

# CIVIL AVIATION AUTHORITY Czech Republic

#### Only translation guidelines from Czech to English

## **Aeronautical Operations Division Guideline**

## **COMPANY MANUAL**

# (INSTALLATIONS, MAINTENANCE, REPAIRS, MODIFICATIONS AND DESIGN CHANGES OF AERONAUTICAL GROUND FACILITIES)

BASIC REQUIREMENTS FOR THE CONTENTS, FORMAT AND MANAGEMENT OF APPROVED DOCUMENTS

**CAA-SLS-006-9/09** EN

Ref. No: 2433-18-701 In Prague, (date): 27. 2. 2018

Version: 6 Approved by (signature):

Date of effect: 1st April 2018

Vítězslav Hezký Director, Aeronautical Operations Division

## **DOCUMENT CHANGES HISTORY**

VERSION	VERSION DATE OF DRAFTED BY CHARACTERISTICS		NOTE	
No.	PRODUCTION	DRAFILDBI	CHARACTERISTICS	NOTE
1	10. 10. 2009	AGF Section	New edition	
2	20. 11. 2009	AGF Section	Adding imposed charges	No major changes
3	1. 10. 2011	AGF Section	Changes in connection with the implementation of Regulation (EC) 552/2004	The whole document
4	31. 7. 2014	AGF Section	Additional requirements for awareness of the consequences of eligible activities in relation to ANS, training, requirements for software and occurrence reporting, minor adjustments in the text.	The whole document
5	17. 2. 2016	AGF Section	Change of the section name and minor adjustments in the text.	The whole document
6	26. 2. 2018	IOP Section	Change in address and modifications in the text (identification of the applicant, representatives of managers, and categorization of AGF according to Annex 1 of Decree No. 108/1997 Coll.).	The whole document

Page 2 Version 6

# TABLE OF CONTENTS

D	OCUM	IENT CHANGES HISTORY	2
T.	ABLE	OF CONTENTS	3
A	PPLIE	D ABBREVIATIONS	6
1	INT	RODUCTION	7
	1.1	Function of the document and definition of the applied basic terms	7
	1.2	Status of the CM	8
	1.3	Document drafting and approval	8
2 cl		ucture of CM for installations, maintenance, repairs, modifications and design s of AGFs	9
	2.1	Contents-related requirements	9
3	BAS	SIC REQUIREMENTS FOR THE CONTENTS OF EACH PART OF CM	11
	3.1	PART 1: ADMINISTRATIVE	11
	3.1.1	Approval Sheet	11
	3.1.2	Record of changes, amendments and corrections	11
	3.1.3	CM contents (including specification of annexes)	12
	3.1.4	Applied terminology and abbreviations	12
	3.1.5	Terms and definitions	12
	3.2	PART 2: COMPANY MANAGEMENT	12
	3.2.1	Applicant identification	12
	3.2.2	Company's undertaking	12
	3.2.3	CM structure and method of issuing CM	13
	3.2.4	List of holders of managed (controlled) CM printouts	13
	3.2.5	Managers	13
	3.2.6	Managers' roles and responsibilities	13
	3.2.7	Authorised staff	13

328	Authorised staff's roles and responsibilities	14
5.2.0	Additionact stair a roles and responsibilities	

_	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	
3.2.9	Company staff structure	14
3.2.10	Company organisation scheme	14
3.2.11	1 Premises	14
3.2.12	2 Scope of the company's activities / operations	14
3.2.13	3 CM change service	15
3.3	PART 3: COMPANY'S INTERNAL PROCEDURES	15
3.3.1	Contractor appraisal	15
3.3.2	Initial checks of products received from suppliers (subcontractors)	15
	Storage, marking and release of products (components) for further processing / ation	15
	Usability of tools and installation / fitting equipment (hereinafter referred to as pment")	16
3.3.5	Calibration of measuring equipment and meters	16
3.3.6	Use of tools and equipment by staff	16
3.3.7	Work environment standards	16
3.3.8	Documentation for the performance of Authorised Operations	17
3.3.9	Performance of Authorised Operations	17
	Method of releasing operation-capable AGF for operation after carrying out orized Operations, including related documents.	18
3.3.11	Procedure for management of non-conforming products, components and mater 18	ials
3.3.12	2 Description of the maintenance system for Authorised Operations	18
3.3.13	B Description of AGF reliability check after performing Authorized Operations	18
3.3.14	4 Environmental factors involved in the operations performed	18
3.3.15	5 Special procedures	18
3.4	PART 4: COMPANY'S QUALITY ASSURANCE SYSTEM	19
3.4.1	Organisation scheme of the Quality Management Unit (QMU)	19
3.4.2	Responsibilities and authorization of the QMU staff	19

