

ADVISORY CIRCULAR

No. : AC-28-01- 003
Date : 10 February 2022

A. SUBJECT.

AOC Variation - Amendment to AOC and / or Operations Specifications

B. PURPOSE.

This advisory circular (AC) provides guidance for the amendment to AOC and / or operations specifications.

C. STATUS.

This is the fourth edition of AC - 28 - 01 - 003, dated 01 February 2022, and it will remain current until withdrawn or superseded.

D. CONTENTS.

- 1.0 AOC variation - amendment to AOC and / or operations specifications.
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- 5.0 New aircraft type added.
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- 8.0 Same aircraft type and variant added
- 9.0 Authorized area of operations change.
- 10.0 Authorized type of operation change.
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E. REFERENCES.

The following documents were used as reference material:

- ICAO Annex 1- Personnel Licensing.
- ICAO Annex 6 - Operations of Aircraft, Parts 1 International Commercial Air Transport.
- ICAO Doc 8335-AN/879, Manual of Procedures for Operations Inspection, Certification and Continued Surveillance.
- JCAR OPS 1 Commercial Air Transport.
- JCAR FCL 1 Flight Crew License.

AOC Variation

1.0 AOC Variation - Amendment to AOC and / or Operations Specifications.

1.1 General.

- a. Any subsequent changes to the operation specified or to the equipment approved for use will necessitate amendments to the operations specifications. An AOC will itself be a very basic document and that all aspects of the operation that might be the subject of change would be dealt with in the associated operations specifications such that changes involve re-issue of the minimum documentation.
- b. The process for the amendment of operations specifications will be similar to the original certification process, with the exception that in many cases it will be far less complex, dependent upon the subject of the change that necessitates the amendment. Where changes involve new types of operation, new geographical areas or new aircraft, the appropriate level of complexity will have to be applied to the process.
- c. The holder of an AOC issued in accordance with the JCAR OPS 1 subpart C who wishes to alter any of the elements listed below, must submit in writing a variation application form, the term AOC variation includes operation specifications.

1.2 AOC Variation Application is Required for any of the Following Reasons:

- a. Expiration date for AOC period of validity.
- b. Operator name change.
- c. Operator location change - address and/or operational base
- d. New aircraft type added.
- e. Same aircraft type and different variant added.
- f. Same aircraft type and similar variant added.
- g. Same aircraft type and variant added.
- h. Authorized area of operations change.
- i. Authorized type of operations change.
- j. Special authorization.



1.3 Application for AOC Variation.

- a. An operator shall submit a variation application form for the AOC variation at least 30 days prior to the intended date of the operation, including all the documentation associated with the specific reason for the AOC variation.
- b. All applications to vary an AOC are made to CARC Chief Commissioner, in his term the director of flight operations standards will nominate a variation project manager and coordinate with other CARC directorates -Airworthiness standards directorate and competition and corporate control directorate to form variation focal points to start the process of the variation.
- c. The AOC variation process is similar to AOC certification process regarding the 5 certification phases.
- d. Application for variation or amendment of an AOC shall be valid for 90 calendar days starting from the date of application.

1.4 Team Members. Variation team will consist of flight operations inspector -project manager, and as applicable cabin safety inspector, ground operations inspector, dangerous goods inspector, aviation security directorate focal point, airworthiness standards directorate focal point and economic regulatory directorate focal point.

1.5 Inspections.

- a. The procedures to conduct an inspection will be the same as outlined in the procedure for initial issuance of an AOC for the related variation area.
- b. Upon receiving the variation application, CARC variation team will conduct the applicable evaluation and inspections - preliminary assessment to ensure that the operator has adequately addressed all aspect of the requested variation.
- c. During the evaluation of the AOC variation, the continued adequacy of the quality system must also be reviewed. If found deficient for the currently approved operations, the request for variation will be denied. In the interest of safety, an operator will not be allowed to vary his AOC in case of expansion of his operations until an acceptable functioning quality system has been met.

