

# INTERNATIONAL CIVIL AVIATION ORGANIZATION ORGANISATION DE L'AVIATION CIVILE INTERNATIONALE ORGANIZACIÓN DE AVIACIÓN CIVIL INTERNACIONAL МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ГРАЖДАНСКОЙ АВИАЦИИ отна пременента пременен

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Ref.: AN 13/48.1-02/1 31 May 2002

**Subject**: Proposal for the amendment of Annexes 1, 6, 10, 11 and the PANS-ATM concerning language proficiency for radiotelephony communications

**Action required**: Comments to reach Montreal by 30 August 2002

### Sir/Madam,

- I have the honour to inform you that the Air Navigation Commission, at the eighth meeting of its 158th Session held on 4 December 2001, carried out a preliminary review of proposals to amend Annex 1—Personnel Licensing, Annex 6—Operation of Aircraft, Part I—International Commercial Air Transport—Aeroplanes and Part III—International Operations—Helicopters, Annex 10—Aeronautical Telecommunications, Volume II—Communication Procedures including those with PANS status, Annex 11—Air Traffic Services and the Procedures for Air Navigation Services—Air Traffic Management (PANS-ATM, Doc 4444) concerning language proficiency for radiotelephony communications and authorized their transmittal to Contracting States and appropriate international organizations for comments. The proposed amendments, as revised in light of the Commission's discussions, are contained in Attachments A to E to this letter. Key points are discussed below, and additional background information is contained in Attachment F.
- 2. The amendments respond to Assembly Resolution A32-16, "Proficiency in the English language for radiotelephony communications," which was prompted by major accident investigations which had indicated a lack of proficiency in, and comprehension of, the English language by flight crews and air traffic controllers alike as a contributing factor. The resolution called for the strengthening of the relevant provisions with a view to obligating Contracting States to take steps to ensure that air traffic controllers and flight crews involved in flight operations in airspace where the use of the English language is required are proficient in conducting and comprehending radiotelephony communications in the English language.
- 3. Conducting and comprehending radiotelephony communications requires competence with standard phraseology as well as general proficiency in the language used for radiotelephony communications. Amendments to Annex 10, Volume II and the PANS-ATM regarding the harmonization of radiotelephony speech and improvement in the use of standard phraseology became applicable on 1 November 2001. The

33rd Session of the Assembly (Montreal, September/October 2001) noted that provisions related to language proficiency were being developed, and considered that the objective should not be limited to the English language. On 22 October 2001 the Council, at the first meeting of its 164th Session, requested that States be informed accordingly and be encouraged to promote harmonization of radiotelephony phraseology with respect to all languages used in international civil aviation.

- 4. The proposed amendments strengthen the provisions for the use of the language to be used in radiotelephony communications, both the language of the station on the ground and, in airspace where it is required, English. In particular, the proposals establish minimum skill level requirements for language proficiency for flight crews and air traffic controllers; they introduce an ICAO language proficiency rating scale applicable to both native and non-native speakers, and they provide a testing schedule to demonstrate language proficiency.
- 5. It is proposed to delete Attachment B to Annex 10, Volume II, which relates to the development of radiotelephony speech for international aviation. The Commission wished to emphasize that the Secretariat is in the process of developing comprehensive guidance material to replace this Attachment. The spirit of the current guidance material in this Attachment, including the emphasis on the importance of universal availability of a common language for radiotelephony communications and the call for close international cooperation, will be carried forward in the new guidance material. The new material will support States' efforts to implement language proficiency requirements and will include, *inter alia*, guidance on the use of the language proficiency rating scale, on testing language proficiency, and on the development of efficient and effective State-approved aviation language training programmes.
- 6. The Commission recognized that, while language proficiency requirements will be an important contribution to aviation safety, compliance will require significant training efforts. Therefore, it was agreed that the views of States and appropriate international organizations should be sought not only on the content of the amendment proposals but also on related issues. In particular, I have been directed to seek your views and comments on the issues outlined below.
  - a) While the envisaged applicability date of the proposed amendments is 27 November 2003, the proposed date by which language proficiency would need to be demonstrated is 1 January 2008 (see Attachment B, paragraphs 1.2.9.2 and 1.2.9.4). This date has been determined in consideration of both the operational need to introduce the proficiency requirements as soon as reasonably possible, and the amount of work by States and individuals to comply;
  - b) The level of language proficiency achieved would need to be administered and may need to be indicated. This could be in the form of an endorsement of language proficiency as a new detail to be added to personnel licences, under detail XIII) Remarks (see Attachment B, page B-9); and
  - c) Please indicate whether you consider the date of 1 January 2008 to be practical for demonstrating language proficiency of flight crews, air traffic controllers and aeronautical station operators as well as for an endorsement of language proficiency in personnel licences.
- 7. In examining the proposed amendments, you should not feel obliged to comment on editorial aspects as such matters will be addressed by the Air Navigation Commission during its final review of the draft amendment.