	3.4.3	Quality audits performed by internal staff	19
	3.4.4	Procedures for corrective actions based on quality audit results	19
	3.4.5	Authorised staff training and qualification enhancement	19
	3.4.6	Staff performing internal quality audits	19
	3.4.7	Supervisors	19
	3.4.8	Checks of operation-related deviations and non-conformities	20
	3.4.9	Checks of deviations from the company's procedures	20
	3.4.10	Method of getting qualifications for special operations	20
		Procedures for quality management-related interactions with contractors and rating manufacturers	
	3.5	PART 5: ANNEXES	20
	3.5.1	Annexes	20
4	CM	VALIDITY AND AUTHORIZATION FEE	20
	4.1	Initial draft	20
	4.2	Changes in approved CM	21
	4.3	Charging for the issuance of Authorization	21
5	CM	FORMAT	21
	5.1	Graphic design and format	21
	5.2	Numbering and identification	22
Α	NNEX	1 – DRAFT CM APPROVAL SHEET	23
		2 – SPECIMEN RECORD OF the CM CHANGES, AMENDMENTS AND CTIONS	24
٨	NINIEV	2 CATHECODIES OF AFRONALITICAL CROLIND FACILITIES	25

### **APPLIED ABBREVIATIONS**

AGF	Aeronautical Ground Facility
AIS	Aeronautical Information Services
ANS	Air Navigation Services
AOD	Aeronautical Operations Division
ASM	Airspace Management
ATFM	Air Traffic Flow Management
ATS	Air Traffic Services
CAA	Civil Aviation Authority
CM	Company Manual
DoC	Declaration of Conformity
DSU	Declaration of Suitability for Use
EU	European Union
EUROCONTROL	European Organisation for the Safety of Air Navigation
ICAO	International Civil Aviation Organisation
OAC	Operational Approval Certificate
QMU	Quality Management Unit
SW	Software
SWAL	Software Assurance Level
TS	Technical Supervision

Page 6 Version 6

#### 1 INTRODUCTION

- 1.1 Function of the document and definition of the applied basic terms
  - This document sets forth the basic contents, scope and principles for drafting, discussing, approving and maintaining in effect the document titled "Company Manual for Installations, Repairs, Modifications and Design Changes of AGFs" (hereinafter referred to as "CM").
  - The drafting of the CM is one of the necessary preconditions for the issue of the Authorisation (Approval certificate) to Install, Maintain, Repair, Modify and Change the Design of AGFs in the sense of §17 of the Civil Aviation Act (Act No. 49/1997 Coll.) and the Ministry of Transport and Communications Decree No. 108/1997 Coll. (as amended) by the Civil Aviation Authority of the Czech Republic (hereinafter referred to as "CAA").
  - It has to be clear from the contents and scope of the CM that the basic requirements for issuing the Authorisation ("Approval certificate") to perform the declared activities (operations) are complied with.
  - For the purpose of this document, the term *installation* means a package of activities (operations) performed with the objective of installing of AGFs in the selected location, i.e. integrating the same into a new structure or into some existing network. Installations are performed according to approved installation plans or other CAA-approved documents.
  - For the purpose of this document, the term repair means a package of post-failure operations performed in order to restore the operational capability (operability) of AGF.
    - Standard repairs are performed based on procedures defined in the productaccompanying technical documentation of AGF (usually by the manufacturer).
    - Non-standard repairs are performed based on procedures that are not set forth in the product-accompanying technical documents. Instead, repairs of this kind are performed according to documents drafted for that purpose.
  - For the purpose of this document, the term *maintenance* means a package of activities (operations) performed in order to maintain AGFs in operable condition. The procedure, including the respective schedules, is set forth in the product-accompanying technical documents.
  - For the purpose of this document, the term modification means a package of activities (operations) performed in order to change the condition of an individual AGF item that was defined at the moment of issuing the respective capability certificate and/or declaration (DoC, DSU, OAC). Modifications are not recorded into the production documentation of the approved AGF type and only apply to the AGF concerned or parts thereof.
  - For the purpose of this document, the term *design change* means a package of operations performed in order to change the condition of an AGF type line that was defined in the production documentation of the approved type (DoC, DSU). Design changes are recorded into the production documentation of the approved type, as a result of which such production documentation is updated and applies to all AGF items produced after the point of approving the change concerned, unless stated otherwise (e.g. application also to earlier-produced AGF items).

- For the purpose of this document, the term official appointed by CAA as a Technical Supervisor means an individual appointed by CAA to perform technical supervision of the activities in the sense of §17 of Act No. 49/1997 Coll. which the company concerned is authorised to perform.
- For the purpose of this document, the term *regulatory base* means a package of laws, decrees (including regulations issued within the EU at their level), civil aviation regulations, standards, follow-up documents and CAA requirements relating to the AGF concerned. The regulatory base for the AGF in question is proposed by the Applicant that subsequently maintains this regulatory base in effect throughout the AGF's life cycle.
- For the purpose of this document, the term *company* means a legal or physical entity that is authorized or is applying for authorization for activities (installation, maintenance, repair, modification and design change of AGF) in the sense of the provisions of § 17 of Act No. 49/1997 Coll.

