

# Instruction N° 15/DSV/2015

SUBJECT: MAINTENANCE CONTRACTURAL ARRANGEMENT

DATE: 07/08/2015

#### 1. PURPOSE

This Instruction provides guidance to an operator for evaluating a maintenance contractual arrangement with a contractor that maintains his aircraft

# 2. APPLICABILITY

This instruction is applicable to all owners/operators of aircraft registered in Cabo Verde.

#### 3. REFERENCES

• CV-CAR 9 - Air Operator Certification and Administration

#### 4. BACKGROUND

- 4.1.1 When an air operator uses a maintenance provider to provide all or part of the maintenance on its aircraft or its component parts, that maintenance provider's organization becomes, in effect, an extension of the air operator's maintenance organization. The use of outsource maintenance providers to complete aircraft maintenance is becoming as fundamental to an air operator's maintenance programs as its own internal maintenance facilities.
  - (1) Any organization or person with whom the air operator has made an arrangement and/or contract (formal/written) for the performance of any maintenance, preventive maintenance, or alterations involving their aircraft and/or components thereof is considered an outsource maintenance provider. Arrangements with persons or organizations that supply parts and/or components, other than new, on a lease, exchange, or sale basis are also considered.
  - (2) All parts and/or components used by an air operator on its authorized aircraft must be maintained under the air operator's continuous airworthiness maintenance program.
  - (3) Any outsourcing organization or person must be able to read, write and comprehend the English language. All maintenance records must be documented in English.
- 4.1.2 Contractual arrangement extends the maintenance facilities and capabilities of an operator for accomplishing elements of the approved maintenance programme. An operator contracting to have maintenance performed by another certificate holder may be authorized by maintenance control manual to adopt all or part of the contractor's maintenance programme, including involvement in that contractor's reliability programme where -.

- (1) The operator retains primary airworthiness responsibility regardless of the terms of any contractual arrangement. It is the operator's responsibility to verify the suitability of the arrangement;
- (2) A contractor must have the capabilities and facilities to perform the contracted work;
- (3) A contractor's publications may be adopted in part or in total by the operator as methods, techniques, and standards. The operator's Maintenance Control Manual (MCM) should describe the applicability and authority of the affected publication;
- (4) The MCM of the operator shall describe the policies and procedures for administering the contractual arrangement;
- (5) The operator shall develop appropriate procedures for administering such arrangements and means of ensuring compliance to those procedures; and
- (6) The related procedures shall apply to the arrangement as a whole and shall not require notification or approval for each action under the authorization.
- 4.1.3 Substantial Maintenance. The provisions of substantial maintenance providers are authorized by operation specifications.
  - (1) Substantial maintenance is defined as any activity involving a "C" check or greater maintenance visit; any engine maintenance requiring case separation or tear down; and/or major alterations or major repairs performed on airframes, engines, or propellers. Examples of substantial maintenance include:
    - (a) Accomplishment of scheduled heavy maintenance inspections (e.g., "C" checks, "D" checks, or equivalent), which may include the accomplishment of Airworthiness Directives, Airworthiness Limitation Items, and Corrosion Prevention and Control Program tasks applicable to aircraft primary structure.
    - (b) Accomplishment of off-aircraft maintenance or alteration of engines that involves the separation of modules or propellers, Full Authority Digital Engine Controls, major engine repairs, and repairs to life-limited parts such as compressors, turbine disks, and engine cases, but excluding parts such as blades, vanes, and burner cans.
    - (c) Accomplishment of off-aircraft maintenance or alteration of required emergency equipment items such as slides and rafts, but excluding items such as medical kits, crash axes, life vests, and escape ropes.
  - (2) Therefore, any maintenance organization that an air operator arranges to provide any of the above type services must be classified as a substantial maintenance provider.
- 4.1.4 The maintenance control manual must provide sufficient detail to control the contractual arrangement, including data transactions and records. The contract and details of the obligations/commitments of each participant must be referenced on maintenance control manual which must provide for cancellation. Programmes outlined in CV-CAR, and authorized by the maintenance control manual become an integral part of the operator's maintenance programme.

