

AMC 042 - CONTINUING AIRWORTHINESS GUIDANCE FOR OPEARTORS OF PRIVATELY OPERATED AEROPLANES and HELICOPTERS

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CHAPTER 1

INTRODUCTION

The purpose of this AMC is to provide Continuing Airworthiness guidance to owners/operators of Privately operated aeroplanes and helicopter.

Chapters 2 and 3 of this AMC may be used to all international general aviation aeroplane operations.

Chapters 4 and 5 of this AMC may be used to all international general aviation helicopter operations.

State Decree "Airworthiness Regulation, AUA-RLW (A.B. 1995 no. 71, latest revision)", articles 43 and 49 are the legal basis which requires owners, operators and/or maintenance organization to maintain the aircraft in an airworthy condition.

CHAPTER 2 AEROPLANE CONTINUING AIRWORTHINESS - AUA-OPS 2(A) -

This chapter is applicable to aeroplanes participating in international general aviation. This AMC is not applicable to aeroplane engaged in aerial work.

The regulations that is applicable for this type of operation is AUA-OPS 2(A).



2.1 CONTINUING AIRWORTHINESS

For the purpose of this chapter "aeroplane" includes: engines, propellers, components, accessories, instruments, equipment and apparatus including emergency equipment; and

2.1.1 Owner/operator continuing airworthiness responsibilities

Owner/operator through means of acceptable procedures is responsible to:

- a) Maintain the aeroplane in an airworthy condition;
- b) Assure that the operational and emergency equipment necessary for the intended flight is serviceable, and;
- c) Assure that the certificate of airworthiness of the aeroplane remains valid.

2.1.2 Owner/operator maintenance responsibilities

Owner/operator through means of acceptable procedures is responsible to:

- a) Assure that the aeroplane is not operated unless maintenance is carried out by an AUA-RLW Chapter III approved, accepted or validated organization, or
- b) By a person or organization in accordance with procedures acceptable to the DCA of Aruba;

and there is a maintenance release in relation to the maintenance carried out.

2.1.3 Owner/operator of an aeroplane must assure that the maintenance of the aeroplane is performed in accordance with a maintenance programme acceptable to the DCA of Aruba.



2.2 CONTINUING AIRWORTHINESS RECORDS

- 2.2.1 Owner/operator through means of acceptable procedures is responsible to ensure that the following records are kept for the periods mentioned in 2.2.2:
 - a) the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life-limited components;
 - b) the current status of compliance with all applicable mandatory continuing airworthiness information;
 - c) appropriate details of modifications and repairs to the aeroplane;
 - d) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components subject to a mandatory overhaul life;
 - e) the current status of the aeroplane compliance with the maintenance programme; and
 - f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
- 2.2.2 The records in 2.2.1 a) to e) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service and the records in 2.6.2.1 f) for a minimum period of one year after the signing of the maintenance release.
- 2.2.3 In the event of a temporary change of owner or lessee, the records shall be made available to the new owner or lessee. In the event of any permanent change of owner or lessee, the records shall be transferred to the new owner or lessee.

Continuing airworthiness records or related documents, other than a valid certificate of airworthiness, need not be carried in the aeroplane during international flights.

In the context of 2.2.3, a judgement on what should be considered as a temporary change of owner or lessee will need to be made by the DCA of Aruba in the light of the need to exercise control over the records, which will depend on access to them and the opportunity to update them.

2.2.4 Records kept and transferred in accordance with 2.2 is to be maintained in a form and format that ensures readability, security and integrity of the records at all times.

The form and format of the records may include, for example, paper records, film records, electronic records or any combination thereof.



2.3 MODIFICATIONS AND REPAIRS

Owner/operator must ensure that there are procedures in the MCM that addresses the modifications and repairs.

At all times the intended modifications or repair must be in compliance with the applicable Type Certificate of the aeroplane.

The application form INS-4.048 is used also as a guidance in addition to the required documents that need to be submitted.