#### 1.2 Status of the CM

- After its approval, the CM is one of the key documents required for the issue of the Authorisation to Install, Maintain, Repair, Modify and Change the Design of AGFs.
- A single CM may apply to one of more related activities / operations (design, production, installations, repairs, modifications, design changes hereinafter referred to as "Authorised Operations"). If the Applicant requires an authorisation for multiple operations simultaneously, this circumstance shall be reflected in the respective parts of CM, depending on the particular requirements. Where the above is not possible (e.g. in order to maintain clarity, ease of survey, etc.), the Applicant shall provide the text in question separately for each sphere of activity. The drafting of the parts relating to such spheres of activity is governed by the principles for drafting the CM for the operations concerned.
- Authorisations to perform the aforesaid operations may only be required for products or in connection with products (AGFs) for which the Applicant has received relevant licences from the manufacturer (authorised importer).

#### Note:

If Authorised Operations are to be performed in relation to AGFs of a different manufacturer, the principles applicable to the AGF OACs (Operational Approval Certificates) have to be complied with already at the stage of preparing such operations.

 After its approval, the CM is a binding document that provides basic information about the company characteristics in relation to Authorised Operations performed in relation to AGFs. Furthermore, the CM includes data that prove compliance with the requirements of Decree No. 108/1997 Coll. for the process of issuing authorisations for the respective operations (staff, organisation, safety, quality, reliability and testing of AGFs, etc.).

#### 1.3 Document drafting and approval

- The contents of the CM must not be in conflict with the Czech Republic's generally applicable legislation, and the technical contents relating to Authorised Operations and the AGFs concerned has to comply with the set regulatory base.
- It is desirable to arrange the respective parts of the CM in line with the structure provided below. If necessary (large scope, graphic design format), the text may

refer to related documents that, in such case, have to constitute annexes to the CM. Such annexes are usually submitted for the approval process along with the CM.

- The CM has to be drafted in Czech and submitted by the Applicant as an annex to the application for authorising the company to perform the respective activities / operations in relation to AGFs. The CM and annexes thereto drafted in foreign languages have to be submitted in the original wording along with a sworn translation thereof into Czech, unless the CAA official in charge (appointed official) informs the Applicant that no such translation is required (§ 16, Article 2 of Act No. 500/2004 Coll.).
- As a document drafted by the Applicant in line with the aforesaid requirements, the CM is negotiated, commented on and approved as part of the process of certifying the company for Approved Operations that is conducted in line with the administrative proceedings principles under Act No. 500/2004 Coll.
- The text of the CM has to be unambiguous, understandable, easy-to-survey and brief.
- The processes relating to CM drafting, negotiation, approval, change service, amendments and archiving are procured or performed by the Applicant. The actual review and final approval of the CM after the incorporation of all comments arising from the aforesaid processes are performed by CAA.
- Approved printouts of the CM are considered "managed (controlled)" and are therefore subject to the principles of the standard change management process (configuration management) the implementation of which is procured by the Applicant.
- Printouts of the CM signed by the statutory representative or an official authorised by such statutory representative are approved by CAA.
- The approval takes the form of signing an approval sheet for the set number of managed (controlled) printouts of the CM. The number of such printouts is set by the Applicant to meet the Applicant's needs and provide one managed printout to CAA, including the aforesaid annexes.
- The approval of the CM does not relieve the Applicant from responsibility for permanent correctness of the data included in the CM.

#### Note:

To ensure that the approval proceedings progress smoothly, it is recommended to design the contents of the CM in line with the set structure. It is in the Applicant's interest to ensure that the data that become binding after the CM approval are really correct and comprehensive.

### 2 STRUCTURE OF CM FOR INSTALLATIONS, MAINTENANCE, REPAIRS, MODIFICATIONS AND DESIGN CHANGES OF AGFs

- 2.1 Contents-related requirements
  - It is required that the CM consists of at least the following parts:

#### **PART 1: ADMINISTRATIVE**

a. Approval Sheet.

- b. Record of changes, amendments and corrections.
- c. CM contents (including specification of annexes).
- d. Applied terminology and abbreviations.
- e. Terms and definitions.

#### **PART 2: COMPANY MANAGEMENT**

- a. Applicant identification.
- b. Company's undertaking.
- c. CM structure and the method of issuing CM.
- d. List of holders of managed printouts of CM.
- e. Managers.
- f. Managers' roles and responsibilities.
- g. Authorised staff.
- h. Authorised staff's roles and responsibilities.
- i. Company staff structure.
- j. Company organisation scheme.
- k. Company premises.
- I. Scope of the company's activity.
- m. Procedure for reporting internal changes to CAA.
- n. CM change service.

#### **PART 3: COMPANY'S INTERNAL PROCEDURES**

- a. Contractor/supplier appraisal.
- b. Initial checks of products received from suppliers.
- c. Storage, marking and release of products (components) for further processing/integration.
- d. Usability of tools and installation/fitting equipment.
- e. Calibration of measuring equipment and meters.
- f. Use of tools and equipment by staff.
- g. Work environment standards.
- h. Documentation for Authorised Operations (listed specifically, depending on the respective requirement).
- i. Performance of Authorised Operations.
- Method of releasing operation-capable AGF for operation, including related documents.
- k. Procedure for management of non-conforming products, components and materials.
- I. Description of the computer-controlled maintenance system and reliability checks.
- m. Description of the AGF reliability check after the performance of authorized activities.
- n. Environmental factors involved in the performed operations.
- o. Special procedures.