1.6 Issue, Variation and Continued Validity of an AOC. (OPS 1.180). An operator will not be granted an AOC, or a variation to an AOC, and that AOC will not remain valid unless:

- a. Airplanes operated have a standard Certificate of Airworthiness issued in accordance with JCAR part 21 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organizations.
- b. The maintenance system has been approved by CARC in accordance with Part M, Subpart G; and
- c. He has satisfied CARC that he has the ability to:
 - (1) Establish and maintain an adequate organization.
 - (2) Establish and maintain a quality system in accordance with OPS 1.035.
 - (3) Comply with required training programs.
 - (4) Comply with maintenance requirements, consistent with the nature and extent of the operations specified, including the relevant items prescribed in OPS 1.175 (g) to (o); and
 - (5) Comply with OPS 1.175.

2.0 Expiration Date for AOC Period of Validity.

For expiration date for AOC period of validity Refer to AOC initial issue procedures

3.0 Operator Name Change.

- 3.1 For operator name change variation, all Documents/ manuals/ certificates affected by the change shall be submitted with the new name.
- 3.2 A change of management personnel alone does not constitute a need for an AOC variation, resumes should be submitted and interviews will be scheduled to determine acceptability.

4.0 Operator Location Change - Address and/or Operational Base.

- 4.1 For operator address and/or operational base change variation, All Documents/ manuals/ certificates affected by the change submitted with the new address, and
- 4.2 An organization and infrastructure inspection will be carried out to determine if the new facilities meet the JCARs requirements.

5.0 New Aircraft Type Added.

5.1 For the new aircraft type added variation, the first inspection will be the evaluation of the operator quality system.

5.2 The operator procedures shall have at least addressed the following:

a. Flight Crew Consideration.**(1) Training.**

- (a) As added aircraft of a different type the flight crew must undergo a type rating course at an approved TRTO and complete operators' conversion course. The Operations Manual Part D shall be amended to include the new aircraft type and submitted for approval. If the flight crew is intended to operate more than one type their training and checking must conform to JCAR OPS 1.980 "operation on more than one type or variant".
- (b) To conduct the line flying under supervision and line checking portion of the conversion course, commanders with experience on the type will need to be used from outside the company if non within the company holds an applicable type rating and have sufficient experience. These commanders need to be submitted for CARC acceptance prior to being authorized to conduct the line flying and line checking. These commanders need to satisfy the requirement of JCAR OPS 1.940 appendix 1, crewing inexperience flight crewmembers.
- (c) The company captains will need to obtain the minimum number of hours in left seat with the line training captains and check in the right seat, prior to the company first officers being released for unrestricted duty. The plan to address this issue should be included with application for addition of new type.
- (d) First officers may be scheduled for flight duty with the qualified captains and checkers restricted duty.
- (e) It is important that these captains and check personnel, if contracted, undergo the appropriate portions of the company conversion course.

(2) Simulator.

- (a) The simulator chosen for the training shall be compatible with the cockpit configuration and equipment of the specific aircraft being acquired.
 - (b) A comparison between the simulator and aircraft shall already have been accomplished by operator management to determine acceptability.
 - (c) As a minimum, the training post holder shall submit original detailed photographs of cockpits of the simulator and the applicable aircraft with a report listing the differences between the two.
 - (d) CARC flight operations inspector will then determines if the simulator is compatible for training.
 - (e) Before the initial type rating training begins determination has been made whether any differences or familiarization training are required to be added to the conversion course. If it is determined that differences training is required, the simulator may not be fit for the use of recurrent training. It is important for the operator considers these issues before applying for new aircraft type induction.
- b. Cabin Crew Consideration.** Cabin crew members will need to complete the conversion course for the new type before being assigned duties on aircraft. The operations manual part D shall be amended to include the new type of aircraft and submitted for approval. All necessary training shall be done for the new aircraft type.
- c. Maintenance Consideration.** Refer to airworthiness standards AOC variation implementation procedures.

6.0 Same Aircraft Type and Different Variant Added.

- 6.1 For the same type and of different variant variation, the first inspection will be the evaluation of the operator quality system.
- 6.2 The operator procedures shall have at least addressed the following:

a. Flight crews considerations.