#### 5. PROCEDURES

- 5.1.1 The operator shall have the contractors facilities inspected to substantiate proper operations and adequate supervision, authorizations and capabilities.
- 5.1.2 The Operator's Manual must include the following:
  - (1) A list or reference to a list (large aircraft only) of all contracted persons, including:
    - (a) Certificate number;
    - (b) Ratings and limitations;
    - (c) Description of work scope authorized;
  - (2) Procedures to ensure:
    - (a) Proper transfer of all required documents and reports between contractor and operator as required;
    - (b) Work is accomplished by the contractor:
    - (c) Periodic evaluations of the contractor's facilities are accomplished as required by CV-CARs;
    - (d) Contracted personnel are appropriately certificated, trained, qualified, and authorized to perform maintenance and inspections, including these items in the operator's MCM that requires specific Inspection; and
    - (e) The contractor's maintenance procedures (MPM or MOE) manuals or portions thereof that are to be used for the contract maintenance are accepted in the operator's MCM.
- 5.1.3 When the operator is satisfied that the contractor would be able to meet his requirements and is ready to make contractual arrangements he shall ensure that contract/referenced documents describe at least the following:
  - (1) The work scope and methods of compliance;
  - (2) Responsibilities of all participants;
  - (3) Location of contracted work;
  - (4) Duration of the contract, if applicable;
  - (5) Work orders:
  - (6) Approved design engineering data;
  - (7) Appropriate maintenance and engineering reference manuals;
  - (8) Airworthiness directives;
  - (9) Major repairs / modifications:
  - (10) Release of components after maintenance;

- (11) Release of aircraft after maintenance;
- (12) Reporting of un airworthy conditions;
- (13) Technical record;
- (14) Quality monitoring system;
- (15) Provision of hangar space for aircraft maintenance;
- (16) Components authorised for use during maintenance & modification;
- (17) Sub-contracted maintenance;
- (18) Work away from a fixed location.
- 5.1.4 Annex A describes the topics refered in paragraph 5.1.3, which may be applicable in such a sub-contract arrangements.
- 5.1.5 The operator shall make arrangements for at least the following to be presented to the Authority with his application for acceptance (see Annex B for AAC Form FS.AER.50 application for acceptance of Maintenance arrangement):
  - (1) A copy of the contract, and referenced documents if applicable;
  - (2) Copy of contractor's Maintenance Organization Approval and the operations specifications;
  - (3) Contractor's maintenance manual and revisions to the operator's manual:
  - (4) Draft of operator's maintenance control manual revision
- 5.1.6 Opportunity for authority to determine Capabilities of Contractor:
  - (1) Where contractor is located outside of Cabo Verde, the Authority may as an alternate request the assistance of the contractor's certificate holding Authority (State) to determine the contractor's authorizations and capabilities. However, the Authority reserves the right to inspect the facilities of all contractors.
  - (2) Access for the AAC inspectors shall be afforded via the contractor.
- 5.1.7 Validity of the acceptance is subject to:
  - (1) Validity of the contract;
  - (2) Validity of the acceptance of the AMO.

João dos Reis Monteiro President of the Board

AGÉNCIA DE AVIAÇÃO CA CIVIL AVIATION AUTHORITY

#### ANNEX A -

This annex describes topics referred in paragraph 5.1.3, which may be applicable in such a sub-contract arrangements.

# 2.1. Scope of work

The type of maintenance to be performed by the approved organization should be specified unambiguously. In case of line and/or base maintenance, the contract should specify the aircraft type and, preferably include the aircraft's registrations. In case of engine maintenance, the contract should specify the engine type.