- 8. May I request that any comments you may wish to make on the proposed amendments be dispatched to reach me not later than 30 August 2002. The Air Navigation Commission has asked me to specifically indicate that comments received after the due date may not be considered by the Commission and the Council. In this connection, should you anticipate a delay in the receipt of your reply, please let me know in advance of the due date.
- 9. For your information the proposed amendments are envisaged for applicability on 27 November 2003. Any comments you may have thereon would be appreciated.
- 10. The subsequent work of the Air Navigation Commission and the Council would be greatly facilitated by specific statements on the acceptability or otherwise of the proposal. Please note that, for the review of your comments by the Commission and the Council, replies are normally classified as "agreement with or without comments," "disagreement with or without comments" or "no indication of position." If in your reply the expression "no objections" or "no comments" are used, they will be taken to mean "agreement without comment" and "no indication of position," respectively. In order to facilitate proper classification of your response, a new form has been included in Attachment G which may be completed and returned together with your comments, if any, on the proposals in Attachments A to E.

Accept, Sir/Madam, the assurances of my highest consideration.

**Enclosures:** 

A — Proposed amendment to Annex 10

B — Proposed amendment to Annex 1

C — Proposed amendment to Annex 6

D - Proposed amendment to Annex 11

E — Proposed amendment to the PANS-ATM

F — Background information on proposed amendments

G — Response Form

### **ATTACHMENT A** to State letter AN 13/48.1-02/1

### NOTES ON THE PRESENTATION OF THE AMENDMENTS

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

1. Text to be deleted is shown with a line through it. text to be deleted

2. New text to be inserted is highlighted with grey shading. new text to be inserted

3. Text to be deleted is shown with a line through it followed by the replacement text which is highlighted with grey shading.

# ANNEX 10 — AERONAUTICAL TELECOMMUNICATIONS, VOLUME II — COMMUNICATION PROCEDURES INCLUDING THOSE WITH PANS STATUS

# CHAPTER 5. AERONAUTICAL MOBILE SERVICE — VOICE COMMUNICATIONS

### 5.1 General

Note.— For the purposes of these provisions, the communication procedures applicable to the aeronautical mobile service, as appropriate, also apply to the aeronautical mobile satellite service.

- 5.1.1 In all communications the highest standard of discipline shall be observed at all times.
- 5.1.1.1 In all situations for which standard radiotelephony phraseology is specified it shall be used. ICAO phraseology shall be used in all situations for which it has been specified. When standardized phraseology cannot serve an intended transmission, plain language shall be used.
  - Note.—Detailed language proficiency requirements appear in the Appendix to Annex 1.
- 5.1.1.2 The transmission of messages, other than those specified in 5.1.8, on aeronautical mobile frequencies when the aeronautical fixed services are able to serve the intended purpose, shall be avoided.

### 5.2.1 General

- 5.2.1.1 **PANS.** When a controller or pilot communicates via voice, the response should be via voice. Except as provided by 8.2.12.1, when a controller or pilot communicates via CPDLC, the response should be via CPDLC.
- 5.2.1.2 Language to be used

- 5.2.1.2.1 Recommendation.—In general, the The air-ground radiotelephony communications should shall be conducted in the language normally used by the station on the ground or in the English language.
- Note 1.— The language normally used by the station on the ground may not necessarily be the language of the State in which it is located. A common language may be agreed upon regionally as a requirement for stations on the ground in that region.
- Note 2.— The level of language proficiency required for aeronautical radiotelephony communications is specified in the Appendix to Annex 1.
- 5.2.1.2.2 Recommendation.—Pending the development and adoption of a more suitable form of speech for universal use in aeronautical radiotelephony communications, the The English language should be used as such and should shall be available, on request from any aircraft station, unable to comply with 5.2.1.2.1, at all stations on the ground serving designated airports and routes used by international air services.