2.4 MAINTENANCE RELEASE

- 2.4.1 Owner/Operator must ensure that when maintenance is carried out by an approved maintenance organization, the maintenance release is issued by and approved/accepted or validated maintenance organization in accordance with AUA-RLW Chapter III.
- 2.4.1.1 The maintenance release must be completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedure described in the maintenance organization's procedures manual.
- 2.4.1.2 The maintenance release is to be signed and include the following:
 - a) basic details of the maintenance carried out including detailed reference to the data used;
 - b) the date such maintenance was completed;
 - c) the identity of the approved maintenance organization; and
 - d) the identity of the person or persons signing the release.
- 2.4.2 When maintenance is not carried out by an approved maintenance organization, the maintenance release is to be completed and signed by a person appropriately licensed in accordance with AUA-RLW Chapter IV to certify that the maintenance work performed has been completed satisfactorily and in accordance with data and procedures acceptable to the DCA of Aruba.
- 2.4.2.1 When maintenance is not carried out by an approved maintenance organization, the maintenance release must include the following:
 - a) basic details of the maintenance performed;
 - b) the date such maintenance was completed; and
 - c) the identity of the authorized person or persons signing the release.
- 2.4.2.2 The maintenance that is to be performed by a person as described in 2.4.2 is limited to Line Maintenance only. For this case the Line Maintenance definition letter no. DL/120302A, as latest revised, is to be consulted for applicability



2.5 MANUALS, LOGS AND RECORDS

For Continuing Airworthiness records refer to chapter 2.2.

2.5.1 Flight manual (AFM)

Owner/operator is responsible for the subscription service and that the AFM is regularly updated as required by DCA of Aruba.

- 2.5.2 Journey log book
- 2.5.2.1 A journey log book shall be maintained for every aeroplane engaged in international air navigation in which shall be entered particulars of the aeroplane, its crew and each journey.
- 2.5.2.2 The aeroplane journey log should contain the following items:
 - a) aeroplane nationality and registration;
 - b) date;
 - c) crew member names and duty assignments;
 - d) departure and arrival points and times;
 - e) purpose of flight;
 - f) observations regarding the flight; and
 - g) signature of the pilot-in-command.



CHAPTER 3 ADDITIONAL GUIDANCE FOR LARGE AEROPLANES

3.1 APPLICABILITY

- 3.1.1 This part of this guidance material is in addition to Chapter 2, applicable to International general aviation operations with:
 - a) aeroplanes with a maximum certificated take-off mass exceeding 5 700 kg; or
 - b) aeroplanes equipped with one or more turbojet engines; or
- 3.1.2 An operation involving an aeroplane with a seating configuration of more than 9 passenger seats should be conducted in accordance with Chapter 3.
 - The applicability of 3.1 does not preclude a general aviation operator from satisfying the requirements of Chapter 3 where it may be to the operator's advantage.
- 3.1.3 A corporate aviation operation involving three or more aircraft that are operated by pilots employed for the purpose of flying the aircraft should be conducted in accordance with this chapter.
 The term "aircraft" is used to indicate that a corporate aviation operation using a mix of aeroplanes and helicopters is subject to this Recommendation as long as at least one

3.2 AEROPLANE CONTINUING AIRWORTHINESS

- 3.2.1 Operator's continuing airworthiness responsibilities
- 3.2.1.1 The operator is expected to comply also with the paragraph 2.1.1 of this AMC.
- 3.2.1.2 The operator should ensure that all maintenance personnel receive initial and continuation training acceptable to the DCA of Aruba and appropriate to their assigned tasks and responsibilities. This should include Human Factors and coordination with other maintenance personnel and flight crew.
- 3.2.2 Operator's maintenance control manual

aeroplane is involved.

- 3.2.2.1 The operator should provide a maintenance control manual, as specified in 3.3.1, for the use and guidance of maintenance and operations personnel. The design of the manual should observe Human Factors principles.
- 3.2.2.2 Guidance for the Development of the MCM is outlined in 3.3.1 or reference accepted industry codes of practice.