- (1) AMC JCAR FCL 1.220 must be applied as applicable to determine requirement for differences training. Difference training will include acquisition of additional knowledge and also will include training on a flight training device, a flight simulator or aircraft. An assessment will be conducted against the comparison aircraft currently operated to determine the extent of training required. The assessment will address aircraft in general, systems, Maneuvers and determine the procedures and handling characteristics effects, if any AMC OPS 1.980 (b) must be used as a guide to determine the extent of the training and type of training device used. A proposal will then be submitted to address credit, if any applied to recurrent training, checking and recent experience of one variant as being valid for another variant.
- (2) JCAR OPS 1.950 (a) (ii) differences training could also be required when changing equipment or procedures on variants currently operated. This evaluation must be made without regard for the segregation indicated between certain groupings of variants in AMC JCAR FCL 1.220 where it is indicated that no differences training is required. The term similar variant used above is used to define these groupings of variants.

b. Cabin crew considerations.

- (1) The following will be assessed on the added aircraft:
 - (a) Emergency exit operation.
 - (b) Location and type of portable safety equipments.
 - (c) Type/variant specific emergency procedures.
- (2) The Factors assessing the items above will be as follows:
 - (a) Emergency exit operation must be similar to the following operations:
 - Exit Arming/Disarming.
 - Direction of movement of the operating handle.
 - Direction of exit opening.
 - Power assists mechanism.
 - Evacuation assists means (e.g. slides).

(b) Location and type of portable safety equipments must be similar. Type of portable safety equipment will be assessed and determined as similar if the equipment requires the same method of operation. Location will be assessed as similar only if all the portable safety equipment is in the same location in the exceptional circumstances substantially the same location could be acceptable. Portable safety equipment includes:

- Firefighting equipment.
- Protective breathing equipment.
- Oxygen equipment.
- Megaphones.
- First aid equipment.
- Survival and signaling equipment.

(c) Type/variant specific emergency procedures must be similar for the following :

- Land and water evacuation.
- In-Flight fire.
- Decompression.
- Pilot incapacitation.

(3) If the assessment of the added aircraft is found similar per the above criteria, in all areas (emergency exit operation, location and types of portable safety equipment, type/variant specific emergency procedures) the aircraft will be considered similar variant. Cabin crew members will then complete the differences training course for the difference as applicable.

(4) If the assessment of the added aircraft is not found similar, the aircraft will be considered different variant. Cabin crew members will then complete the conversion course. The cabin crew member's recurrent training will also include the new variant.

c. Maintenance Consideration. Refer to airworthiness standards AOC variation implementation procedures.

7.0 Same Aircraft Type and Similar Variant Added.

7.1 For the same type and similar variant variation, the first inspection will be the evaluation of the operator quality system.

7.2 The operator procedures shall have at least addressed the following:

- a. Flight crews considerations.** For added aircraft of the same type and of a similar variant, as a minimum familiarization training will be required. Familiarization training includes the acquisition of additional knowledge without the use of training device.
- b. Cabin crew considerations.**
- (1) The following will be assessed on the added aircraft:
- (a) Emergency exit operation.
 - (b) Location and type of portable safety equipments.
 - (c) Type/variant specific emergency procedures.
- (2) The Factors assessing the items above will be as follows:
- (a) Emergency exit operation must be similar to the following operations:
- Exit Arming/Disarming.
 - Direction of movement of the operating handle.
 - Direction of exit opening.
 - Power assists mechanism.
 - Evacuation assists means (e.g. slides).
- (b) Location and type of portable safety equipments must be similar. Type of portable safety equipment will be assessed and determined as similar if the equipment requires the same method of operation. Location will be assessed as similar only if all the portable safety equipment is in the same location in the exceptional circumstances substantially the same location could be acceptable. Portable safety equipment includes:
- Firefighting equipment.
 - Protective breathing equipment.
 - Oxygen equipment.
 - Megaphones.
 - First aid equipment.
 - Survival and signaling equipment.

(c) Type/variant specific emergency procedures must be similar for the following :

- Land and water evacuation.
- In-Flight fire.
- Decompression.
- Pilot incapacitation.

(3) If the assessment of the added aircraft is found similar per the above criteria, in all areas (emergency exit operation, location and types of portable safety equipment, type/variant specific emergency procedures) the aircraft will be considered similar variant. Cabin crew members will then complete the differences training course for the difference as applicable.