#### PART 4: COMPANY'S QUALITY MANAGEMENT SYSTEM

a. Organisation scheme of the Quality Management Unit (QMU).

# ${f CM}$ – installations, maintenance, repairs, modifications and design changes

- b. Responsibilities and authority of QMU staff.
- c. Quality audits performed by internal staff.
- d. Procedures for corrective actions based on quality audit results.
- e. Authorised staff training and qualification enhancement.
- f. Staff performing internal quality audits.
- g. Supervisors.
- h. Checks of operation-related deviations and non-conformities.
- i. Checks of deviations from the company's procedures.
- j. Method of getting qualifications for special operations.
- k. Procedures for interactions with contractors and manufacturers.

#### **PART 5: ANNEXES**

The Applicant shall provide documents to support, clarify and make the text of CM more precise (company's quality certificate, staff's authorisations, internal auditors' authorisations, product-related DSUs and DoC in force, etc.) and specimens of documents issued by the company (e.g. cards, forms, protocols, dispatch notes, forms for releasing operation-capable AGF for operation, etc.).

#### Note:

If any of the above items is not relevant to the company's operation, it will still be part of the CM, but the text will include "not applied" or "not applicable" plus an explanation (reasons) why such item is not relevant.

# 3 BASIC REQUIREMENTS FOR THE CONTENTS OF EACH PART OF CM

#### 3.1 PART 1: ADMINISTRATIVE

#### 3.1.1 Approval Sheet

- A possible Approval Sheet format is provided in Annex 1. The Approval Sheet has to include:
- Document name (COMPANY MANUAL FOR INSTALLATIONS ...);
- Document identification No. (set by the Applicant);
- Edition No.;
- Applicant name;
- Printout No.;
- Approving organisations and signatures by authorised officials expressing consent with the contents of the CM;
- Space for notes, if any.

#### 3.1.2 Record of changes, amendments and corrections

- A specimen record of changes, amendments and corrections is provided in Annex
  2. The record format has to make it possible to enter:
- Change, amendment or correction (entry) No.;
- Subject of the entry and identification of the CM parts involved;
- Date of entry;

Name and signature of the authorised official that has made such entry.

#### 3.1.3 CM contents (including specification of annexes)

• The Applicant shall state the name of each part of the CM and each annex thereto in combination with the numbers of the respective pages. The format is not defined, but the author should place emphasis on ease of survey and unambiguity in order to make the reading of the document comfortable.

#### 3.1.4 Applied terminology and abbreviations

- The Applicant shall provide explanations for names, abbreviations and symbols that are used in the text and are not standardised or usual, are different from standard terms (i.e. are specific to that particular CM) or are not absolutely clear in terms of interpretation in the given context.
- To make looking for individual items comfortable, the abbreviations, symbols, etc. are provided in alphabetical order, with explanations.

#### 3.1.5 Terms and definitions

• Specific terms and definitions used by the processor in the text of the CM and the listed annexes are given, explaining their meaning.

#### 3.2 PART 2: COMPANY MANAGEMENT

#### 3.2.1 Applicant identification

- The Applicant shall provide identification data of the company that is to be authorised to perform the operations in question:
- Registered name;
- Legal status;
- ID No.;
- Head office address:
- Contact phone (fax) number;
- Contact email address:
- IDDS:
- Web Address (URL).

#### Note:

If the company performs Authorised Operations on multiple sites or its address for deliveries is not identical with that of its head office, these contact data shall be provided separately.

#### 3.2.2 Company's undertaking

• The Applicant shall provide a declaration that the CM includes a list of currently applicable regulations, standards, guidelines, recommendations and procedures specific to the performance of Authorised Operations by the company concerned and specifies the company's operations and procedures on which the respective authorisation is based. Furthermore, it is required that this part should include a declaration that no activity performed by the Applicant in relation to "Authorised Operations" is in conflict with the data stated in this CM.

- If it is required to establish an CAA TS in the company, the Applicant shall provide a binding declaration on general conditions created to enable the TS to work independently in connection with the company's AGF-relevant products.
- The said declaration has to be signed by an authorised company executive who has a statutory authority to create all HR-related, technical and financial conditions to ensure that the company performs all Authorised Operations in line with its undertaking mentioned above.

#### 3.2.3 CM structure and method of issuing CM

- The Applicant shall provide a description of:
- CM structure and the method of issuing the CM, including similar data for related documents (guidelines, instructions, internal standards, etc.);
- method of issuing and implementing the CM within the applicant's company.

#### 3.2.4 List of holders of managed (controlled) CM printouts

- The Applicant shall provide:
- list of holders within the company (company department, first name and surname, printout No.);
- list of holders outside the company (organisation, printout No.).

#### 3.2.5 Managers

 The Applicant shall provide a list of names of managers (involved in Authorised Operations – whole organisational structure is not necessary), including a specification of their positions. At the same time, their representatives in relation to the authorized operations must be listed.

#### 3.2.6 Managers' roles and responsibilities

- The Applicant shall provide a list of positions involving management authority concerning Authorised Operations. These data shall include:
- Name of the position:
- Education/Training requirements;
- Duties:
- Responsibilities;
- Scope of authority;
- Subordination:
- Deputies, if any.