- Note:—While the Contracting State designates the airports to be used and the routes to be followed by international air services, the formulation of ICAO opinion and recommendations to Contracting States concerned is carried out periodically by Council, ordinarily on the basis of recommendations of Regional Air Navigation Meetings.
- Note 2.— In certain regions the availability of another language, in addition to English, may be agreed upon regionally as a requirement for stations on the ground in that region.
- Note 3.— The development mentioned in 5.2.1.2.2 is the subject of continuing study and the broad principles of this study are laid down in Attachment B.
- 5.2.1.2.3 Recommendation.—Pending implementation of 5.2.1.2.2 and when the aircraft station and the station on the ground cannot use a common language, arrangements should be made between the Competent Authority and the aircraft operating agency concerned for the provision of an interpreter by the latter.
- 5.2.1.2.4 When provided, such interpreters shall be permitted to have access to and use of radiotelephony channels under the supervision of the controller on duty.
- 5.2.1.2.5 5.2.1.2.3 The language normally used by and other languages that may be used on request at a The languages available at a given station on the ground shall form part of the Aeronautical Information Publications and other published aeronautical information concerning such facilities.
- 5.2.1.4 Transmission of numbers in radiotelephony
- 5.2.1.4.3 Pronunciation of numbers

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5.2.1.4.3.1 When the provisions of 5.2.1.2.2 are applied, numbers shall be transmitted using the following pronunciation:

Numeral or numeral element	Pronunciation
0	ZE-RO
1	WUN
2	TOO
3	TREE
4	FOW-er
5	FIFE
6	SIX
7	SEV-en
8	AIT
9	NIN-er
Decimal	DAY-SEE-MAL
Hundred	HUN-dred
Thousand	TOU-SAND

Note.— The syllables printed in capital letters in the above list are to be stressed; for example, the two syllables in ZE-RO are given equal emphasis, whereas the first syllable of FOW-er is given primary emphasis.

5.2.1.4.3.2 **Recommendation.** When the language normally used by the station on the ground is English the pronunciation given in 5.2.1.4.3.1 should shall be used.

Note.— A poster (No. P674) illustrating the desired pronunciation is available from ICAO.

- 5.2.1.5 Transmitting technique
- 5.2.1.5.1 **PANS.**—Each written message should be read prior to commencement of transmission in order to eliminate unnecessary delays in communications.
- 5.2.1.5.2 Transmissions shall be conducted concisely in a normal conversational tone; full use shall be made of standard phraseologies wherever these are prescribed in relevant ICAO documents or procedures.

Note.—See the language proficiency requirements in the Appendix to Annex 1.

- 5.2.1.5.3 **PANS.** Speech transmitting technique should be such that the highest possible intelligibility is incorporated in each transmission. Fulfilment of this aim requires that air crew and ground personnel should:
  - a) enunciate each word clearly and distinctly;
  - b) maintain an even rate of speech not exceeding 100 words per minute. When a message is transmitted to an aircraft and its contents need to be recorded the speaking rate should be at a slower rate to allow for the writing process. A slight pause preceding and following numerals makes them easier to understand:
  - c) maintain the speaking volume at a constant level;

- d) be familiar with the microphone operating techniques particularly in relation to the maintenance of a constant distance from the microphone if a modulator with a constant level is not used;
- e) suspend speech temporarily if it becomes necessary to turn the head away from the microphone.
- 5.2.1.5.4 **Recommendation.** Speech transmitting technique should be adapted to the prevailing communications conditions.
- 5.2.1.5.5 **PANS.** Messages accepted for transmission should be transmitted in plain language or approved phrases ICAO phraseologies without altering the sense of the message in any way. Approved ICAO abbreviations contained in the text of the message to be transmitted to aircraft should normally be converted into the unabbreviated words or phrases which these abbreviations represent in the language used, except for those which, owing to frequent and common practice, are generally understood by aeronautical personnel.
- Note.— The abbreviations which constitute the exceptions mentioned in 5.2.1.5.5 are specifically identified in the abbreviation encode sections of the PANS-ABC (Doc 8400).
- 5.2.1.5.6 **PANS.** To expedite communication, the use of phonetic spelling should be dispensed with, if there is no risk of this affecting correct reception and intelligibility of the message.

# ATTACHMENT B TO VOLUME II — DEVELOPMENT OF RADIOTELEPHONY SPEECH FOR INTERNATIONAL AVIATION

Delete Annex 10, Volume II, Attachment B in its entirety.

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### **ATTACHMENT B** to State letter AN 13/48.1-02/1

### ANNEX 1 — PERSONNEL LICENSING

### CHAPTER 1. DEFINITIONS AND GENERAL RULES CONCERNING LICENCES

### 1.2.9 Language Proficiency

- 1.2.9.1 Flight crews, air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the language normally used for radiotelephony communications.
- 1.2.9.2 As of 1 January 2008, flight crews, air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements in the Appendix.
- 1.2.93 Recommendation Flight crews, air traffic controllers and aeronautical station operators should demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements in the Appendix.
- 1.2.9.4 As of 1 January 2008, the language proficiency of flight crews, air traffic controllers and aeronautical station operators required to communicate in a language other than a mother tongue or native language shall be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level.
- 1.2.9.5 Recommendation.—The language proficiency of flight crews, air traffic controllers and aeronautical station operators required to communicate in a language other than a mother tongue or native language should be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level, as follows:
  - a) those demonstrating language proficiency at the Operational Level (Level 4) should be evaluated at intervals not greater than three years;
  - b) those demonstrating language proficiency at the Extended Level (Level 5) should be evaluated at intervals not greater than six years; and
  - c) those demonstrating language proficiency at the Expert Level (Level 6) should be exempt from further language evaluation.

