



Jordan Civil Aviation Regulatory Commission

Guidance Procedure: AWS 37

**Approved Maintenance Organization- Definition of
Maintenance Organization Staff**

Prepared by

Eng. Falah Maharmah
Airworthiness Inspector

Revised By

Eng. Bilal Nazzal
Chief Maintenance Organizations

Reviewed by

Engr Abdalah Alhajel
Director Airworthiness Standards

Approved by

Capt. Haitham Misto
Chief Commissioner/CEO

Issue: 01
Rev.: 00
January 2020



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

Records of Revisions

Issue	Revision	Date	Reason for the change (include chapter/subchapter and a short description)

List of Effective Pages

Page	Issue	Rev	Date
1	01	00	Jan. 2020
2	01	00	Jan. 2020
3	01	00	Jan. 2020
4	01	00	Jan. 2020
5	01	00	Jan. 2020
6	01	00	Jan. 2020
7	01	00	Jan. 2020
8	01	00	Jan. 2020
9	01	00	Jan. 2020
10	01	00	Jan. 2020
11	01	00	Jan. 2020
12	01	00	Jan. 2020
13	01	00	Jan. 2020
14	01	00	Jan. 2020

Page	Issue	Rev	Date





Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

0.1 Table of Contents

Subject	Page
Preface Page	1
Records of Revisions	2
List of Effective Pages	2
0.1 Table of Contents	3
0.2 Abbreviations	4
0.3 Introduction	5
0.4 Purpose	5
0.5 Distribution	5
0.6 Amendments	6
0.7 Scope and Applicability	6
1.0 Definition of maintenance organization's staff number / Category of personnel to be considered	6
1.1 Management personnel	6
1.2 Technical support staff	7
1.3 Safety and quality policy, maintenance procedures and quality system staff	7
1.4 . Certifying staff	8
1.5 B1 and B2 support staff	8
1.6 Maintenance technical staff other than Certifying Staff	9
1.7 Store and purchasing department staff	9
1.8 Training staff	9
1.9 Contracted staff	9
2.1 Scope of activity	10
2.2 Production planning	10
2.3 Staff number variation requiring a CARC Form 18-0148 for change	10
2.4 Summary table.	11



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

0.2 Abbreviations

AMC	Acceptable Means of Compliance
AMO	Approved Maintenance organization
CARC	Civil Aviation Regulatory Commission
CEO	Chief Executive Officer
CMM	Component Maintenance Manual
JCAR	Jordan Civil Aviation Regulations
MOE	Maintenance Organization Exposition
C/S	Certifying Staff
CC/S	Component Certifying Staff
GM	Guidance Material
MOA	Maintenance Organization Approval
MOAP	Maintenance Organization Approval Procedures
MOE	Maintenance Organization Exposition
MOR	Mandatory Occurrence Reporting
QE	Qualified Entity
S/S	Support Staff
STCH	Supplemental Type Certificate Holder
TCH	Type Certificate Holder
WH	Working Hours



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

0.3 Introduction

CARC is the Competent Authority for maintenance organizations having their principal place of business located inside Jordan, as established by CARC Part 145.1 “General” and is therefore responsible for the final approval of these maintenance organizations and for establishing procedures detailing how CARC Part-145 applications and approvals are managed .

This user Guide is applicable to CARC Part-145 applicant and CARC Part-145 AMOs’ (hereafter referred as maintenance organizations) having their principal place of business located outside Jordan and which have maintenance agreements signed with Jordanian customers .

The provisions of this user guide are complementary to the requirements of JCAR Part-145 regulations and does not supersede or replace the associated regulatory requirements.

0.4 Purpose

This user guide is designed to be used by maintenance organizations and the assigned inspector when: the maintenance organization is:

- Defining the staff number to be declared in the MOE chapter 1.7 and in the CARC Form 18-0285 when applying for a CARC approval;
- Demonstrating that sufficient staff to plan, perform, supervise, inspect and quality monitor the maintenance organization is available in accordance with the approval {adequate resources to justify the grant of approval as defined in paragraphs 1.8 (facilities to be approved) and 1.9 (scope of work.)}
- assigned inspector is checking that: sufficient staff to plan, perform, supervise, inspect and quality monitor the maintenance organization is available in accordance with the approval;
- The staff number declared in the CARC Form 18-0285 is consistent with the CARC Part-145 requirements at the time of the audit.

