be blown if loose or, if compacted by hand, will fall apart upon release; specific gravity: up to but not including 0.35.
  - Wet snow: Snow which, if compacted by hand, will stick together and tend to or form a snowball; specific gravity: 0.35 up to but not including 0.5.
  - Compacted snow: Snow which has been compressed into a solid mass that resists further compression and will hold together or break up into chunks if picked up; specific gravity: 0.5 and over.
- **Stabilized approach:** An approach without speed and/or configuration changes during final descent.
- **Stabilized approach procedure:** An approach procedure along the extended runway centerline with a constant, in-flight verifiable descent gradient from the final approach altitude to the runway touchdown zone. Except for offset-localizer approaches, an ILS approach is inherently a stabilized approach procedure. On-precision approaches can be constructed as a stabilized approach procedure by choosing the FAF accordingly and by publishing a distance-versus-altitude (VOR+DME, NDB+DME, LOC+DME) or waypoint-versus-altitude table (GPS) to be able to verify adherence to the (imaginary) glide path.
- **Taxiing:** Movement of an aircraft on the surface of an aerodrome under its own power, excluding takeoff and landing.
- **Taxiway:** A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another.
- **Technical log:** A document carried on an aircraft that contains information to meet ICAO requirements; a technical log contains at least two independent sections: a journey record section and an aircraft maintenance record section.
- **Threshold:** The beginning of that portion of the runway usable for landing.
- **Track:** The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).
- **Transition altitude:** The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.
- **Transition level:** The lowest flight level available for use above the transition altitude.
- **UN number:** The four-digit number assigned by the United Nations Committee of experts on the transport of dangerous goods to identify a substance or a particular group of substances.
- **Visibility:** The ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night.
- **Visual approach:** An approach when either part or all of an instrument approach procedure is not completed and the approach is executed with visual reference to the terrain.
- **Visual meteorological conditions:** Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.
- **Waypoint:** A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation.
- **Wet lease:** Is when the airplane is operated under the AOC of the lessor.

- Wet runway:** A runway is considered wet when the runway surface is covered with water, or equivalent, less than or equal to 3 mm or when there is sufficient moisture on the runway surface to cause it to appear reflective, but without significant areas of standing water.

### 0.5.8 Synonyms

Due to the lack of standardization of terminology, the following list of synonyms cross-references the terms used in this manual with the terms that may be encountered in the operation. Word in the left-hand column is interchangeable with word(s) in the right hand column.

| Term                 | Synonyms   |
|----------------------|--|
| A320                 | Airbus 320   |
| Aerodrome            | Airport  |
| Aeroplane            | Airplane, Aircraft   |
| At The Same          | Time Simultaneously  |
| CAT I, II And III    | Category I, II And III   |
| Commander            | Pilot-In-Command, Pilot In Command, PIC, CP, CPT, Cpt, Captain   |
| Co-Pilot             | Co-Pilot, First Officer, FO, F/O   |
| Country              | State  |
| Crewmember           | Crew Member  |
| Data link            | ACARS  |
| Dead-Head            | Flight Crew Member Travelling As Passenger, Proceeding En-Route Enroute, En Route                              |
| Evacuation Route     | Emergency Escape Path  |
| Flight Deck          | Cockpit  |
| Library              | Technical Library For The Control Storage And Distributions Of Both Engineering And Operations Documentations. |
| Live Vest            | Life Jacket  |
| New Hire             | Ready-Entry, Direct Entry  |
| Operations Personnel | Flight Crew, Flight Dispatcher, Cabin Crew And Other Relevant Operations Staff.                                |
| Seat Belts           | Safety Belts   |

## 0.6 System of Amendment and Revision

### 0.6.1 Amendments to the Operations Manual

Director of Operations is responsible for the issuance of amendments and revisions to this Operations Manual.

A revision service is provided for each manual. Amendments to the Operations Manual are normally promulgated by means of normal revisions issued whenever necessary to cover corrections and to add new data.

All amendments will be in the form of printed, replacement pages and/or Authorized Digital Copy. They are accompanied by filing instructions and an updated List of Effective Pages (LEP).

A brief outline of the purpose and the nature of each change are included in the transmittal sheet attached to each amendment.

A vertical bar in front of the line indicates any change in the text.

The contents of Operations Manual (OM) and the respective revisions shall be controlled and authorized by the Director Flight Operations.