Note: The language to be used for radiotelephony communications is specified in Annex 10, Volume II, Chapter 5.

### CHAPTER 2. LICENCES AND RATINGS FOR PILOTS

# 2.1 General rules concerning pilot licences and ratings

### 2.1.1 General licensing specifications

- 2.1.1.2 The category of aircraft shall be included in the title of the licence itself, or endorsed as a category rating on the licence.
- 2.1.1.2.1 When the holder of a pilot licence seeks a licence for an additional category of aircraft, the Licensing Authority shall either:
  - a) issue the licence holder with an additional pilot licence for that category of aircraft; or
  - b) endorse the original licence with the new category rating, subject to the conditions of 2.1.2.

Note.— The requirements for category ratings are given in terms of licensing specifications for pilots and at levels appropriate to the privileges to be granted to the licence holder.

- 2.1.1.3 An applicant shall, before being issued with any pilot licence or rating, meet such requirements in respect of age, knowledge, experience, flight instruction, skill, and medical fitness; and language proficiency as are specified for that licence or rating.
- 2.1.1.3.1 An applicant for any pilot licence or rating shall demonstrate, in a manner determined by the Licensing Authority, such requirements for knowledge, and skill, and language proficiency as are specified for that licence or rating.

### 2.3 Private pilot licence — Aeroplane

2.3.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

2.3.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of a private pilot licence — aeroplane shall be to act, but not for remuneration, as pilot-incommand or co-pilot of any aeroplane engaged in non-revenue flights.

### 2.4 Commercial pilot licence — Aeroplane

2.4.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

- 2.4.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of a commercial pilot licence aeroplane shall be:
  - a) to exercise all the privileges of the holder of a private pilot licence aeroplane;

### 2.5 Airline transport pilot licence — Aeroplane

2.5.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5, 1.2.6 1.2.9 and 2.1, the privileges of the holder of an airline transport pilot licence — aeroplane shall be:

a) to exercise all the privileges of the holder of a private and commercial pilot licence — aeroplane and of an instrument rating — aeroplane; and

### 2.6 Instrument rating — Aeroplane

2.6.2 Privileges of the holder of the rating and the conditions to be observed in exercising such privileges

2.6.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of an instrument rating — aeroplane shall be to pilot aeroplanes under IFR.

### 2.7 Private pilot licence — Helicopter

2.7.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

2.7.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of a private pilot licence — helicopter shall be to act, but not for remuneration, as pilot-in-command or co-pilot of any helicopter engaged in non-revenue flights.

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### 2.8 Commercial pilot licence — Helicopter

2.8.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

- 2.8.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of a commercial pilot licence helicopter shall be:
  - a) to exercise all the privileges of the holder of a private pilot licence helicopter;

### 2.9 Airline transport pilot licence — Helicopter

2.9.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of an airline transport pilot licence — helicopter shall be:

a) to exercise all the privileges of the holder of a private and commercial pilot licence — helicopter; and

### 2.10 Instrument rating — Helicopter

2.10.2 Privileges of the holder of the rating and the conditions to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of an instrument rating — helicopter shall be to pilot helicopters under IFR.

### 2.11 Flight instructor rating appropriate to aeroplanes and helicopters

2.11.2 Privileges of the holder of the rating and the conditions to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5, 1.2.9 and 2.1, the privileges of the holder of a flight instructor rating shall be:

a) to supervise solo flights by student pilots; and

### 2.12 Glider pilot licence

2.12.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

2.12.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, \$\frac{1}{42.9}\$ and 2.1, the privileges of the holder of a glider pilot licence shall be to act as pilot-in-command of any glider provided the licence holder has operational experience in the launching method used.

### 2.13 Free balloon pilot licence

2.13.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

2.13.2.1 Subject to compliance with the requirements specified in 1.2.5, 1.2.6, 1.2.9 and 2.1, the privileges of the holder of a free balloon pilot licence shall be to act as pilot-in-command of any free balloon provided that the licence holder has operational experience in hot air or gas balloons as appropriate.