0.5 Distribution

This procedure shall be published on the CARC official website. The holders of this procedure are CARC airworthiness standards specialists and the key management (post holders) of CARC approved maintenance organizations. Holders are responsible to download this procedure and follow its guidelines.





Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

0.6 Amendments

This procedure will be reviewed each time there is a regulation change that affects it and as long as it is considered necessary by CARC.

Any amendment to this procedure shall go through CARC's document control procedure (25 QP-02) and be approved by the Chief Commissioner/CEO and becomes effective only after incorporation to this procedure and publishing it on CARC official website.

0.7 Scope and Applicability.

This guidance procedure is applicable to JCAR Part-145 applicant and CARC approved Part-145 AMOs' (hereafter referred as maintenance organizations).

The provisions of this guidance procedure are complementary to the requirements of Part-145 regulation "as amended" and does not supersede or replace the associated regulatory requirements.

1.0 Definition of maintenance organization's staff number / Category of personnel to be considered

JCAR Part 145.30 :The organization shall establish and control the competence of personnel involved in any maintenance, development of maintenance programs, airworthiness reviews, management and/or quality audits in accordance with a procedure and to a standard agreed by CARC. In addition to the necessary expertise related to the job function, competence must include an understanding of the application of human factors and human performance issues appropriate to that person's function in the organization. 'Human factors' means principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration of human performance. 'Human performance' means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

1.1. Management personnel.

The maintenance organization shall appoint an Accountable Manager and nominate a group of persons which shall represent the maintenance management structure. Dependent upon the size of the maintenance organization and the extent of approval, all CARC Part-145 functions / responsibilities, could be subdivided under individual managers or combined in any number of ways:





Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

- Line Maintenance manager;
- Base Maintenance Manager;
- Workshop Manager;
- Quality Manager.

Note: In the case of small maintenance organization, the Accountable Manager could combine his own responsibilities with those related to any here above mentioned managers.

1.2. Technical support staff.

Technical support staffs to be considered are the ones who are involved in the process of:

- planning the maintenance activities (planners);
- planning the availabilities of the means to perform the work (including availability of the hangar, ground support equipment, etc.);
- keeping maintenance data available and up to date (librarians);
- preparing the relevant work packages (engineers);
- archiving of all maintenance records (technical record staff).

In addition, where a maintenance organization is using its own job cards, the personnel who transpose the maintenance data (AMM, AD, SB) into maintenance tasks or who analyze and report inaccurate/ambiguous data, shall be considered as well as technical support staff.

1.3. Safety and quality policy, maintenance procedures and quality system staff.

The quality system staff number shall include every person who is involved in:

- the safety and quality policy;
- the maintenance organization procedures issuance and revision;
- the independent audits (internal and external) process which are based on the annual audit plan;
- Quality feedback reporting (requesting remedial actions);
- Quality control;
- SMS implementation.



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

1.4. Certifying staff.

Certifying staff number shall include every person who is authorized by the maintenance organization (MOE § 3.4) to release an Aircraft / an aircraft component to service.

The following types of certifying staff must be included:

- aircraft certifying staff: all staff that hold a :
- company authorization which authorizes the holder to release an A/C to service within the A1 to A3 rating. Four different categories of certifying staff which are A, B1, B2 and C must be considered;
- Engine & APU certifying staff: all staff that hold a company authorization which authorizes the holder to release an engine or APU to service within the B1 to B3 rating;
- component certifying staff: all staff that hold a company authorization which authorizes the holder to release a component to service within the C1 to C20 rating;
- specialized Services certifying staff: all staff that hold a company authorization which authorized the holder to release a specialized service performed on A/C, engine, APU or component to service within the D1 rating;
- every commander, flight engineer who is authorized by the maintenance organization to carry out and certify tasks which are listed in AMC145.30 (j) (4) paragraph 2(a-d).

1.5. B1 and B2 support staff.

B1 and B2 Support Staff (S/S) means staff authorized by the maintenance organization to support the Category “C” certifying staff in managing and releasing the A/C to service after base maintenance activity while not necessarily holding certification privileges.

