

## APPENDIX 1

### REQUIREMENTS FOR PROFICIENCY IN LANGUAGES USED FOR RADIOTELEPHONY COMMUNICATIONS

*(Chapter 1, Section 1.2.9, refers)*

1. General

**Note.** The ICAO language proficiency requirements include the holistic descriptors at Section 2 and the ICAO Operational Level (Level 4) of the ICAO Language Proficiency Rating Scale in Attachment A. The language proficiency requirements are applicable to the use of both phraseologies and plain language.

To meet the language proficiency requirements contained in Chapter 1, Section 1.2.9, an applicant for a licence or a licence holder shall demonstrate, in a manner acceptable to the licensing authority, compliance with the holistic descriptors at Section 2 and with the ICAO Operational Level (Level 4) of the ICAO Language Proficiency Rating Scale in Attachment A.

2. Holistic descriptors

Proficient speakers shall:

- a) communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations;
- b) communicate on common, concrete and work-related topics with accuracy and clarity;
- c) use appropriate communicative strategies to exchange messages and to recognize and resolve misunderstanding (e.g. to check, confirm, or clarify information) in a general or work-related context; d) handle successfully and with relative ease the linguistic challenges presented by a complication or unexpected turn of events that occurs within the context of a routine work situation or communicative task with which they are otherwise familiar; and e) use a dialect or accent which is intelligible to the aeronautical community.

## APPENDIX 2

### APPROVED TRAINING ORGANIZATION

*(Chapter 1, 1.2.8.2 refers)*

#### 1. Issue of approval

- 1.1 The issuance of an approval for a training organization and the continued validity of the approval will depend upon the training organization being in compliance with the requirements of this Appendix.
- 1.2 The approval document will contain at least the following:
  - a) organization's name and location;
  - b) date of issue and period of validity (where appropriate);
  - c) terms of approval.

#### 2. Training and procedures manual

- 2.1 The training organization shall provide a training and procedures manual for the use and guidance of personnel concerned. This manual may be issued in separate parts and shall contain at least the following information:
  - a) a general description of the scope of training authorized under the organization's terms of approval;
  - b) the content of the training programmes offered including the courseware and equipment to be used;
  - c) a description of the organization's quality assurance system in accordance with 4;
  - d) a description of the organization's facilities;
  - e) the name, duties and qualification of the person designated as responsible for compliance with the requirements of the approval in 6.1;
  - f) a description of the duties and qualification of the personnel designated as responsible for planning, performing and supervising the training in 6.2;
  - g) a description of the procedures used to establish and maintain the competence of instructional personnel as required by 6.3;
  - h) a description of the method used for the completion and retention of the training records required by 7;
  - i) a description, when applicable, of additional training needed to comply with an operator's procedures and requirements; and
  - j) when an approved training organization is authorized to conduct the testing required for the issuance of a licence or rating in accordance with 9, a description of the selection, role and duties of the authorized personnel, as well as the applicable requirements as established by CAD.
- 2.2 The training organization shall ensure that the training and procedures manual is amended as necessary to keep the information contained therein up to date.
- 2.3 Copies of all amendments to the training and procedures manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.

#### 3. Training programmes

- 3.1 CAD may approve a training programme for a private pilot licence, commercial pilot licence an instrument rating or an aircraft maintenance (technician/engineer/mechanic) licence that allows an alternative means of compliance with the experience requirements established by this manual, provided that the approved training organization demonstrates to the satisfaction of CAD that the training provides a level of competency at least equivalent to that provided by the minimum experience requirements for personnel not receiving such approved training.

*Note.* A comprehensive training scheme for the aircraft maintenance (technician / engineer / mechanic) licence, including the various levels of competency, is contained in the Procedures for Air Navigation Services — Training (Doc 9868, PANS-TRG).

3.2 When CAD approves a training programme for a multi-crew pilot licence, the approved training organization shall demonstrate to the satisfaction of CAD that the training provides a level of competency in multi-crew operations at least equal to that met by holders of a commercial pilot licence, instrument rating and type rating for an aeroplane certificated for operation with a minimum crew of at least two pilots.