# CHAPTER 3. LICENCES FOR FLIGHT CREW MEMBERS OTHER THAN LICENCES FOR PILOTS

### 3.1 General rules concerning flight navigator and flight engineer licences

- 3.1.1 An applicant shall, before being issued with a flight navigator licence or a flight engineer licence, meet such requirements in respect of age, knowledge, experience, skill, and medical fitness and language proficiency as are specified for those licences.
- 3.1.1.1 An applicant for a flight navigator license or a flight engineer licence shall demonstrate such requirements for knowledge, and skill and language proficiency as are specified for those licences, in a manner determined by the Licensing Authority.

### 3.2 Flight navigator licence

3.2.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

Subject to compliance with the requirements specified in 1.2.5, and 1.2.6 and 1.2.9, the privileges of the holder of a flight navigator licence shall be to act as flight navigator of any aircraft.

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### 3.3 Flight engineer licence

3.3.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges

3.3.2.1 Subject to compliance with the requirements specified in 1.2.5, and 1.2.6 and 1.2.9, the privileges of the holder of a flight engineer licence shall be to act as flight engineer of any type of aircraft on which the holder has demonstrated a level of knowledge and skill, as determined by the Licensing Authority on the basis of those requirements specified in 3.3.1.2 and 3.3.1.4 which are applicable to the safe operation of that type of aircraft.

# CHAPTER 4. LICENCES AND RATINGS FOR PERSONNEL OTHER THAN FLIGHT CREW MEMBERS

# 4.1 General rules concerning licences and ratings for personnel other than flight crew members

- 4.1.1 An applicant shall, before being issued with any licence or rating for personnel other than flight crew members, meet such requirements in respect of age, knowledge, experience and, where appropriate, language proficiency, medical fitness and skill, as are specified for that licence or rating.
- 4.1.2 An applicant, for any licence or rating for personnel other than flight crew members, shall demonstrate, in a manner determined by the Licensing Authority, such requirements in respect of knowledge, and skill, and language proficiency as are specified for that licence or rating.

### 4.3 Air traffic controller licence

### 4.3.1 Requirements for the issue of the licence

Before issuing an air traffic controller licence, a Contracting State shall require the applicant to meet the requirements of 4.3.1 and the requirements of at least one of the ratings set out in 4.4. Unlicenced State employees may operate as air traffic controllers on condition that they meet the same requirements.

### 4.3.1.1 Age

The applicant shall be not less than 21 years of age.

### 4.3.1.2 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the holder of an air traffic controller licence, in at least the following subjects:

### Human performance

d) human performance relevant to air traffic control;

Note.— Guidance material to design training programmes on human performance can be found in the Human Factors Training Manual (Doc 9683).

### Language

e) the language or languages nationally designated for use in air traffic control and ability to speak such language or languages without accent or impediment which would adversely affect radio communication:

### Meteorology

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f)e) aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

Secretariat Note.— Renumber subsequent paragraphs accordingly.

### 4.4 Air traffic controller ratings

4.4.3 Privileges of the holder of the air traffic controller rating(s) and the conditions to be observed in exercising such privileges

- 4.4.3.1 Subject to compliance with the requirements specified in 1.2.5, and 1.2.6 and 1.2.9, the privileges of the holder of an air traffic controller licence endorsed with one or more of the undermentioned ratings shall be:
  - a) aerodrome control rating: to provide or to supervise the provision of aerodrome control service for the aerodrome for which the licence holder is rated;

# 4.6 Aeronautical station operator licence

Note.— This licence is not intended for personnel providing Aerodrome Flight Information Service (AFIS). Guidance on the qualifications to be met by these personnel can be found in Circular 211, Aerodrome Flight Information Service (AFIS).

### 4.6.1 Requirements for the issue of the licence

4.6.1.1 Before issuing an aeronautical station operator licence, a Contracting State shall require the applicant to meet the requirements of 4.6.1. Unlicensed individuals may operate as aeronautical station operators on the condition that the State from which they operate ensures that they meet the same requirements.

### 4.6.1.2 Age

The applicant shall be not less than 18 years of age.

### 4.6.1.3 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the holder of an aeronautical station operator, in at least the following subjects:

### General knowledge

a) air traffic services provided within the State;

### Language

 b) the language or languages nationally designated for use in air-ground communications and ability to speak such language or languages without accent or impediment which would adversely affect radio communication;

### Operational procedures

e)b) radiotelephony procedures; phraseology; telecommunication network;

Secretariat Note.— Renumber subsequent subparagraphs accordingly.

4.6.2 Privileges of the aeronautical station operator and the conditions to be observed in exercising such privileges

4.6.2.1 Subject to compliance with the requirements specified in 1.2.5 and 1.2.9, the privileges of the holder of an aeronautical station operator licence shall be to act as an operator in an aeronautical station. Before exercising the privileges of the licence, the holder shall be familiar with all pertinent and current information regarding the types of equipment and operating procedures used at that aeronautical station.