B1 and B2 Support Staff shall ensure that all relevant tasks or inspections have been carried out to the required standard before the category C certifying staff issues the certificate of release to service.



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

1.6. Maintenance technical staff other than Certifying Staff.

Maintenance Technical staff number shall include every person who is authorized by the maintenance organization (MOE § 3.8 and 3.11) to perform, attest (sign-off) or inspect any maintenance carried out on an Aircraft, an engine or APU or an aircraft component according to approved data under the CARC Part-145 approval,

Technical staffs which have to be considered are those acting within the approved ratings A1 to A3, B1 to B3, C1 to C20, D1, such as but not limited to:

- Aircraft maintenance Technicians (i.e. mechanic, avionic, cabin, etc.);
- Component/engines/APU maintenance Technicians;
- Support activities Technicians (NDT, welding, cleaning, machining, etc.);
- Supervisors/Inspectors.

1.7. Store and purchasing department staff.

Store and purchasing department staff number shall include every person who makes available to the maintenance organization the parts, components, tools and consumables:

- Store keepers;
- Procurement staff (staff in charge to place purchasing orders to any sources internally or externally).

1.8. Training staff.

Training staff number shall include every person who is responsible for providing training related services on behalf of the maintenance organization such as but not limited to:

- continuation / recurrent;
- human factor;
- practical element of the type training;
- CARC Part-145/aviation legislation/EWIS/FTS.

1.9. Contracted staff.

Contracted staff to be considered are all external staff who are not directly / permanently employed by the maintenance organization and who are involved in the maintenance activities.

Only the long term contracted staff need to be considered under this chapter for the purpose of defining the organization's staff number. This does not release the maintenance organization from complying with the relevant requirements also when using contracted staff for short term periods.



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

2. Criteria to be considered.

2.1. Scope of activity.

The maintenance organization shall have sufficient staff according to the approved scope of work. This means that the following criteria shall be considered:

- the size of the maintenance organization;
- the extent of the requested/approved scope;
- number of sites (headquarter, main bases, line stations, engine and component shops);
- number of line/base maintenance contracts;
- the variety of the capability list;
- Number of CARC Form 18-0227 releases.

2.2. Production planning.

Production planning, shall take into account the human limitations, the total amount of lines of product to be managed at the same time, and be used to compare the adequacy between the work load and the man hour availability during maintenance activities. In addition, man power planning shall show that the maintenance organization has sufficient staff to plan, perform, supervise, inspect and quality monitor the maintenance organization based on the approved scope of work.

2.3. Staff number variation requiring a CARC Form 18-0148 for change

Reduction or increase of the staff number when the variation:

- is more than 10% of the total staff number declared in the MOE 1.7 (i.e. Reduction of 11 staff when the staff to maintain the CARC approval was 100) or;
- is impacting the fees to be paid to CARC, or
- is affecting the approval (i.e. All certifying staff for a certain aircraft type approved under A1 rating leave the maintenance organization);

Note: permanent and contracted staff shall be considered.



Civil Aviation Regulatory Commission

Approved Maintenance Organization- Definition of Maintenance Organization Staff

2.4 Summary table.

#	Categories	Sub categories	Total by Sub categories	Total
1.1	Management personnel	Accountable Manager Quality Manager Line Maintenance Manager Base Maintenance Manager Workshop Manager		
1.2	Technical support Staff	Planners Librarians Engineers Technical record staff		
1.3	Safety, quality policy & quality system Staff	Safety & quality Policy Maintenance procedure Auditors Quality control SMS		
1.4	Certifying Staff	Aircraft "A" Category Aircraft "B1" Category Aircraft "B2" Category Aircraft "B3" Category Aircraft "C" Category Engine & APU Component Specialized Services Commander or flight engineer holding a limited certification authorization		
1.5	B1 and B2 Support staff for base maintenance	"B1" Support Staff "B2" Support Staff		
1.6	Maintenance Technical Staff	Aircraft Engine & APU Component Specialized service		
1.7	Store and Purchasing staff			
1.8	Training staff			
1.9	Contracted staff			
Total:				