*Note.* Guidance on the approval of training programmes can be found in the Manual on the Approval of Training Organizations (Doc 9841).

#### **4. Safety management**

4.1 States are required, as part of their safety programme, that an approved training organization that is exposed to safety risks during the provision of its services implement a safety management system acceptable to the State that, as a minimum:

- a) identifies safety hazards;
- b) ensures the implementation of remedial action necessary to maintain agreed safety performance;
- c) provides for continuous monitoring and regular assessment of the safety performance; and
- d) aims at a continuous improvement of the overall performance of the safety management system.

*Note.* Guidance on defining safety performance is contained in the Safety Management Manual (SMM) (Doc 9859).

4.2 A safety management system shall clearly define lines of safety accountability throughout the approved training organization, including a direct accountability for safety on the part of senior management.

*Note 1.* — The framework for the implementation and maintenance of a safety management system is contained in Appendix 4. Guidance on safety management systems is contained in the Safety Management Manual (SMM) (Doc 9859).

*Note 2.* — A framework for the implementation and maintenance of a State safety programme is contained in Attachment C.

#### **5. Quality assurance system**

The training organization shall establish a quality assurance system, acceptable to CAD, which ensures that training and instructional practices comply with all relevant requirements.

#### **6. Facilities**

6.1 The facilities and working environment shall be appropriate for the task to be performed and be acceptable to CAD.

6.2 The training organization shall have, or have access to, the necessary information, equipment, training devices and material to conduct the courses for which it is approved.

6.3 Synthetic training devices shall be qualified according to requirements as established by CAD and their use will be approved by CAD to ensure that they are appropriate to the task.

*Note.* The Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625) provides guidance on the approval of flight simulation training devices.

## 7. Personnel

- 7.1 The training organization shall nominate a person responsible for ensuring that it is in compliance with the requirements for an approved organization.
- 7.2 The organization shall employ the necessary personnel to plan, perform and supervise the training to be conducted.
- 7.3 The competence of instructional personnel shall be in accordance with procedures and to a level acceptable to the CAD.
- 7.4 The training organization shall ensure that all instructional personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities. The training programme established by the training organization shall include training in knowledge and skills related to human performance.

*Note.* Guidance material to design training programmes to develop knowledge and skills in human performance can be found in the Human Factors Training Manual (Doc 9683).

## 8. Records

- 8.1 The training organization shall retain detailed student records to show that all requirements of the training course have been met as agreed by CAD.
- 8.2 The training organization shall maintain a system for recording the qualifications and training of instructional and examining staff, where appropriate.
- 8.3 The records required by 7.1 shall be kept for a minimum period of two years after completion of the training. The records required by 7.2 shall be retained for a minimum period of two years after the instructor or examiner ceases to perform a function for the training organization.

## 9. Oversight

CAD will maintain an effective oversight programme of the approved training organization to ensure continuing compliance with the approval requirements.

## 10. Evaluation and checking

When a State has authorized an approved training organization to conduct the testing required for the issuance of a licence or rating, the testing shall be conducted by personnel authorized by CAD or designated by the training organization in accordance with criteria approved by CAD.

# APPENDIX 3

## REQUIREMENTS FOR THE ISSUE OF THE MULTI-CREW PILOT LICENCE — AEROPLANE

(Chapter 2, Section 2.5, refers)

### 1. Training

- 1.1 In order to meet the requirements of the multi-crew pilot licence in the aeroplane category, the applicant shall have completed an approved training course. The training shall be competency-based and conducted in a multi-crew operational environment.
- 1.2 During the training, the applicant shall have acquired the knowledge, skills and attitudes required as the underpinning attributes for performing as a co-pilot of a turbine-powered air transport aeroplane certificated for operation with a minimum crew of at least two pilots.

### 2. Assessment level

The applicant for the multi-crew pilot licence in the aeroplane category shall have satisfactorily demonstrated performance in all the nine competency units specified in 3, at the advanced level of competency as defined in Attachment B.