### CHAPTER 5. SPECIFICATIONS FOR PERSONNEL LICENCES

5.1 Personnel licences issued by a Contracting State in accordance with the relevant provisions of this Annex shall conform to the following specifications:

### 5.1.1 Detail

The following details shall appear on the licence:

I) Name of State (in bold type);

- II) Title of licence (in very bold type);
- III) Serial number of the licence, in arabic numerals, given by the authority issuing the licence;
- IV) Name of holder in full (in roman alphabet also if script of national language is other than roman);
- IVa) Date of birth;
- V) Address of holder;
- VI) Nationality of holder;
- VII) Signature of holder;
- VIII) Authority and, where necessary, conditions under which the licence is issued;
- IX) Certification concerning validity and authorization for holder to exercise privileges appropriate to licence;
- X) Signature of officer issuing the licence and the date of such issue;
- XI) Seal or stamp of authority issuing the licence;
- XII) Ratings, e.g. category, class, type of aircraft, airframe, aerodrome control, etc.;
- XIII) Remarks, i.e. special endorsements relating to limitations and endorsements for privileges, including from 1 January 2008 an endorsement of language proficiency;
- XIV) Any other details desired by the State issuing the licence.

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### APPENDIX

### LANGUAGE PROFICIENCY REQUIREMENTS

(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 the Attachment.

1.1 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 the Attachment.

### 2. Holistic descriptors

- 2.1 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;
  - use appropriate communicative strategies to exchange messages and to recognize and resolve misunderstandings (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.

# ATTACHMENT TO ANNEX 1

1.1 ICAO language proficiency rating scale: Expert, Extended and Operational Levels.

INTERACTIONS	Interacts with ease in nearly all situations. Is sensitive to verbal and non-verbal cues, and responds to them appropriately.	Responses are immediate, appropriate, and informative. Manages the speaker/listener relationship effectively.	Responses are usually immediate, appropriate, and informative. Initiates and maintains exchanges even when dealing with an expected turn of events. Deals adequately with apparent misunderstandings by checking, confirming, or clarifying.
COMPREHENSION	Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties.	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.	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 inexpected turn of events, nacqueeted turn of events, comprehension may be slower or require clarification strategies.
FLUENCY	Able to speak at length with a natural, effortless flow. stries speed flow for stylistic effect, e.g. to emphasize a point. Uses appropriate discourse markers and connectors spontaneously.	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.	Produces stretches of language at an appropriate tempor There may be occasional loss of fluency on transitionif 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.
VOCABULARY	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.	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete, and work related topics.  Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	Vocabulary range and Produces stretche accuracy are usually fanguage at an ap sufficient to communicate tempor. There may effect to go occasional loss of concrete, and work related transition from retopies. Can often paraphrase successfully spontaneous interpretain unusual or unexpected finited use of discussionary of the fillers are not discussional and the fillers are not discussional and the fillers are not discussed.
STRUCTURE REESPAY GRAMMATICAL STRUCTURES AND SENTENCE PATTERNS ARE DETERMINED BY LANCHAGE PROCTIONS APPROPRIATE TO THE TASK.	Both basic and complex grammatical structures and sentence patterns are consistently well controlled.	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with errors which sometimes interfere with meaning.	Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may oceur, particularly in unusual or-unexpected circumstances, burrarely interfere with meaning.
PRONUNCIATION ASSUMES A PLACE ANNOR ACCENT INTELLIGIBLE TO THE ACRONAUTICAL COMMONITY.	Pronunciation, stress, rhythm, and intonation, though possibly influenced by the first language or regional variation, almost never interfere with understanding.	Pronunciation, stress, rhythm, and intonation, though influenced by the first language or regional variation, rarely interfere with understanding.	Pronunciation, stress-rhythm, and intonation are influenced by the first language or regional variation but only sometimes interfere with understanding.
LEVEL	Expert 6	EXTENDED 5	OPERATION'AL

1.2 ICAO language proficiency rating scale: Pre-Operational, Elementary and Pre-Elementary Levels.

INTERACTIONS		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.	Response time is slow, and often inappropriate. Interaction is limited to simple routine exchanges.	Performs at a level below the Elementary level.
COMPREHENSION			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.	Comprehension is limited to isolated, memorized phrases when they are carefully and slowly articulated.
FLUENCY	N PRECEDING PAGE	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.	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.	Performs at a level below the Elementary level.
VOCABULARY	LEVELS 4, 5 AND 6 ARE ON PRECEDING PAGE	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.	Limited vocabulary range consisting only of isolated words and memorized phrases.	Performs at a level below the Elementary level.
STRUCTURE RELEVANT GRAMMANTICAL STRUCTURES AND SENTENCE PATTERNS ARE DETERMINED BY LANGUAGE FUNCTIONS APPROPRIATE TO THE TASK.		Basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning.	Shows only limited control of a few simple memorized grammatical structures and sentence patterns.	Performs at a level below the Elementary level.
PRONUNCIATION ASSUMES A DIALECT AND/OR ACENT INTELLIGIBLE TO THE AERONAUTICAL COMMUNITY.		Pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation and frequently interfere with understanding.	Pronunciation, stress, rhythm, and intonation are heavily influenced by the first language or regional variation and usually interfere with understanding.	Performs at a level below the Elementary level.
LEVEL		PRE- OPERATIONAL 3	ELEMENTARY 2	PRE- ELEMENTARY 1