#### 3.2.7 Authorised staff

- The Applicant shall provide a list of staff authorised to confirm completion of work and/or the fitness (capability check) of AGFs after completion of some of the Authorised Operations. These data shall include:
- First name and surname:
- Clear identification (e.g. date of birth, personal No., etc.);
- Education/Training requirements;
- Personal qualifications:
- Position in the company;
- Specific authorisations (for what operations).

#### 3.2.8 Authorised staff's roles and responsibilities

- The Applicant shall list positions responsible for Authorised Operations under the previous paragraph. These data shall include:
- Scope of authority, responsibility and duties regarding the operations concerned;
- Specimen signature or a copy of the personal stamp of the particular staff member.

#### Note:

If the company performs Authorised Operations on multiple sites, the Applicant shall specify which of the company sites and to what extent such roles and responsibilities apply to.

#### 3.2.9 Company staff structure

- The Applicant shall provide an approximate number of:
- in-house staff, including a breakdown of the respective lines of activity (structured according to the respective requirements for authorisation);
- contractors, also including a breakdown of the respective lines of activity.
- Each line of activity shall come with criteria for the assessment of suitability (qualifications) of both the in-house staff and the contractors.

#### 3.2.10 Company organisation scheme

 Shall be provided in graphic form, including an explanatory description of internal links that show line-based and project-based relations at company management level concerning operations relating to AGFs, including the respective responsibilities and deputies.

#### 3.2.11 Premises

- The Applicant shall specify:
- characteristics and purpose of its permanent premises including detached sites; applies
  to both the company's own and hired premises as for the latter, the Applicant shall
  enclose copies of the respective agreements;
- characteristics of non-permanent sites (e.g. premises expected to be used for Authorised Operations as part of installation work or sites of already operated AGFs).

#### Note:

The above information has to show compliance with relevant requirements regarding occupational health & safety, hygiene, environmental friendliness of the performed operations, etc.

#### 3.2.12 Scope of the company's activities / operations

- The Applicant shall specify in detail the scope of the company's activities / operations relating to Authorised Operations. These data shall include:
- List of all AGFs including type designation (following the categorization defined in Annex 1 of Decree No. 108/1997 Coll.), whose installation, maintenance, repairs, modifications and design changes are subject to the authorisation (competence of company's employees to perform Authorized Operations at mentioned AGFs must be proved);
- Maintenance level for which the company is approved;
- Detailed list of tests conducted as part of Authorised Operations.

#### Note:

# ${f CM}$ – installations, maintenance, repairs, modifications and design changes

The content of this point must be processed in such a way as to provide the most detailed overview of the company's intended activities in Authorised Operations.

Example of defining the maintenance and/or repair level:

- I. Checking the functionality and functional parameters of AGFs, detecting a defective block, removing the block, replacing the block.
- II. Disassembling the block, checking the functionality and functional parameters of the block modules/boards, detecting a defective module/board and replacing it.
- III. Checking the functionality of module/board components, detecting a defective component and replacing it.
  - The Applicant shall specify who is responsible for reporting changes made to the CM data, every CM-related change has to be reported to CAA, explained and, as the case may require, documented.

#### 3.2.13 CM change service

- The Applicant shall specify who is responsible for reporting changes made to the CM data, every CM-related change has to be reported to CAA, explained and, as the case may require, documented.
- Specification of responsibilities and procedures for amending and changing the CM on the Applicant's side (the company shall appoint a staff member responsible for compliance with such procedures).
- Described procedure has to ensure that unapproved changes are not incorporated into the CM for any of the managed (controlled) printout holders and that each of such holders has the latest, valid copy of the CM, i.e. corrected and including all approved changes (amendments).

#### Note:

Implementations of major changes, particularly those regarding the scope of activity, are subject to approval by CAA.

#### 3.3 PART 3: COMPANY'S INTERNAL PROCEDURES

- 3.3.1 Contractor appraisal
  - The Applicant shall specify the methods of appraising suppliers of all components, materials, products, etc. relating to Authorised Operations.
- 3.3.2 Initial checks of products received from suppliers (subcontractors)
  - The Applicant shall specify:
  - who is responsible for performing the initial checks;
  - description of receipt procedures and initial checks;
  - technical documents making it possible to decide that the products and materials (spare parts) to be used in performing Authorised Operations comply with all requirements regarding performance, properties, resistance to external impacts and reliability and, as far as such sub-delivery involves an independently functional product (AGF), also some other documents (such as DSU, DoC);
  - method of managing compliant, non-compliant, new and/or repaired components and method of marking the same.
- 3.3.3 Storage, marking and release of products (components) for further processing /

#### integration

- The Applicant shall specify:
- marking methods and formats plus types of data involved;
- stock-in and stock-out procedures;
- storage methods;
- record-keeping method and method of handling AGF components and whole AGF units on each site.
- 3.3.4 Usability of tools and installation / fitting equipment (hereinafter referred to as "equipment")
  - The Applicant shall specify:
  - key criteria for the assessment of usability of tools and installation / fitting equipment;
  - method of ensuring that inappropriate tools / equipment are not used;
  - list of tools, equipment and jigs checked (manufacturers, types, production No., Record. No. etc.).
  - method of tool / equipment record-keeping and marking;
  - specification of special equipment and jigs (manufacturers, types, production No., Record. No. etc.).