# 2.2. Locations identified for the performance of maintenance/ Certificates held

The place(s) where base, line or engine maintenance, as applicable, will be performed should be specified. The certificate held by the maintenance organization at the place(s) where the maintenance will be performed should be referred to in the contract. If necessary the contract may address the possibility of performing maintenance at any location subject to the need for such maintenance arising either from the unserviceability of the aircraft or from the necessity of supporting occasional line maintenance.

# 2.3. Subcontracting

The maintenance contract should specify under which conditions the maintenance organization may subcontract tasks to a third party (whether this third party is approved or not). At least the contract should make reference to the regulations concerning privileges of the organization. In addition the operator may require the maintenance organization to obtain the operator's approval before subcontracting to a third party. Access should be given to the operator to any information (especially the quality monitoring information) about the maintenance organization's subcontractors involved in the contract. It should however be noted that under operators responsibility both the operator and its competent authority are entitled to be fully informed about subcontracting, although the competent authority will normally only be concerned with aircraft, engine and APU subcontracting.

# 2.4. Maintenance programme

The maintenance programme under which the maintenance has to be performed has to be specified. The operator should have that maintenance programme approved by its competent authority. When the maintenance programme is used by several operators, it is important to remember that it is the responsibility of each operator to have that maintenance programme approved under its own name by its competent authority.

#### 2.5. Quality monitoring

The terms of the contract should include a provision allowing the operator to perform a quality surveillance (including audits) upon the maintenance organization. The maintenance contract should specify how the results of the quality surveillance are taken into account by the maintenance organization (See also paragraph 2.22. 'Meetings').

# 2.6. Competent authority involvement

When the operator's competent authority and the maintenance organization's competent authority is not the same, the operator and the maintenance organization have to ensure together with their competent authority that the respective competent authority's responsibilities are properly defined and that, if necessary, delegations have been established.

#### 2.7. Airworthiness data

The airworthiness data used for the purpose of this contract as well as the authority responsible for the acceptance/approval should be specified. This may include, but may not be limited to:

- maintenance programme,
- airworthiness directives,
- major repairs/modification data,
- aircraft maintenance manual,
- aircraft IPC,
- wiring diagrams,
- trouble shooting manual,
- Minimum Equipment List (normally on board the aircraft),
- operators manual,
- Flight Manual,
- engine maintenance manual,
- engine overhaul manual.

# 2.8. Incoming Conditions

The contract should specify in which condition the operator should send the aircraft to the maintenance organization. For checks of significance i.e. 'C' checks and above, it may be beneficial that a work scope planning meeting be organized so that the tasks to be performed may be commonly agreed (see also paragraph 2.23: 'Meetings').

#### 2.9. Airworthiness Directives and Service Bulletin/Modifications

The contract should specify what information the operator is responsible to provide to the maintenance organization, such as the due date of the airworthiness directives (ADs), the selected means of compliance, the decision to embody Service Bulletins (SBs) or modification, etc. In addition the type of information the operator will need in return to complete the control of ADs and modification status should be specified.

# 2.10. Hours & Cycles control

Hours and cycles control is the responsibility of the operator, but there may be cases where the maintenance organization should receive the current flight hours and cycles on a regular basis so that it may update the records for its own planning functions (see also paragraph 2.22: 'Exchange of information').

# 2.11. Service life-limited components

Service life-limited components control is the responsibility of the operator. The maintenance organization will have to provide the operator with all the necessary information about the service life-limited components removal/installation so that the operator may update its records (see also paragraph 2.22 'Exchange of information').

# 2.12. Supply of parts

The contract should specify whether a particular type of material or component is supplied by the operator or by the contracted maintenance organization, which type of component is pooled, etc. The contract should clearly state that it is the maintenance organization competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to ensure that the aircraft component is in a satisfactory condition for installation. In other words, there is definitely no way for a maintenance organization to accept whatever is supplied by the operator.