All publications and/or revisions requiring an approval / acceptance by the ECAA shall be forwarded to them before publication by the Director Flight Operations. After receiving the approval/acceptance of the Authority, the publication shall be issued via the Operations Library to an authorized holder.

If time does not permit to achieve prior approval from the ECAA, information requiring immediate notification or safety related items will be issued without such approval.

In such cases the information is issued via a Temporary Revisions (TR) clearly indicating that this is of temporary nature and will be followed either by a permanent approved revision or will be withdrawn after a defined period. A list indicating the TRs issued and still enforce is kept with the Operations Library.

#### 0.6.1.1 Manual Holder Responsibility

Each authorized holder of an Operations Manual or parts thereof is personally responsible that his copy is properly amended and/or revised. This is to be documented by filling in their vision record that is part of each copy. Unscheduled inspections shall be performed to verify compliance. Non-conformities shall be reported to the Director of Operations.

Certificates of amendments should be returned to the secretary Director of Operations as soon as amendments have been incorporated.

For the Digital Copy of the Operations Manual or part of it, each Manual Holder is responsible to destroy any old copies, which is previously dated before last revision date.

### 0.6.1.2 Manuals Distribution

Digital and electronic copies of the manuals are given precedence in case appropriate control procedures are present. In case manual distribution control cannot be done digitally/electronically, distribution of hardcopies shall be used.

The manuals including amendments or revisions are distributed to the authorized holders in accordance with the distribution list and in the relevant format (digital or printed). The Library shall be responsible to maintain an up-to-date list of manual holders together with their copy numbers and name/appointment as appropriate.

In order to exercise positive control of the manual distribution, each manual shall bear a numerical digit number and shall be registered within the Library.

Manual distribution using Distribution list form (F300) (refer to corporate manual) to the authorized users shall be carried out as expeditiously as possible. The normal notification and/or distribution is done via Flight Operations Library or via e-mail.

#### 0.6.1.2.1 Operations Manuals Electronic Distribution

Electronic distribution of the Operations Manuals for relevant personnel may be used if unique electronic fingerprint is granted to each user. In this case, the platform used for distributing the manual shall have an assigned administrator whose responsibilities include:

- Prevent fraudulent access or alteration of content
- Maintain system security and assure uniqueness of fingerprints

Nesma Airlines' E-learning system allows the assignment and delivery of documents to all users, this feature will allow Nesma Airlines to use its E-learning portal to distribute Flight Operations Manuals in accordance with the security and administrative measures cited in OM-D, chapter 6. In such case, the operations technical office shall be responsible for assuring the delivery of the document to all relevant users in accordance with 1.6.2.3 Management and Control of Electronic Communication Tools.

Electronic manual distribution through E-learning system is given precedence; however, digital copies may also be distributed alongside. Email notification shall be sent to all concerned personnel requiring the view/download of the assigned document so it appears in the log file as a certificate of delivery. Documents shall be retained on the server until another revision of issue is uploaded. The notification email shall include the name of the manual, its revision date and effective date if applicable.

In case of system failure or inability to track users' digital or hard copies shall be distributed. EFB operations, a digital copy shall be handed to the EFB administrator who is in charge of distributing the copy to the aircraft libraries

#### 0.6.1.2.2 Outsourced Documents Receipt and Distribution

Manuals from original equipment manufacturer (OM-B), in Nesma Airlines case these documents are received from Airbus.

An online portal is used as a communication tool between Airbus and Nesma Airlines called “Airbus World”. Through this tool, Nesma Airlines receives notifications regarding the latest manual updates, revisions or issues. Manuals are received from Airbus in both Portable Document Format (PDF) and/or eXtensible Mark-up Language (XML). Manufacturer manuals shall not be reproduced.

Once a manual is received, it shall be distributed through the same procedures illustrated in 0.6.1.2 Manuals Distribution and is distributed to EFB as illustrated in 8.12.6.2 Process of the Documentation.

#### 0.6.1.3 Authorized Copies (Controlled Copies)

Hard Copies: Authorized hard copies shall be identified by “Controlled Document” Stamp on the Front Page.

Digital Copies: Authorized Digital copies shall be identified by “Controlled Document” Stamp on the Front Page of the digital copy.

|                       |                          |                                |
|-----------------------|--------------------------|--------------------------------|
| Issue No.: 04         | Revision No.: 00         | Doc. No.: NMA – OMA.GOM – 1001 |
| Issue Date: Jan. 2018 | Revision Date: Jan. 2018 |                                |

#### 0.6.1.4 Non-Authorized Copies (Uncontrolled copies)

Non-authorized copies shall not be used for the conduct of flight operations.