*Note.* The training scheme for the multi-crew pilot licence in the aeroplane category, including the various levels of competency are contained in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).

### 3. Competency units

The nine competency units that an applicant has to demonstrate in accordance with Chapter 2, 2.5.1.3, are as follows:

- 1) apply threat and error management (TEM) principles;
- 2) perform aeroplane ground operations;
- 3) perform take-off;
- 4) perform climb;
- 5) perform cruise;
- 6) perform descent;
- 7) perform approach;
- 8) perform landing; and
- 9) perform after-landing and aeroplane post-flight operations.

*Note1.* Competency units are broken down into their constituent elements, for which specific performance criteria have been defined. Competency elements and performance criteria are contained in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).

*Note2.* The application of threat and error management principles is a specific competency unit that is to be integrated with each of the other competency units for training and testing purposes.

### 4. Simulated flight

4.1 The flight simulation training devices used to gain the experience specified in Chapter 2, 2.5.3.3, shall have to be approved by CAD.

4.2 Flight simulation training devices shall be categorized as follows:

- a) *Type I.* E-training and part tasking devices approved by CAD that have the following characteristics:
  - involve accessories beyond those normally associated with desktop computers, such as functional replicas of a throttle quadrant, a sidestick controller, or an FMS keypad; and
  - involve psychomotor activity with appropriate application of force and timing of responses.
- b) *Type II.* A flight simulation training device that represents a generic turbine-powered aeroplane.

*Note.* This requirement can be met by a flight simulation training device equipped with a daylight visual system and otherwise meeting, at a minimum, the specifications equivalent to FAA FTD Level 5, or JAA FNPT II, MCC.

- c) *Type III.* A flight simulation training device that represents a multi-engined turbine-powered aeroplane certificated for a crew of two pilots with enhanced daylight visual system and equipped with an auto-pilot.

*Note.* This requirement can be met by a flight simulation training device equipped with a daylight visual system and otherwise meeting, at a minimum, the specifications equivalent to a Level B simulator as defined in JAR STD 1A, as amended; and in FAA AC 120-40B, as amended, including Alternate Means of Compliance (AMOC), as permitted in AC 120-40B. (Some previously evaluated Level A full flight simulators that have been approved for training and checking required manoeuvres may be used.)

- d) *Type IV.* Fully equivalent to a Level D flight simulator or to a Level C flight simulator with an enhanced daylight visual system.

**Note.** *This requirement can be met by a flight simulation training device meeting, at a minimum, the specifications equivalent to a Level C and Level D simulator as defined in JAR STD 1A, as amended; and in FAA AC 120-40B, as amended, including Alternate Means of Compliance (AMOC), as permitted in AC 120-40B.*

**Note.** *The Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625), Volume I – Aeroplanes, provides guidance on the qualification of flight simulation training devices used in training programmes. The manual defines seven examples of flight simulation training devices based on the specific training being conducted, including four examples for the four phases of multi-crew pilot licence training defined in Attachment B of Annex 1. The numbering system used in Doc 9625 is different from the numbering used in 4.2.*

