

International Civil Aviation Organization

The Second Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/2)

Bangkok, Thailand, 4 – 8 October 2004

Agenda Item 8: Any Other Business

LANGUAGE PROFICIENCY

(Presented by the Secretariat)

SUMMARY

This paper provides information on the new ICAO requirements for controllers and pilots involved in international operations to demonstrate a minimum level of English language proficiency, introduces the pending *Manual on the Implementation of the ICAO Language Proficiency Requirements* (Doc 9835) and notifies dates for the December 2004 Tokyo Seminar on language proficiency.

1. INTRODUCTION

- 1.1 Between 1976 and 2000, more than 1100 passengers and crew lost their lives in accidents in which investigators determined that language problems had played a contributory role. Moreover, numerous incidents involving language issues, including a number of runway incursions, are reported annually.
- 1.2 Prior to the adoption of Amendment 164, the provisions of Annex 1 already required that air traffic controllers and pilots speak and understand the language used for radiotelephony communications. Additionally the standards contained in Annex 10 Volume II, paragraph 5.1.1.1 provide that "ICAO standardized phraseology shall be used in all situations for which it has been specified. Only when standardized phraseology cannot serve an intended transmission, plain language shall be used". Annex 10 Volume II, paragraph 5.2.1.2.2 also requires that "The English language shall be available, on request from any aircraft station, at all stations on the ground serving designated airports and routes used by international air services."
- 1.3 Even though suitable Standards and Recommended Practices (SARPs) mandating the use of standard phraseologies and the use of English language for international communications were in place, concern increased regarding the less than desirable English language proficiency levels evident in some high profile accidents and incidents.
- 1.4 The increasing concern over the role of language in airline accidents resulted in action during 1998 when the ICAO Assembly assigned high priority to efforts to strengthen provisions concerning language requirements. Consequently, the amendments to ICAO Annex 1 Personnel Licensing, Annex 6 Operation of Aircraft, Annex 10 Aeronautical Telecommunications and Annex 11 Air Traffic Services adopted in March 2003 contain language proficiency requirements that clarified and extended existing provisions.

2. DISCUSSION

Testing and Rating Scale

- 2.1 The ability to communicate when there is no standard phraseology to cover the situation is critical to safety. In practice this means that pilots and air traffic controllers must be able to achieve mutual understanding through the use of plain or general language to get their messages heard and understood. It is precisely this issue of plain or general language use and the assessment of a suitable level of language proficiency that has been problematic in the aviation context.
- 2.2 In view of the above discussion, Amendment 164 of Annex 1 introduced a strengthened language proficiency requirement as follows.
 - "1.2.9.4 As of 5 March 2008, aeroplane and helicopter pilots, 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."
- 2.3 ICAO language requirements focus on the assessment of communicative proficiency, that is, an individual's speaking and listening skills only. The best way to assess communicative speaking and listening proficiency is by assessing actual speaking performance, and this will always require the use of some sort of scale to guide good judgment. In addition, the ICAO language proficiency requirements apply to native or non-native speakers alike, in order to identify other issues (e.g. any speech impediment) that would affect an individual's capacity to operate safely.
- 2.4 Accordingly, Amendment 164 to Annex 1 includes the following Appendix:

"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."

- Amendment 164 also includes an Attachment to Annex 1 specifying the criteria for the requirements and assessment of language proficiency. This recently developed ICAO language proficiency rating scale describes 6 levels of proficiency and will be used to guide the assessment of an individual's language ability. The extract from the Attachment relating to the Level 4 criteria required for pilot and controller proficiency is reproduced in the Appendix to this paper.
- The final format of any formal assessment will be determined by the individual States to suit their specific needs, but the language tests should be tailor-made for aviation. Commercially available English knowledge tests are often not appropriate for the purpose of testing language competency for pilots and air traffic controllers. Efforts to develop appropriate commercially available aviation-specific testing instruments have already begun and it is expected that more aviation-specific test options will be available in the future. The ICAO *Manual on the Implementation of Language Proficiency Requirements* (Doc 9835) will provide specific suggestions on how States can assess the suitability and reliability of testing solutions that are likely to be proposed by the industry.