3.2.3 Maintenance programme

- 3.2.3.1 The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, acceptable to the DCA of Aruba, containing the information outlined in 3.3.2.
- 3.2.3.2 The design and application of the operator's maintenance programme shall observe Human Factors principles.
- 3.2.3.3 Copies of all amendments to the maintenance programme is to be furnished promptly to all organizations or persons to whom the maintenance programme has been issued.
- 3.2.4 Continuing airworthiness information
- 3.2.4.1 The operator of an aeroplane must ensure that a system exists whereby information resulting from maintenance and operational experience regarding faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aeroplane is transmitted to organization responsible for the aeroplane type design.
- 3.2.4.2 Whenever the information relates to an engine or propeller, such information is to be transmitted to both organization responsible for engine or propeller type design and the organization responsible for the aeroplane type design.
- 3.2.4.3 Where a continuing airworthiness safety issue is associated with a modification, the information is to be transmitted to the organization responsible for the design of the modification.
- 3.2.4.4 The DCA of Aruba is be notified through the e-mail: safetymanagement@dca.gov.aw

3.2.5 Maintenance release

Operators of aeroplane as define in chapter 3.1.1 need to comply with chapters 2.4.1 or 2.4.2 of this AMC as applicable.



3.3 MANUALS, LOGS AND RECORDS

3.3.1 Operator's maintenance control manual

The operator's maintenance control manual provided in accordance with 3.2.2, which may be issued in separate parts, should be developed according to industry codes of practice and should contain at a minimum information about:

- a) the means for complying with the procedures required by 3.2.1.1;
- b) the means of recording the names and duties of the person or persons required by 3.2;
- c) the maintenance programme required by 3.2.3;
- d) the methods used for the completion and retention of the operator's continuing airworthiness records required by 3.2.5;
- e) the procedures for complying with the service information reporting required by 3.2.4;
- f) the procedures for implementing action resulting from mandatory continuing airworthiness information;
- g) a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme, in order to correct any deficiency in that programme;
- h) the aeroplane types and models to which the manual applies;
- i) the procedures for ensuring that unserviceability's affecting airworthiness are recorded and rectified; and
- j) procedures for advising the DCA of Aruba of significant in-service occurrences.

3.3.2 Maintenance programme

- 3.3.2.1 A maintenance programme for each aeroplane as required by 3.2.3 must contain the following information:
 - a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;
 - b) when applicable, a continuing structural integrity programme;
 - c) procedures for changing or deviating from a) and b) above as approved by the DCA of Aruba; and
 - d) when applicable and approved by the DCA of Aruba, condition monitoring and reliability programme descriptions for aeroplane systems, components and engines;
 - e) AMC-017 may also be consulted.
- 3.3.2.2 Maintenance tasks and intervals that have been specified as mandatory in approval of the type design, or approved changes to the maintenance programme, must be identified as such.
- 3.3.2.3 The maintenance programme should be based on maintenance programme information made available by the aeroplane Type Certificate or by the organization responsible for the type design, and any additional applicable experience.



3.3.3 Flight recorder records

The owner of the aeroplane, or in the case where it is leased, the lessee, shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with Aruba Aviation Accident State Decree, AB 1989 no. GT 58, as latest revised.



CHAPTER 4 HELICOPTER CONTINUING AIRWORTHINESS - AUA-OPS 2(H) -

This chapter is applicable to helicopter participating in international general aviation operations. This AMC is not applicable to helicopter engaged in aerial work.

The regulations that is applicable for this type of operation is AUA-OPS 2(H).

For the purpose of this chapter "helicopter or rotorcraft" includes: engines, power transmissions, rotors, components, accessories, instruments, equipment and apparatus including emergency equipment.

4.1 OPERATOR'S CONTINUING AIRWORTHINESS RESPONSIBILITIES

- 4.1.1 Owner/operator through means of acceptable procedures is responsible to:
 - a) Maintain the helicopter in an airworthy condition;
 - b) Assure that the operational and emergency equipment necessary for the intended flight is serviceable, and;
 - c) Assure that the certificate of airworthiness of the aeroplane remains valid; and
 - a) Assure that the maintenance of the helicopter is performed in accordance with a maintenance programme acceptable to the DCA of Aruba.
- 4.1.2 Owner/operator through means of acceptable procedures must not operate the helicopter unless maintenance on the helicopter, including any associated engine, rotor and part is carried out:
 - a) by an AUA-RLW Chapter III approved, accepted or validated organization, or
 - b) by a person or organization in accordance with procedures acceptable to the DCA of Aruba:

and there is a maintenance release in relation to the maintenance carried out. Refer also to chapter 4.5.