#### 3.3.5 Calibration of measuring equipment and meters

- The Applicant shall provide:
- description of the system used for the calibration of test measuring equipment and meters and the method of marking the period of force of such calibration on the respective equipment and meters;
- No. and name of the company's metrological order or another company's document with a similar purpose;
- complete list of test measuring equipment and meters (with identification data) and their classification under the company's metrological order plus their metrological relevance to étalons:
- staff member responsible for performing the verification, calibration of étalons and meters and for procuring the calibration of the company's main étalons by a relevant authorised organisation by deadlines set in the company's metrological order;
- method of setting calibration deadlines;
- periodicity of calibrations of étalons and meters;
- checks of rough-measuring devices and the company's étalons in line with the company's metrological order or another company's document with a similar purpose.

#### 3.3.6 Use of tools and equipment by staff

- The Applicant shall specify:
- method of allocating tools and equipment to staff, including a description of responsibility for maintenance thereof;
- procedures when finding out that some of the allocated tools and/or equipment items is worn out or damaged.

#### 3.3.7 Work environment standards

- The Applicant shall provide:
- list of standards and internal regulations to define work environment requirements (cleanliness, lighting, space, zones ...); depending on the nature of the performed

# **CM** – installations, maintenance, repairs, modifications and design changes

operations, these data may also include temperature, atmospheric pressure, humidity, etc.;

- responsibility and principles for compliance with such standards;
- external impacts in relation to electrical devices;
- exceptions, if any;
- at the same time, the standards relating to the customer's work environment during the implementation of Authorized Operations (eg installation, maintenance, etc.) are also stated.

**Note:** If any of the work environment requirements (occupational health and safety, fire protection, etc.) are addressed by contractors, the Applicant has to include reference to the respective contracts and the names of the service providers.

#### 3.3.8 Documentation for the performance of Authorised Operations

- The Applicant shall provide:
- list of documents used for operations performed on each AGF item regulatory base (exact name, identification, who issued such document and when);
- complete list of documents for Authorised Operations (instructions, standards, guidelines, procedures for production, maintenance, repairs, modifications, design changes, testing and, if applicable, other operations for which the authorisation application is being filed);
- complete list of test methods relating to Authorised Operations,
- procedures for customised services and related documentation;
- method of procuring external documents and keeping the same up-to-date;
- method of and responsibility for registration, storage, updating and issue of documents to the respective departments;
- principles for drafting internal documentation (guidelines, procedures, internal standards, e.g. for internal technological procedures, etc.).

#### 3.3.9 Performance of Authorised Operations

- The Applicant shall specify:
- method of ensuring that Authorised Operations are always performed in line with applicable documentation (e.g. applicable maintenance programme, instructions, manuals and maintenance guidelines, etc.);
- specific conditions for SW modification (application of standards, creation of conditions for ensuring SWAL);
- method of ensuring that no accepted tasks exceed the approved scope of the company's activity determined by its equipment/capacities, documentation, technical resources, staff's qualifications and the scope of authorisation on the part of the staff members listed in CM;
- procedure for evaluation and elimination of defects identified by the company in performing Authorised Operations;
- method and format of a detailed specification and documentation of work;
- principles governing the performance of Authorised Operations, including work-inprogress checks, post-completion checks and documentation thereof;
- responsibility for completion and checks of all work required by relevant documentation applicable to Authorised Operations;
- responsibility for drafting and performing checks of completeness of all operational and dispatch documents;

# ${f CM}$ – installations, maintenance, repairs, modifications and design changes

- maintenance responsibility for drafting and performing checks of completeness of operational documentation relevant to AGF and documents for releasing operationcapable AGF for operation after completing maintenance interventions;
- method of archiving documents describing the work done on AGF; for maintenance operations: method of archiving documents that describe the maintenance work performed (in the company, at a customer's site) and method of delivering documents to customers that include results of the operations performed;
- method of maintaining machinery and equipment.

**Note:** Work done by authorised staff members and, as the case may be, CAA TS has to be taken into account in connection with all Authorised Operations.

- 3.3.10 Method of releasing operation-capable AGF for operation after carrying out Authorized Operations, including related documents.
  - The Applicant shall specify:
  - method of releasing operation-capable AGFs for subsequent operational use by the AGF operator;
  - types of confirmations for releasing AGFs for subsequent operational use by the AGF operator;
  - conditions for releasing the same;
  - their contents and format.

**Note:** Documents for newly installed AGF and documents for AGF after maintenance and, as the case may be, after completion of some other Authorised Operation (AGF after repair, modification or design change) are listed separately.