**ATTACHMENT A**  
**ICAO LANGUAGE PROFICIENCY RATING SCALE**

LEVEL	PRONUNCIATION <i>Assumes a dialect and/or accent intelligible to the aeronautical community.</i>	STRUCTURE <i>Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task.</i>	OCABULARY	FLUENCY	COMPREHENSION	INTERACTIONS
Expert 6	Pronunciation, stress, rhythm, and intonation, though possibly influenced by the first language or regional variation, almost never interfere with ease of understanding.	Both basic and complex grammatical structures and sentence patterns are consistently well controlled.	Vocabulary range and accuracy are sufficient to communicate effectively on a wide variety of familiar and unfamiliar topics. Vocabulary is idiomatic, nuanced, and sensitive to register.	Able to speak at length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to emphasize a point. Uses appropriate discourse markers and connectors spontaneously.	Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties.	Interacts with ease in nearly all situations. Is sensitive to verbal and non-verbal cues and responds to them appropriately.
Extended 5	Pronunciation, stress, rhythm, and intonation, though influenced by the first language or regional variation, rarely interfere with ease of understanding.	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with errors which sometimes interfere with meaning.	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete, and work-related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	Able to speak at length with relative ease on familiar topics but may not vary speech flow as a stylistic device. Can make use of appropriate discourse markers or connectors.	Comprehension is accurate on common, concrete, and work related topics and mostly accurate when the speaker is confronted with a linguistic or situational complication or an unexpected turn of events. Is able to comprehend a range of speech varieties (dialect and/or accent) or registers.	Responses are immediate, appropriate, and informative. Manages the speaker/listener relationship effectively.
Operational 4	Pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding.	Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.	Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work-related topics. Can often paraphrase successfully when lacking vocabulary in unusual or unexpected circumstances.	Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.	Comprehension is mostly accurate on common, concrete, and work related topics when the accent or variety used is sufficiently intelligible for an international community of users. When the speaker is confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	Responses are usually immediate, appropriate, and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings by checking, confirming, or clarifying.

*Levels 1, 2 and 3 are on subsequent page.*

LEVEL	PRONUNCIATION <i>Assumes a dialect and/or accent intelligible to the aeronautical community.</i>	STRUCTURE <i>Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task.</i>	OCABULARY	FLUENCY	COMPREHENSION	INTERACTIONS
Performs at a level below						
Preoperational 3	Pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation and frequently interfere with ease of understanding.	Basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning.	Vocabulary range and accuracy are often sufficient to communicate on common, concrete, or work-related topics, but range is limited and the word choice often inappropriate. Is often unable to paraphrase successfully when lacking vocabulary.	Produces stretches of language, but phrasing and pausing are often inappropriate. Hesitations or slowness in language processing may prevent effective communication. Fillers are sometimes distracting.	Comprehension is often accurate on common, concrete, and work related topics when the accent or variety used is sufficiently intelligible for an international community of users. May fail to understand a linguistic or situational complication or an unexpected turn of events	Responses are sometimes immediate, appropriate, and informative. Can initiate and maintain exchanges with reasonable ease on familiar topics and in predictable situations. Generally inadequate when dealing with an unexpected turn of events.
Elementary 2	Pronunciation, stress, rhythm, and intonation are heavily influenced by the first language or regional variation and usually interfere with ease of understanding.	Shows only limited control of a few simple memorized grammatical structures and sentence patterns.	Limited vocabulary range consisting only of isolated words and memorized phrases.	Can produce very short, isolated, memorized utterances with frequent pausing and a distracting use of fillers to search for expressions and to articulate less familiar words.	Comprehension is limited to isolated, memorized phrases when they are carefully and slowly articulated.	Response time is slow and often inappropriate. Interaction is limited to simple routine exchanges.
Elementary 1	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.

*Note. The Operational Level (Level 4) is the minimum required proficiency level for radiotelephony communication. Levels 1 through 3 describe Pre-elementary, Elementary, and Pre-operational levels of language proficiency, respectively, all of which describe a level of proficiency below the ICAO language proficiency requirement. Levels 5 and 6 describe Extended and Expert levels, at levels of proficiency more advanced than the minimum required Standard. As a whole, the scale will serve as benchmarks for training and testing, and in assisting candidates to attain the ICAO Operational Level (Level 4).*

## ATTACHMENT B

### MULTI-CREW PILOT LICENCE — AEROPLANE LEVELS OF COMPETENCY

#### 1. Core flying skills

The level of competency at which the applicant shall have complied with the requirements for the private pilot licence specified in Chapter 2, 2.3, including night flight requirements, and, in addition, have completed, smoothly and with accuracy, all procedures and manoeuvres related to upset training and flight with reference solely to instruments. From the outset, all training is conducted in an integrated multi-crew, competency-based and threat and error management (TEM) environment. Initial training and instructional input levels are high as core skills are being embedded in the *ab initio* application. Assessment at this level confirms that control of the aeroplane is maintained at all times in a manner such that the successful outcome of a procedure or a manoeuvre is assured.