4.2 CONTINUING AIRWORTHINESS RECORDS

- 4.2.1 Owner/operator through means of acceptable procedures is responsible to ensure that the following records are kept for the periods mentioned in 4.2.2:
 - a) the total time in service (hours, calendar time and cycles, as appropriate) of the helicopter and all life-limited components;
 - b) the current status of compliance with all applicable mandatory continuing airworthiness information;
 - c) appropriate details of modifications and repairs to the helicopter;
 - d) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the helicopter or its components subject to a mandatory overhaul life;
 - e) the current status of the helicopter compliance with the maintenance programme; and
 - f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
- 4.2.2 The records in 4.2.1 a) to e) is to be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service and the records in 4.2.1 f) for a minimum period of one year after the signing of the maintenance release.
- 4.2.3 The lessee of a helicopter should comply with the requirements of 4.2.1 and 4.2.2, as applicable, while the helicopter is leased.

In the event of a temporary change of owner or lessee, the records must be made available to the new owner or lessee. In the event of any permanent change of owner or lessee, the records must be transferred to the new owner or lessee.

Continuing airworthiness records or related documents, other than a valid certificate of airworthiness, need not be carried in the aeroplane during international flights.

In the context of 4.2.3, a judgement on what should be considered as a temporary change of owner or lessee will need to be made by the DCA of Aruba in the light of the need to exercise control over the records, which will depend on access to them and the opportunity to update them.

4.2.4 Records kept and transferred in accordance with 4.2 is to be maintained in a form and format that ensures readability, security and integrity of the records at all times.

The form and format of the records may include, for example, paper records, film records, electronic records or any combination thereof.



4.3. CONTINUING AIRWORTHINESS INFORMATION

- 4.3.1 The owner/operator of a helicopter over 3175 kg certificated take-off mass,, or in the case where it is leased, the lessee must ensure through written procedures that a system exists whereby information resulting from maintenance and operational experience regarding faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the helicopter is transmitted to organization responsible for the helicopter type design.
- 4.3.2 Whenever the information relates to an engine, such information is to be transmitted to both organization responsible for engine type design and the organization responsible for the helicopter type design.
- 4.3.3 Where a continuing airworthiness safety issue is associated with a modification, the information is to be transmitted to the organization responsible for the design of the modification.
- 4.3.4 The DCA of Aruba is be notified through the e-mail: safetymanagement@dca.gov.aw

4.4 MODIFICATIONS AND REPAIRS

Owner/operator must ensure that there are procedures in the MCM that addresses the modifications and repairs.

At all times the intended modifications or repair must be in compliance with the applicable Type Certificate of the helicopter.

The application form INS-4.048 is used also as a guidance in addition to the required documents that needs to be submitted.



4.5 MAINTENANCE RELEASE

- 4.5.1 Owner/Operator must ensure that when maintenance is carried out by an approved maintenance organization, the maintenance release is issued by and approved/accepted or validated maintenance organization in accordance with AUA-RLW Chapter III.
- 4.5.2 The maintenance release must be completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedure described in the maintenance organization's procedures manual.
- 4.5.3 The maintenance release is to be signed and include the following:
 - a) basic details of the maintenance carried out including detailed reference to the data used;
 - b) the date such maintenance was completed;
 - c) the identity of the approved maintenance organization; and
 - d) the identity of the person or persons signing the release.
- 4.5.4 When maintenance is not carried out by an approved maintenance organization, the maintenance release is to be completed and signed by a person appropriately licensed in accordance with AUA-RLW Chapter IV to certify that the maintenance work performed has been completed satisfactorily and in accordance with data and procedures acceptable to the DCA of Aruba.
- 4.5.5 When maintenance is not carried out by an approved maintenance organization, the maintenance release must include the following:
 - a) basic details of the maintenance performed;
 - b) the date such maintenance was completed; and
 - c) the identity of the authorized person or persons signing the release.
- 4.5.6 The maintenance that is to be performed by a person as described in 4.5.4 is limited to Line Maintenance only. For this case the Line Maintenance definition letter no. DL/120302A, as latest revised, is to be consulted for applicability



4.6 MANUALS, LOGS AND RECORDS

For Continuing Airworthiness records refer to chapter 4.2.

4.6.1 Rotorcraft Flight Manual (RFM)

Owner/operator is responsible for the subscription service and that the RFM is regularly updated as required by DCA of Aruba.