#### 2.13. Pooled parts at line stations

If applicable the contract should specify how the subject of pooled parts at line stations should be addressed.

#### 2.14. Scheduled maintenance

For planning scheduled maintenance checks, the support documentation to be given to the maintenance organization should be specified. This may include, but may not be limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- modifications to be incorporated.

When the maintenance organization determines, for any reason, to defer a maintenance task, it has to be formally agreed with the operator. If the deferment goes beyond an approved limit, refer to paragraph 2.17: 'Deviation from the maintenance schedule'. This should be addressed, where applicable, in the maintenance contract.

#### 2.15. Unscheduled maintenance/Defect rectification

The contract should specify to which level the maintenance organization may rectify a defect without reference to the operator. As a minimum, the approval and incorporation of major repairs should be addressed. The deferment of any defect rectification should be submitted to the operator and, if applicable, to its competent authority.

# 2.16. Deferred tasks

See paragraphs 2.14 and 2.15.In addition, for aircraft line and base maintenance the use of the operator's MEL and the relation with the operator in case of a defect that cannot be rectified at the line station should be addressed.

#### 2.17. Deviation from the maintenance schedule

Deviations have to be requested by the operator to its competent authority or granted by the operator in accordance with a procedure acceptable to its competent authority. The contract should specify the support the maintenance organization may provide to the operator in order to substantiate the deviation request.

# 2.18. Test flight

If any test flight is required after aircraft maintenance, it should be performed in accordance with the procedures established in the operator's continuing airworthiness management exposition.

#### 2.19 Bench Test

The contract should specify the acceptability criterion and whether a representative of the operator should witness an engine undergoing test.

#### 2.20 Release to service documentation

The release to service has to be performed by the maintenance organization in accordance with its MOE procedures. The contract should, however, specify which support forms have to be used (Operator's technical log, approved organization's maintenance visit file, etc.) and the documentation the maintenance organization should provide to the operator upon delivery of the aircraft. This may include, but may not be limited to:

- Certificate of release to service mandatory,
- flight test report,
- list of modifications embodied,
- list of repairs.
- list of ADs incorporated,
- maintenance visit report,
- test bench report.

#### 2.21. Maintenance recording

The operator may contract the maintenance organization to retain some of the maintenance records required by CV-CAR 9. It should be ensured that every requirement CV-CAR 9 is fulfilled by either the operator or the maintenance organization. In such a case, free and quick access to the abovementioned records should be given by the maintenance organization to the operator and its

competent authority (in case of two different competent authorities involved, see paragraph 2.6 'competent authority involvement').

# 2.22. Exchange of information

Each time exchange of information between the operator and the maintenance organization is necessary, the contract should specify what information should be provided and when (i.e. on what occasion or at what frequency), how, by whom and to whom it has to be transmitted.

# 2.23. Meetings

For the competent authority to be satisfied that a good communication system exists between the operator and the maintenance organization, the terms of the maintenance contract should include the provision for a certain number of meetings to be held between both parties.

#### 2.23.1. Contract review

Before the contract is applicable, it is very important for the technical personnel of both parties that are involved in the application of the contract to meet in order to be sure that every point leads to a common understanding of the duties of both parties.

# 2.23.2. Work scope planning meeting

Work scope planning meetings may be organized so that the tasks to be performed may be commonly agreed.

# 2.23.3. Technical meeting

Scheduled meetings may be organized in order to review on a regular basis technical matters such as ADs, SBs, future modifications, major defects found during maintenance check, reliability, etc.

# 2.23.4. Quality meeting

Quality meetings may be organized in order to examine matters raised by the operator's quality surveillance and to agree upon necessary corrective actions.

# 2.23.5. Reliability meeting

When a reliability programme exists, the contract should specify the operator's and maintenance organization's respective involvement in that programme, including the participation in reliability meetings.

# ANNEX B - APPLICATION FOR ACCEPTANCE OF MAINTENANCE ARRAGEMENT