(4) If the assessment of the added aircraft is not found similar, the aircraft will be considered different variant. Cabin crew members will then complete the conversion course. The cabin crew member's recurrent training will also include the new variant.

c. **Maintenance Consideration.** Refer to airworthiness standards AOC variation implementation procedures

8.0 Same Aircraft Type and Variant Added.

8.1 For the same type and variant variation, the first inspection will be the evaluation of the operator quality system.

8.2 The operators' procedures shall address at least the MEL.

9.0 Authorized Area of Operations Change.

9.1 For the authorized area of operations variation, the first inspection will be the evaluation of the operator quality system.

9.2 The operators procedures shall address at least the following:

- a. The adequacy of the operational control and maintenance arrangements within the proposed area of operations.
- b. The operations manual shall be modified to reflect any required changes.

- c. The general suitability of the aircraft to be used , in particular :
- (1) The performance capability of the aircraft.
 - (2) The need for any special equipment.
 - (3) The aircraft systems and the level of redundancy of those systems in regards to extremes of weather and climate.
 - (4) The need for any additional dispatch restrictions with regard to the MEL, and flight follow up requirements.
- d. Any special training required for exposure to weather or climatic conditions likely to be encountered, and compliance with special rules (e.g. MNPS, ETOPS, and RNAV).
- e. Any non-Standard ATC requirements such as New Phraseology, altitude clearances in meters, different measurement for altimeter settings, wind speed, visibility.
- f. Navigation and communication facilities available over the routes proposed and the associated equipments of the aircraft.
- g. The adequacy of aerodromes within the proposed area and the availability of current maps, charts, and associated documents or equivalent data.
- h. The availability of adequate search and rescue facilities and the need to carry special survival equipments and the need for training in its use.
- i. Maintenance Consideration. Refer to airworthiness standards AOC variation implementation procedures.

10.0 Authorized Type of Operation Change.

10.1 Variation for the authorized type of operation change is applicable for:

- a. Change from cargo to passenger operation, or changing from passenger to cargo operations. This is a major AOC variation and involves practically a complete re-certification - refer to AOC initial certification.
- b. Adding cargo operations (cargo airplane) to passenger operations, or adding passenger operations (passenger airplane) to cargo operations. This is a major AOC variation and involves practically a complete re-certification - refer to AOC initial certification.

- c. Adding cargo operations to passenger operation - passenger airplane refer to point 10.2 below.
- d. Changing from none schedule to schedule operations refer to point 10.3 below.
- e. Adding Air Ambulance Operations - passenger airplane refer to point 10.4 below.

10.2 Adding Cargo Operations to Passenger Operation - Passenger Airplane.

- a. For adding cargo to passenger operation (passenger airplane) variation, the first inspection will be the evaluation of the operator quality system.
- b. The operator's procedures shall address at least the following:
 - (1) Organization structure. Applicant ground operations department to include cargo section.
 - (2) Operations manuals. Documents subject to amendments to include the new changes:
 - (a) Operations Manual Part A.
 - (b) Ground Handling Procedures Manual.

10.3 Changing from Nonscheduled to Scheduled Operations.

- a. For the nonscheduled to scheduled operation operations variation, the first inspection will be the evaluation of the operator quality system.
- b. The operator's procedures shall address at least the following:
 - (1) The adequacy of the implemented method of "operational control", and if any modifications are needed to include the schedule operations.
 - (2) The operations manual shall be modified to reflect any required changes.
 - (3) The general suitability of the aircraft to be used , in particular:
 - (a) The performance capability of the aircraft.
 - (b) The need for any special equipment.
 - (c) The aircraft systems and the level of redundancy of those systems in regards to extremes of weather and climate.
 - (d) The need for any additional dispatch restrictions with regard to the MEL, and flight follow up requirements.

- (4) Any special training required for exposure to new weather/climatic conditions or special rules. (e.g. MNPS , ETOPS , RNAV)
- (5) Any none Standard ATC requirements such as: New Phraseology, altitude clearances in meters, different measurement for altimeter settings, wind speed and visibility.
- (6) Navigation and communication facilities available over the routes proposed and the associated equipment of the aircraft.
- (7) The adequacy of aerodromes within the proposed area and the availability of current maps, charts, and associated documents or equivalent data.
- (8) The availability of adequate search and rescue facilities and the need to carry special survival equipment and the need for training in its use.
- (9) Maintenance Consideration. Refer to airworthiness standards AOC variation implementation procedures.