- 3.3.11 Procedure for management of non-conforming products, components and materials
  - The Applicant shall specify:
  - method of marking such items;
  - method of storing such items;
  - procedure for deciding whether the item concerned is to be repaired, modified, discarded or claimed defective at the supplier.
- 3.3.12 Description of the maintenance system for Authorised Operations
  - The Applicant shall provide:
  - description of its maintenance system used during Authorised Operations.
- 3.3.13 Description of AGF reliability check after performing Authorized Operations
  - The Applicant shall provide:
  - description of monitoring the reliability of AGF after performed Authorised Operations.
- 3.3.14 Environmental factors involved in the operations performed.
  - The Applicant shall specify:
  - environmental impacts;
  - packaging management methods;
  - waste management methods.
- 3.3.15 Special procedures
  - The Applicant shall specify e.g.:

- procedures for drafting and approving documentation for completion of non-standard repairs;
- procedures for diagnostics involving the use of remote access to AGF through a data communication environment and the method of ensuring the safety of such AGF;
- procedures for reporting occurrences directly or potentially endangering the safety of air traffic in the sense of currently valid legislation;
- other procedures for non-standard operations.

#### 3.4 PART 4: COMPANY'S QUALITY ASSURANCE SYSTEM

- 3.4.1 Organisation scheme of the Quality Management Unit (QMU)
  - Shall be provided in graphic form, with a text description.
- 3.4.2 Responsibilities and authorization of the QMU staff
  - The Applicant shall specify:
  - specific responsibilities; and
  - specific powers of the QMU staff in relation to AGF-related Authorised Operations (installations, maintenance, repairs, modifications and design changes, depending on the requirement concerned).
- 3.4.3 Quality audits performed by internal staff
  - The Applicant shall specify:
  - documentation for audits of completed work;
  - documentation for audits of the company's procedures related to Authorised Operations.
- 3.4.4 Procedures for corrective actions based on quality audit results
  - The Applicant shall describe:
  - methods of managing identified non-conformities;
  - methods of monitoring the effectiveness of corrective actions.
- 3.4.5 Authorised staff training and qualification enhancement
  - The Applicant shall specify:
  - types of licences;
  - its programme for building, maintaining and enhancing the staff's qualifications;
  - method and responsibility for ensuring qualification requirements for each group of staff.
- 3.4.6 Staff performing internal quality audits
  - The Applicant shall provide a list of auditors, their rights and obligations and sphere of activity.
- 3.4.7 Supervisors
  - The Applicant shall provide:
  - list of supervisors for each site;
  - their rights and obligations;
  - specimen signatures or personal stamps;
  - required qualifications;

- special training and courses undertaken.
- 3.4.8 Checks of operation-related deviations and non-conformities
  - The Applicant shall specify:
  - who is responsible for checks of deviations and non-conformities relating to Authorised Operations;
  - criteria for assessing the admissibility of deviations and non-conformities.
- 3.4.9 Checks of deviations from the company's procedures
  - The Applicant shall specify who is authorised to approve deviations and on what condition.

**Note:** It is necessary to differentiate between deviations that have to be pre-approved by CAA and those approved by e.g. TS (CAA TS).

- 3.4.10 Method of getting qualifications for special operations
  - The Applicant shall specify methods (if any have been realised)
  - Competence for Authorized Operations at AGF requiring specific authorization (non-destructive diagnostics, welding, work at height, inspection activities, etc.).
- 3.4.11 Procedures for quality management-related interactions with contractors and cooperating manufacturers
  - This information shall include (if applicable):
  - methods of delivering products to test labs and taking the same over;
  - tests of components received from subcontractors / suppliers or manufacturers and who manages these operations, takes the items over and checks them;
  - external audits at contractors.

#### 3.5 PART 5: ANNEXES

#### 3.5.1 Annexes

• Containing materials referred to in the text of the CM (such as instructions for maintenance, repairs, etc. referred within the CM) and, in particular, drawings, wiring schemes, component assembly lists, dimensions-specifying drawings, specimen documents, specimen aptitude (capability) certificates or verifications issued for AGFs (e.g. specimen Declarations of Conformity, specimen Declarations of Quality and Completeness, specimen tags, specimen AGF test operation protocols, etc.), annexes are an integral part of CM.

#### 4 CM VALIDITY AND AUTHORIZATION FEE

#### 4.1 Initial draft

- A CM containing approved changes remains in force (valid) for the respective type of Authorised Operation (installation, maintenance, repair, modification and design change of AGFs) unless there is a reason to change it.
- The end of force of the CM is not announced; however, after such end of force, the Applicant is no longer authorised by CAA to perform the respective operations on AGFs.

#### 4.2 Changes in approved CM

- The term *change* means any amendment to the CM or some of the reference documents provided as part of the CM approval process. Every change has to be recorded, to appropriate extent, in the record of changes, amendments and corrections that is an integral part of the CM.
- If only formal changes are made (regarding the Applicant's name, head office address, etc.) but the technology and procedures of AGF-related Authorised Operations remain unchanged, the CM will remain in force and will only be amended to reflect the change concerned. This condition does not lead to issuing a new "Edition No.".
- To ensure that the CM remains easy-to-survey, it is required to update the CM in the event of a larger number of changes, substantial changes of other serious reasons, i.e. issue an updated CM with the same identification No. but a new "Edition No.".
- The CM update is subject to an approval process as part of change management proceedings (configuration management). The text of the updated parts of the CM that is different from that of the previous edition shall be highlighted, e.g. using a vertical line outside the text, a different background, etc.
- The original CM or, as the case may be, the replaced pages are not archived; only the version in force is stored and managed.
- Change proposals are filed by the Applicant.
- All changes to the CM have to be negotiated with and major changes approved by CAA prior to their implementation.
- The Applicant is obliged to record all changes and report the same to the holders of managed (controlled) CM printouts, including the respective identification.