#### 2. Level 1 (Basic)

The level of competency at which assessment confirms that control of the aeroplane or situation is maintained at all times and in such a manner that if the successful outcome of a procedure or manoeuvre is in doubt, corrective action is taken. Performance in the generic cockpit environment does not yet consistently meet the Standards of knowledge, operational skills and level of achievement required in the core competencies. Continual training input is required to meet an acceptable initial operating standard. Specific performance improvement/ personal development plans will be agreed and the details recorded. Applicants will be continuously assessed as to their suitability to progress to further training and assessment in successive phases.

#### 3. Level 2 (Intermediate)

The level of competency at which assessment confirms that control of the aeroplane or situation is maintained at all times and in such a manner that the successful outcome of a procedure or manoeuvre is assured. The training received at Level 2 shall be conducted under the instrument flight rules, but need not be specific to any one type of aeroplane. On completion of Level 2, the applicant shall demonstrate levels of knowledge and operational skills that are adequate in the environment and achieves the basic standard in the core capability. Training support may be required with a specific development plan to maintain or improve aircraft handling, behavioural performance in leadership or team management. Improvement and development to attain the Standard is the key performance objective. Any core competency assessed as less than satisfactory should include supporting evidence and a remedial plan.

#### 4. Level 3 (Advanced)

The level of competency required to operate and interact as a copilot in a turbine-powered aeroplane certificated for operation with a minimum crew of at least two pilots, under visual and instrument conditions. Assessment confirms that control of the aeroplane or situation is maintained at all times in such a manner that the successful outcome of a procedure or manoeuvre is assured. The applicant shall consistently demonstrate the knowledge, skills and attitudes required for the safe operation of an applicable aeroplane type as specified in the performance criteria.

*Note.* Material on the development of performance criteria can be found in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).

## ATTACHMENT C

### GUIDELINES FOR ASSESSING APPLICANTS WITH A LOW-RISK UNCOMPLICATED PREGNANCY

(Chapter 6, Section 6.3.2.22.1, 6.4.2.22.1, 6.5.2.22.2, refers)

*Note: This Attachment does not apply to cabin crew.*

Pregnancy entails unfitness. If obstetric evaluation indicates a low-risk uncomplicated pregnancy, the applicant may be assessed as fit until the end of the 26th week of gestation in cases of Class I and II medical holders (Pilots) and 34th week of gestation in case of Class III medical holders (Air Traffic Controllers), in accordance with the arrangement in this attachment.

1. On confirmation of the pregnancy the applicant shall consult a Gynecologist who must certify that he or she is satisfied that the pregnancy is not likely to interfere with the safe exercise of privileges of duties under the license that the person hold or applied for as the case maybe. This consultation must be sought once a month as long as the holder of the license desires to exercise privileges of duties, under the license that the person holds.
2. The certification by the Gynecologist must be approved by Medical Examiner who will then certify fitness to fly and the period thereof in the license.
3. Even upon the lifting of this suspension it is the responsibility of the pilot to assess herself daily during the course of the pregnancy and should refrain form exercising the privileges of duties, under the license that the person hold in case of any pregnancy related symptoms or when in doubt. The holder must also provide writing to the following effect to the Medical Examiner.

“I..... have been explained in a language I know the potentially significant complications of pregnancy by the Medical Examiner Dr....., particularly in relation to my job as a pilot/co-pilot/Air Traffic Controller. Further more I have been explained in a language I know the potential risks these complications can cause to me or others due to the nature of work I intend to carry out during this pregnancy and the immediate period after confinement. I hereby agree that the approval for this temporary release of my medical suspension due to this pregnancy is at my own risk and that I will assess myself on a daily basis and I should cease to exercise my privileges rendered to me by this release. If I find myself to be having any symptoms which I think is incompatible with the exercise of the said privilege and I shall sought the opinion of the Medical Examiner before exercising the said privilege again.”

4. Following confinement or termination of pregnancy, the applicant shall not be permitted to exercise the privileges of her license for a period of six weeks after which the Medical Examiner should certify her fitness to exercise the privileges of her license.