Note.—The Operational Level (Level 4) is the minimum required proficiency level for radiotelephony communication. Levels 1 through 3 describe Pre-elementary, and Pre-operational levels of Inoficiency more advanced than the minimum required Standard. As a whole, the scale will serve as benchmarks for training and testing, in assisting candidates to attain the ICAO Operational Level (Level 4).

End of new text.

### **ATTACHMENT** C to State letter AN 13/48.1-02/1

### ANNEX 6 — OPERATION OF AIRCRAFT

### PART I — INTERNATIONAL COMMERCIAL AIR TRANSPORT — AEROPLANES

### **CHAPTER 3. GENERAL**

3.1 Compliance with laws, regulations and procedures

3.1.5 Operators shall ensure that pilots-in-command have available on board the aeroplane all the essential information concerning the search and rescue services in the area over which the aeroplane will be flown.

Note.— This information may be made available to the pilot by means of the operations manual or such other means as is considered appropriate.

3.1.6 Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for aeronautical radiotelephony communications as specified in Annex 1.

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### ANNEX 6 — OPERATION OF AIRCRAFT

### PART III — INTERNATIONAL OPERATIONS — HELICOPTERS

### SECTION II INTERNATIONAL COMMERCIAL AIR TRANSPORT

### CHAPTER 1. GENERAL

1.1 Compliance with laws, regulations and procedures

- 1.1.1 Operators shall ensure that their employees when abroad know that they must comply with the laws, regulations and procedures of the States in which their helicopters are operated.
- 1.1.2 Operators shall ensure that all pilots are familiar with the laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the heliports to be used and the air navigation facilities relating thereto. The operator shall ensure that other members of the flight crew are familiar with such of these regulations and procedures as are pertinent to the performance of their respective duties in the operation of the helicopter.
- 1.1.3 Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for radiotelephony communications as specified in Almex 1.
- 1.1.3 1.1.4 An operator or a designated representative shall have responsibility for operational control.

Note.— The rights and obligations of a State in respect to the operation of helicopters registered in that State are not affected by this provision.

Secretariat Note.— Renumber subsequent paragraphs accordingly.

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### ATTACHMENT D to State letter AN 13/48.1-02/1

### ANNEX 11 — AIR TRAFFIC SERVICES

### CHAPTER 2. GENERAL

2.25 Establishment of requirements for carriage and operation of pressure-altitude reporting transponders

States shall establish requirements for carriage and operation of pressure-altitude reporting transponders within defined portions of airspace.

Note.— This provision is intended to improve the effectiveness of air traffic services as well as airborne collision avoidance systems.

### 2.26 ATS safety management

2.26.1 States shall implement systematic and appropriate ATS safety management programmes to ensure that safety is maintained in the provision of ATS within airspaces and at aerodromes.

. . .

### 2.27 Language proficiency

- 2.27. 1 An air traffic services provider shall ensure that air traffic controllers speak and understand the language used for radiotelephony communications as specified in Annex 1.
- 2.27.2 Except when communications between air traffic control units are conducted in a mutually agreed language, the English language shall be used for such communications.

### **ATTACHMENT E** to State letter AN 13/48.1-02/1

# PROCEDURES FOR AIR NAVIGATION SERVICES — AIR TRAFFIC MANAGEMENT (DOC 4444)

### CHAPTER 12. PHRASEOLOGIES

### 12.1 COMMUNICATIONS PROCEDURES

The communications procedures shall be in accordance with Volume II of Annex 10 — Aeronautical Telecommunications, and pilots, ATS personnel and other ground personnel shall be thoroughly familiar with the radiotelephony procedures contained therein.