#### 4.3 Charging for the issuance of Authorization

- Charging for issuing/changing of the Authorization is governed by Act No. 634/2004 Coll. as amended. The applicant must pay the relevant fee before the Authorization is issued.
- The employee responsible for issuing the authorization records the payment of the fee in the CAA registration system.

#### 5 CM FORMAT

#### 5.1 Graphic design and format

- The text of each chapter of the CM has to include an appropriate heading (see 2.1).
- If the CM includes any Chapter that is not completed due to the nature of the company's sphere of activity, the Applicant shall enter just the heading of such Chapter and add "NOT APPLIED" or "NOT APPLICABLE" below plus a relevant short explanation why this chapter is not completed.
- If any of the Chapters is too extensive and the ease of survey of the CM might be affected as a result, it is possible to refer to a related document which, has to be submitted along with the CM for the comments-and-approval proceedings.

- If the CM includes references to other documents, such references have to be specific (exact identification including name, ID No., version, etc). If the reference documents are not publicly available, the Applicant shall ensure their availability for CAA.
- The text of managed printouts of the CM has to be in the A4 format when used as a hardcopy.
- If it is necessary to use larger formats (schemes, plans, flow charts, drawings, etc.), these items have to be folded to A4 format.
- Articles are numbered continuously within Chapters and Chapters are numbered continuously throughout the document.
- It is required to use a uniform font and uniform style of formatting the respective parts throughout the document.
- Each printout of the CM has to be inserted into a suitable folder.
- Annexes listed and clearly identified in the CM may be enclosed as separate files.

#### 5.2 Numbering and identification

- The identification of the CM and the type of operation for which the CM is approved is proposed by the Applicant in line with his documentation registration system.
- The CM identification relevant to an approved type of Authorised Operation must not be changed.
- It is not allowed to use the same identification for another CM.

#### Note:

- The identification of the CM must be identical throughout its life cycle with the identification stated in the decision on which basis the Authorization was issued.
- It is recommended to use a format that can be disassembled (e.g. a ring file) to make it possible to replace changed or corrected pages.

## ANNEX 1 – DRAFT CM APPROVAL SHEET

Applicant:	COMI	PANY	CM ID:	
		IUAL		
	INICTALLATIONIC	MAINTENIANCE	Edition:	
	INSTALLATIONS REPAIRS, MODI DESIGN CHAI			
Printout No.:			Number of pages:	
			Number of annexes:	
	APPROVA	AL SHEET		
	Authorised re	presentatives		
Drafted	Name and surname	Signature and stamp	Date	
Approved on the Applicant's behalf	Name and surname	Signature and stamp	Date	
Approved on CAA's behalf	Name and surname	Signature and stamp	Date	
Notes:				

Page 23 Version 6

### ANNEX 2 - SPECIMEN RECORD OF THE CM CHANGES, **AMENDMENTS AND CORRECTIONS**

Change /correct ion ID	Subject of the change and the affected part (Article, Clause)	Change made by	
		Date	Name
			Signature

Page 24 Version 6

# ANNEX 3 – CATHEGORIES OF AERONAUTICAL GROUND FACILITIES

Division into categories according to Annex No. 1 to Decree No. 108/1997 Coll.:

### 3. Aeronautical ground facilities

#### 3.1 Lighting equipment

- 3.1.1 Aerodrome ground lights and their supporting structures
- 3.1.2 Aeronautical light beacons and their supporting structures

#### 3.2 Lighting system components

- 3.2.1 Power supply
- 3.2.2 Serial cable wiring
- 3.2.3 Isolation transformers
- 3.2.4 Control equipment
- 3.2.5 Monitoring system

#### 3.3 Electronic aeronautical ground facilities

- 3.3.1 Airspace management facilities
- 3.3.2 Air traffic flow management facilities
- 3.3.3 Air traffic services facilities, especially facilities for flight, planning and surveillance data processing, time synchronization including a human/machine interface
- 3.3.4 Facilities for ground-ground and air-ground communication, including facilities for data transfer between aeronautical ground facilities, excepting passive components of transmission environment or facilities of commercial providers of telecommunication and transmission services
- 3.3.5 Navigation facilities
- 3.3.6 Surveillance facilities
- 3.3.7 Flight information services facilities
- 3.3.8 Facilities for use of meteorological information
- 3.3.9 Backup power supplies for aeronautical ground facilities
- 3.3.10 Recording, assessment, monitoring and control devices
- 3.3.11 Surface movement guidance and control system devices
- 3.4 Aircraft power supplies (electric, hydraulic and pneumatic)
- 3.5 Flight trainers and simulators
- 3.6 Aerodrome movement area braking action measuring and assessment devices