Recurrent Testing and Training

- Another important aspect of the language proficiency provisions is that an emphasis is placed on the need for recurrent training and testing. Recurrent testing of pilot and controller language skills is important for two reasons. Firstly, it is widely acknowledged that language skills taper off if people do not have the opportunity to use and practice them. Retesting is particularly important for individuals with intermediate levels of proficiency who live in places which offer them little opportunity to use their second language.
- 2.8 Secondly, retesting is important because of the necessarily inexact nature of language proficiency assessment. As with all grading systems, there is a possibility that on occasion an individual who actually demonstrates Level 3 ability will be assessed as meeting the Level 4 standard and vice versa.
- 2.9 In view of the above discussion, Amendment 164 to Annex 1 also adopted the following Recommendation.
 - 1.2.9.7 **Recommendations.** The language proficiency of aeroplane and helicopter pilots, flight navigators required to use the radio telephone aboard an aircraft, air traffic controllers and aeronautical station operators who demonstrate proficiency below the Expert Level (Level 6) 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 least once every three years; and
 - b) those demonstrating language proficiency at the Extended Level (Level 5) should be evaluated at least once every six years.

ICAO Aviation Language Symposium

A three-day symposium on the new ICAO language proficiency requirements was held at ICAO Headquarters, Montreal, from 1 to 3 September 2004. This symposium was part of a worldwide educational and awareness campaign to introduce the ICAO language proficiency requirements and to provide practical information to facilitate implementation of the SARPs on the ICAO language proficiency requirements contained in the recent amendments to Annexes 1, 6, 10 and 11 that take effect in 2008. The symposium was intended for managers from government, airlines and air traffic service providers that will be in charge of implementing the new requirements, as well as training entities that may be interested in providing aviation language training and testing services. Participants received practical advice on how to comply with the ICAO Standards and Recommended Practices concerning language proficiency.

Regional Language Proficiency Seminars

- 2.11 Language Proficiency Regional Seminars will be organized in the various ICAO regions after the symposium. The seminars will provide those who were not able to attend the symposium with an opportunity to become familiar with the new ICAO Standards and supporting implementation strategies. Regional seminars will include workshops to allow participants to gain hands-on experience in assessing language training and testing programmes.
- 2.12 The First Regional Seminar for the Asia/Pacific Region will be held in Tokyo, Japan from 8 to 10 December 2004, hosted by the Japanese Civil Aviation Bureau. Details on this seminar will be provided in due course by the ICAO Asia/Pacific Regional Office.

Manual on the Implementation of the ICAO Language Proficiency Requirements

2.13 A manual addressing the various training and evaluation issues related to the implementation of ICAO language proficiency Standards is in preparation. The *Manual on the Implementation of the ICAO Language Proficiency Requirements* (Doc 9835-AN/453) is expected to be published at the end of the third quarter of 2004.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to note:
 - a) the information on the latest amendment to Annexes 1, 6, 10 and 11 relating to language proficiency requirements;
 - b) the information on the ICAO Manual on the Implementation of the ICAO Language Proficiency Requirements (Doc 9835) under preparation; and
 - c) the need for States to fully participate in the ICAO Asia/Pacific Seminar on Language Proficiency in Tokyo, to be held 8 to 10 December, 2004.

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LANGUAGE PROFICIENCY

ICAO RATING SCALE FOR OPERATIONAL LEVEL 4

Pronunciation: (Assumes a dialect and/or accent intelligible to the aeronautical community)

Pronunciation, stress, rhythm, and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding.

Structure: (Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task)

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:

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.

Fluency:

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:

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.

Interactions:

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.

(Note: For complete information on the ICAO language proficiency rating scales, please refer to the Attachment to Annex 1.)