10.4 Adding Air Ambulance Operations - Passenger Airplane.

- a. **Inspection.** For adding Air Ambulance Operations to passenger airplane variation, the first inspection will be the evaluation of the operator quality system.
- b. **Scope.**
 - (1) Air Ambulance Operations is to provide the transports by airplane to a person requiring medical care in airplane medically equipped and staffed with a minimum one medical personnel who is experienced, qualified, certified, trained with current competency in accordance with the applicable requirements of the Jordanian Ministry of Health.
 - (2) AOC holder is responsible to provide safe transport by air to a person requiring medical care in airplane medically equipped under the medical care of a Jordanian medical entity certified/approved by the Jordanian Ministry of Health. The Jordanian medical entity is responsible for patient clinical care to include pre air transport clinical assessment, clinical care during air transport and post air transport medical arrangement in accordance with the requirements of the Jordanian Ministry of Health.

c. Requirements.

- (1) The AOC holder shall have medical agreement with Jordanian medical entity certified/approved by the Jordanian Ministry of Health.
 - (a) The medical agreement shall include a statement that, the medical entity complies with the applicable requirements of the Jordanian Ministry of Health.
 - (b) The medical agreement shall define the Air Ambulance Operations medical responsibilities in accordance with the applicable requirements of the Jordanian Ministry of Health.
- (2) AOC holder shall have valid liability insurance that covers the Air Ambulance Operations.
- (3) AOC holder shall not operate an airplane Air Ambulance Operations unless at least one cabin crew member is included in the crew for the purpose of performing duties, specified in the Operations Manual in the interests of the safety.
- (4) AOC holder shall establish airplane familiarization training program to include:
 - (a) The physiological aspects of flight.
 - (b) Airplane familiarization - Airplane visit. The purpose of airplane visits is to familiarize medical team with the airplane environment and its equipment.
 - (c) The location, handling and the use of the related medical equipment installed on the airplane.
 - (d) Patient loading and off-loading on the airplane.
 - (e) Airplane emergency evacuation, including evacuation of disabled/incapacitated persons.
- (5) AOC holder shall hold and maintain airplane familiarization training records to include the initial and the 36 calendar months recurrent training.
- (6) AOC holder shall ensure that, the airplane is clean and sanitize before and after each flight.
- (7) Air Ambulance Operations airplane shall be equipped with Stretchers (litters). Stretchers shall be approved by airplane manufacturer and/or medical equipment manufacturer.

- (8) Air Ambulance Operations airplane shall be equipped with the following basic medical equipment:
- (a) Portable Ventilator with rechargeable Battery.
 - (b) Pulse oximeter.
 - (c) Portable Cardiac Monitor.
 - (d) Defibrillator with rechargeable Battery, Electro Cardio Graph (ECG), Leads, Pediatric and Adults Paddles.
 - (e) Suction unit.
 - (f) Blood pressure devise, Doppler Monitor.
 - (g) Installed oxygen System Source mounted in the patient Case area.
 - (h) Three Oxygen Cylinders bottles.
 - (i) External Battery.
 - (j) Intravenous Pump.
 - (k) Different sizes of Endo Tracheal tubes.
 - (l) Different sizes of laryngoscope.
 - (m) All the Emergency & lifesaving drugs.
- (9) The additional medical equipment that might be needed for specific medical cases shall be presented on a list, after conducting safety assessment on the effects on airplane operations subject to CARC acceptance.
- (10) The medical equipment shall be installed in the airplane using approved data of the airplane manufacturer and/or medical equipment manufacturer in accordance with JCAR Part 21.
- (11) AOC holder shall comply with the dangerous goods regulations.
- d. Operations Manuals.** The operations manuals (OMA, CSPM, OMD, MEL, etc) shall be amended to reflect the changes for the Air Ambulance Operations.

11.0 Special Authorization.

- 11.1 For special authorization approval variation, the first inspection will be the evaluation of the operator quality system.
- 11.2 For special authorization approvals refer to special authorization approvals.



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Chief Commissioner