#### 0.6.1.5 Handwritten Amendments

Hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revisions in the interest of safety.

#### 0.6.1.6 Revisions

##### 0.6.1.6.1 Normal Revisions

Issued periodically to cover non-urgent corrections, changes and/or to add new data. They are accompanied by Filing instructions and an updated List of Effective Pages (LEP).

A **normal revision** record sheet mentioning the issue date is provided in 0.2.7.

##### 0.6.1.6.2 Temporary Revisions (TR)

Temporary revisions, printed on yellow paper are issued to cover urgent matters arising between normal revisions. They are accompanied by filing instructions.

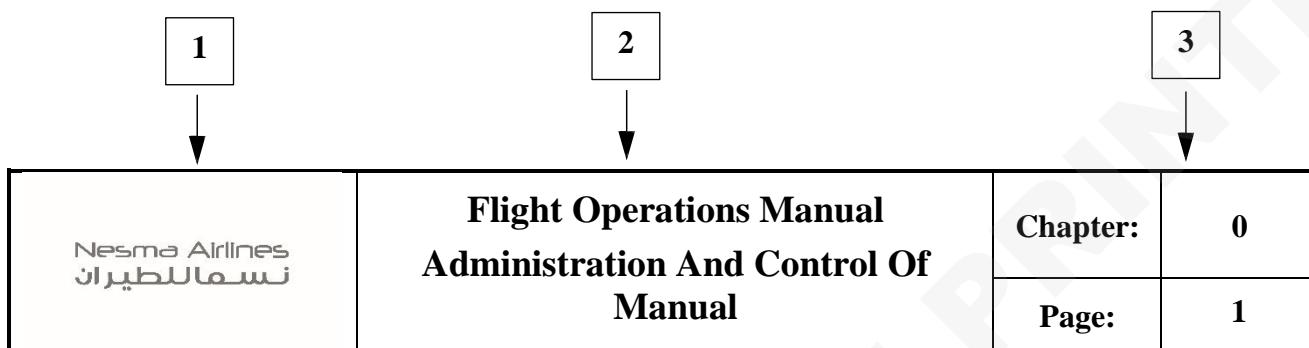
A **temporary revision** record sheet is provided in 0.2.8.

Each change will be marked by a vertical **black line** at the left-hand side of such change.

**0.6.2 Pagination**

A vertical line indicates revised or newly published text on the pages. It will not be used to indicate format or page number changes. Editorial revisions e.g. spelling corrections may have revision bar with no associated highlights.

The header and footer of each page contains:



|                       |                          |                                |
|-----------------------|--------------------------|--------------------------------|
| Issue No.: 04         | Revision No.: 00         | Doc. No.: NMA – OMA.GOM – 1001 |
| Issue Date: Jan. 2018 | Revision Date: Jan. 2018 |                                |

- **Header :**
  - (1) : Nesma Airlines' Logo
  - (2) : Name of manual and the Chapter title
  - (3) : (At top) and Sub chapter title (at bottom).
  - (4) : Chapter Number and Page Number.
  
- **Footer :**
  - (5) : Date of issue in the left-hand corner; Revision number in the middle. The Date of Issue and revision indicates the actual date of effectivity of the published revision.
  - (6) : Document Control Number.

|                       |                          |                                |
|-----------------------|--------------------------|--------------------------------|
| Issue No.: 04         | Revision No.: 00         | Doc. No.: NMA – OMA.GOM – 1001 |
| Issue Date: Jan. 2018 | Revision Date: Jan. 2018 |                                |

### 0.6.3 Filing Instructions

Use the filing instructions as follows:

**REMOVE:** The page must be removed. It may be replaced by a new page if associated with an INSERT instruction. If not, the page is cancelled.

**INSERT:** The page must be inserted. If not associated with a REMOVE instruction, the page is new and does not replace an existing one

### 0.6.4 Comments - Questions - Suggestions

All manual holders and users are encouraged to forward their questions and suggestions using COMMENTS - QUESTIONS - SUGGESTIONS sheet provided at the end of the manual (See Forms chapter).