### 12.2 GENERAL

- 12.2.1 Most phraseologies contained in Section 12.3 of this Chapter show the text of a complete message without call signs. They are not intended to be exhaustive, and when circumstances differ, pilots, ATS personnel and other ground personnel will be expected to use appropriate subsidiary phraseologies plain language which should be as clear and concise as possible and designed to avoid possible confusion by those persons using a language other than one of their national languages, to the level specified in the ICAO language proficiency requirements contained in Annex I—Personnel Licensing.
- 12.2.2 The phraseologies are grouped according to types of air traffic service for convenience of reference. However, users shall be familiar with, and use as necessary, phraseologies from groups other than those referring specifically to the type of air traffic service being provided. All phraseologies shall be used in conjunction with call signs (aircraft, ground vehicle, ATC or other) as appropriate. In order that the phraseologies listed should be readily discernible in Section 12.3, call signs have been omitted. Provisions for the compilation of RTF messages, call signs and procedures are contained in Annex 10, Volume II, Chapter 5.

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### **ATTACHMENT F** to State letter AN 13/48.1-02/1

### BACKGROUND INFORMATION TO PROPOSED AMENDMENTS CONCERNING LANGUAGE PROFICIENCY FOR RADIOTELEPHONY COMMUNICATIONS

- 1. The introduction of proposed amendments concerning language proficiency for radiotelephony communications raises a number of issues which warrant clarification:
  - a) the distinction between phraseologies and "plain" language;
  - b) the applicability of the proposed language proficiency requirement to native and non-native speakers;
  - c) the applicability of the proposed language proficiency requirement to all languages used for radiotelephony communications; and
  - d) the rationale for a proposed testing schedule.

### 2. The role of phraseologies and plain language

Standardized ICAO phraseologies have been developed to cover many circumstances, mainly routine events, and include some predictable emergency or non-routine events. However, no set of standardized phraseologies can fully describe all possible circumstances and responses. It is felt that language proficiency limited to memorized phraseologies is inadequate, and a need exists to use a breadth of language beyond the narrow subset of ICAO phraseologies. Furthermore, specialized language relies upon a solid foundation in general or plain language. Although mentioned explicitly in the Foreword to the *Manual of Radiotelephony* (Doc 9432), the use of plain language is not elaborated upon in any ICAO document. The proposed amendments, therefore, strengthen the provisions for the use of ICAO phraseologies and provide improved guidance on the use of plain language when phraseologies do not suffice.

### 3. Proposed language proficiency requirements and rating scale

- 3.1 The language proficiency requirement and its related rating scale were developed with the assistance of the aviation language specialists in the Proficiency Requirements In Common English Study Group. With backgrounds in Applied Linguistics and experience in aviation communications, the group drew on research and years of practical experience in training and testing controllers and pilots to appropriate levels of language proficiency for efficient and safe radiotelephony communications. The proficiency requirement and scale were developed with both native and non-native speakers in mind and are applicable to both groups.
- 3.2 Furthermore, it should be noted that the proficiency requirement and scale were developed to be applicable to any language used for radiotelephony communications. Thus, the proposed amendment to Annex 1 refers to the ICAO language proficiency requirement for any language used in radiotelephony communications.

### 4. **Testing requirements**

4.1 Additionally, proposed amendments to Annex 1 specify recurrent testing in order to ensure that language skills do not diminish. Except at the very highest levels, language proficiency can diminish when an individual does not have sufficient opportunity to use the language. The proposed schedule for recurrent language testing reflects that stronger language skills require less frequent testing, with no recurrent testing required for those individuals at the highest levels of language proficiency.

### ATTACHMENT G to State letter AN 13/48.1-02/1

# RESPONSE FORM TO BE COMPLETED AND RETURNED TO ICAO TOGETHER WITH ANY COMMENTS YOU MAY HAVE ON THE PROPOSED AMENDMENTS

То:	The Secretary General International Civil Aviation Orga 999 University Street Montreal, Quebec Canada, H3C 5H7	nization				
(State	)		_			
Please	make a checkmark $(\sqrt{\ })$ against one ents" or "disagreement with common the common	option for e	each amendn e <b>provide y</b> o	nent. If you cour comment	hoose options s on separate	s "agreement wit e <b>sheets</b> .
		Agreement without comments	Agreement with comments*	Disagreement without comments	Disagreement with comments	No position
Telecon	ment to <b>Annex 10</b> — Aeronautical imunications ment A refers)					
	ment to Annex 1 — Personnel Licensing ment B refers)					
Amendr (Attachi	ment to <b>Annex 6</b> — Operation of Aircraft ment C refers)					
Amendr (Attachi	ment to Annex 11 — Air Traffic Services ment D refers)					
Service (PANS-	ment to the <i>Procedures for Air Navigation</i> s — <i>Air Traffic Management</i> ATM, Doc 4444) ment E refers)					
of the a	reement with comments" indicates to amendment proposal; the comments parts of the proposal and/or offer a	s themselves	may include	e, as necessar	vith the intent y, your reserv	and overall thruations concerning
Signati	ire					_

— END —