- 4.6.2 Journey log book
- 4.6.2.1 A journey log book should be maintained for every helicopter engaged in international air navigation in which should be entered particulars of the helicopter, its crew and each journey.
- 4.6.2.2 The helicopter journey log should contain the following items:
 - a) helicopter nationality and registration;
 - b) date;
 - c) crew member names and duty assignments;
 - d) departure and arrival points and times;
 - e) purpose of flight;
 - f) observations regarding the flight; and
 - g) signature of the pilot-in-command.



CHAPTER 5 ADDITIONAL GUIDANCE FOR HELICOPTER

5.1 APPLICABILITY

This part of this guidance material is in addition to Chapter 4, may be applicable to International General Aviation operations with an helicopter over 3175 kg maximum certificated take-off mass.

The applicability of 5.1 does not preclude a general aviation operator from satisfying the requirements of Chapter 4 where it may be to the operator's advantage.

5.2 HELICOPTER CONTINUING AIRWORTHINESS

- 5.2.1 Operator's continuing airworthiness responsibilities
- 5.2.1.1 The operator is expected to comply also with the paragraph 4.1.1 of this AMC.
- 5.2.1.2 The operator should ensure that all maintenance personnel receive initial and continuation training acceptable to the DCA of Aruba and appropriate to their assigned tasks and responsibilities. This should include Human Factors and coordination with other maintenance personnel and flight crew.
- 5.2.2 Operator's maintenance control manual
- 5.2.2.1 The operator should provide a maintenance control manual or extract thereof, as specified in 5.3.1, for the use and guidance of maintenance and operations personnel. The design of the manual should observe Human Factors principles.
- 5.2.2.2 Guidance for the Development of the MCM is outlined in 5.3.1 or reference accepted industry codes of practice.



5.2.3 Maintenance programme

- 5.2.3.1 The operator should provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, acceptable to the DCA of Aruba, containing the information outlined in 5.3.2.
- 5.2.3.2 The design and application of the operator's maintenance programme should observe Human Factors principles.
- 5.2.3.3 Copies of all amendments to the maintenance programme is to be furnished promptly to all organizations or persons to whom the maintenance programme has been issued.

5.2.4 Maintenance release

Operators of an helicopter define in chapter 5.1 should assure compliance with chapters 4.5 of this AMC as applicable.



5.3 MANUALS, LOGS AND RECORDS

5.3.1 Operator's maintenance control manual

- 5.3.1.1 The operator's maintenance control manual provided in accordance with 5.2.2, which may be issued in separate parts, should be developed according to industry codes of practice and should contain at a minimum information about:
 - a) the means for complying with the procedures required by 4.1;
 - b) the means of recording the names and duties of the person or persons required by 4.1;
 - c) the maintenance programme required by 5.2.3;
 - d) the methods used for the completion and retention of the operator's continuing airworthiness records required by 4.2;
 - e) the procedures for complying with the service information reporting requirements of 4.3.4;
 - f) the procedures for implementing action resulting from mandatory continuing airworthiness information;
 - g) a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme, in order to correct any deficiency in that programme;
 - h) the helicopter type(s) and model(s) to which the manual applies;
 - i) the procedures for ensuring that unserviceability's affecting airworthiness are recorded and rectified; and
 - j) procedures for advising the DCA of Aruba of significant in-service occurrences as per 4.3.4 as applicable.

5.3.2 Maintenance programme

- 5.3.2.1 A maintenance programme for each type of helicopter as required by 5.2.3 must contain the following information:
 - a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;
 - b) when applicable, a continuing structural integrity programme;
 - c) procedures for changing or deviating from a) and b) above as approved by the DCA of Aruba; and
 - d) when applicable and approved by the DCA of Aruba, condition monitoring and reliability programme descriptions for helicopter systems, components and engines;
 - e) AMC-017 may also be consulted.
- 5.3.2.2 Maintenance tasks and intervals that have been specified as mandatory in approval of the type design, or approved changes to the maintenance programme, must be identified as such.
- 5.3.2.3 The maintenance programme should be based on maintenance programme information made available by the helicopter Type Certificate or by the organization responsible for the type design, and any additional applicable experience.



5.3.3 Flight recorder records

The owner of the helicopter, or in the case where it is leased, the lessee, shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with Aruba Aviation Accident State Decree, AB 1989 no. GT 58, as latest revised.