### 0.6.5 Flight Operations Manual Distribution List

Flight Operations Manual distribution list must be specified in this paragraph as well as the associated Flight Operations Manual number.

| No. | Operations Manual Holders   | Control Number | Type of Copy   |
|-----|---|----------------|----------------|
| 1   | Egyptian Civil Aviation Authority   | 01             | Hard Copy      |
| 2   | Accountable Executive   | 02             | Hard Copy/ DC  |
| 3   | Director Flight Operations  | 03             | Hard Copy/ DC  |
| 4   | Chief Pilot   | 04             | DC             |
| 5   | Safety and QA Director  | 05             | DC             |
| 6   | Operations Training Manager   | 06             | DC             |
| 7   | Operations Control Center Manager   | 07             | DC             |
| 8   | Operations Library  | 08             | Hard Copy / DC |
| 9   | In-Flight Service Manager   | 09             | DC             |
| 10  | Technical Director  | 10             | DC             |
| 11  | Security Manager  | 11             | DC             |
| 12  | Ground Handling Manager   | 12             | DC             |
| 13  | IT office   | 13             | DC             |
| 14  | EFB Administrator/Aircraft Library  | 14             | DC             |
| 15  | Technical Office Manager  | 15             | DC             |
| 16  | Flight Deck Crewmembers*<br>(According to the active crewmember's number) | 15             | EC (or DC)     |

**Note:**

- DC: Digital Copy/Electronic Copy (EC): the copy on Nesma Airlines' intranet or Electronic Library.
- The ground handling Manager shall distribute a copy from this Manual as applicable to Nesma Airlines local and outside stations.
- The operations technical office shall use the e-learning system to distribute manuals in accordance with [Electronic Manual Distribution](#) procedures. For Electronic distribution, the control copy of the operations training manager is used.

\* Flight Deck Crewmembers copy takes the same control number as the technical office manager if the copy is distributed electronically or digitally.

**0.6.5.1 Distribution of Other Parts of the Operations Manual**

Other parts of the operations manuals (Operations Manual part B) shall be distributed to the following list

| No. | Operations Manual Holders   | Control Number | Type of Copy |
|-----|---|----------------|--------------|
| 1   | Director Flight Operations  | 01             | EC/ DC       |
| 2   | Chief Pilot   | 02             | EC/ DC       |
| 3   | Operations Training Manager   | 03             | EC/ DC       |
| 4   | Operations Library  | 04             | EC/ DC       |
| 5   | Technical Library   | 05             | EC/ DC       |
| 6   | IT office   | 06             | EC/ DC       |
| 7   | EFB Administrator/Aircraft Library  | 07             | EC/ DC       |
| 8   | Technical Office Manager  | 08             | EC/ DC       |
| 9   | OCC manager   | 09             | EC/ DC       |
| 10  | Flight Deck Crewmembers*<br>(According to the active crewmember's number) | 10             | EC (or DC)   |

### 0.6.6 Record of Normal Revisions (NR)

When receiving a revision, insert the "Date filed", "Filed by" and sign in the "Signature" box.

| Issue. No. | Issue Date      | Revision No. | Revision Date    | Effective Date   |
|------------|-----------------|--------------|------------------|------------------|
| 04         | JAN 2018        | 0            | JAN 2018         | FEB 2018         |
| 04         | JAN 2018        | 01           | APR 2018         | MAY 2018         |
| 04         | JAN 2018        | 02           | NOV 2018         | DEC 2018         |
| 04         | JAN 2018        | 03           | APR 2019         | MAY 2019         |
| 04         | JAN 2018        | 04           | OCT 2019         | DEC 2019         |
| 04         | JAN 2018        | 05           | DEC 2019         | FEB 2020         |
| <b>04</b>  | <b>JAN 2018</b> | <b>06</b>    | <b>DEC 2022</b>  | <b>Jan 2022</b>  |
| <b>04</b>  | <b>JAN 2018</b> | <b>07</b>    | <b>OCT. 2023</b> | <b>OCT. 2023</b> |
|            |                 |              |                  |                  |
|            |                 |              |                  |                  |
|            |                 |              |                  |                  |

## **0.6.7 Record of Temporary Revisions (TR)**

When receiving a Temporary Revision, insert the "Issue date", "Date filed", "Filed by" and sign in the "Signature" box.

## 0.6.8 Revision Highlights

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**UNCONTROLLED IF PRINTED**

# **Organization and Responsibilities**

## **Chapter 1**