International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
SIXTEENTH MEETING OF THE CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS/16)
Punta Cana, Dominican Republic, 28 March – 1 April 2011

Agenda Item 3: Performance framework for Regional Air Navigation Planning and Implementation

3.1 Global, inter-regional and intra-regional activities concerning air navigation systems in the CAR/SAM Regions

ENGLISH PROFICIENCY ASSESSMENT

(Note presented by Brazil)

SUMMARY

This Working Paper aims to present the Brazilian experience in the assessment of the English proficiency level of air traffic controllers from the Brazilian Airspace Control System (SISCEAB), this assessment being conducted in accordance with the guidelines contained in ICAO Doc 9835 and the validation process to which the evaluation test was submitted.

Reference:
- Doc 9835, 2ª ed. – 2010
- Circ 318 AN/180, 2009

1. Introduction

1.1. In 2004, concerned with the issue of safety of operations, ICAO published Doc 9835 with the aim of guiding the Contracting States on a model of evaluation in a common language for professionals (pilots and controllers) who speak different languages to communicate in a third language (English).

1.2. Brazil, a country whose population speaks only Portuguese and does not have English or another language as a second language, began actions, by means of DECEA, as of 2005, to test and train its more than 3,000 air traffic controllers.

1.3. In pursuit of excellence in its work, DECEA partnered in 2009 with a recognized institution of higher education in Brazil, Universidade de Campinas - UNICAMP, with specialists in Language Proficiency Testing on an international level.

2. Background

2.1. With the publication of ICAO Doc 9835 in 2004, requirements were established regarding English proficiency to be achieved by pilots, air traffic controllers and operators of aeronautical telecommunication stations. The guidelines are for both the training and testing for these professionals.

2.2. In the months of November and December 2005, DECEA conducted a diagnostic assessment of air traffic controllers from SISCEAB in order to determine the initial level of knowledge in English, to assess the need for strategic actions to increase the proficiency level of its professionals.

2.3. In 2006, DECEA started the English Level Improvement Program, approved by Ordinance No. 114/DGCEA of 04 November, 2006.

2.4. A DECEA team deepened studies on the assessment of foreign language proficiency, by attending the Rater Course, developed in accordance with the ICAO standards, at the Mayflower College - England, and in 2007, the SISCEAB English Language Proficiency Exam (EPLIS) was drawn up and taken for the first time by the more than 3,000 air traffic controllers of the SISCEAB. Since then, EPLIS has been taken annually by controllers who have not demonstrated the ICAO minimum level of proficiency 4, or by professionals who need to revalidate their knowledge, according to the validity criteria laid down by ICAO (3 years for level 4 and 6 years for level 5).

2.5. In 2009, DECEA initiated contacts with UNICAMP, so that this renowned Institution, with experts in the field of language proficiency examinations, conducted a validation process of EPLIS, which was developed during the year 2010.

3. EPLIS Methodology

3.1. EPLIS is applied in two phases. The first stage is computer-based, and all air traffic controllers and operators of aeronautical telecommunications stations throughout the country are tested.

3.2. The candidate takes the 1st phase in their workplace, supervised by a previously appointed instructor. The test has a maximum duration of 70 (seventy) minutes and has 30 questions; each question contains one different audio, all in English, addressing circumstances in which aeronautical vocabulary is privileged, in situations that intersect with the target activity of an air traffic service (ATS) provider.

3.3. The objective of this Phase 1 is to select candidates who have answered correctly at least 70% of the test (21 questions), so they are able to perform Phase 2. So it's a qualifying stage.

3.4. The second phase consists of an interview with the presence of two professionals (an interlocutor and a rater) who assess the candidate's proficiency in English considering the six ICAO descriptors (vocabulary, pronunciation, structure, fluency, comprehension and interactions). The entire interview is based on the aeronautical context. It is noteworthy that the descriptors are determined by ICAO according to the ICAO Language Proficiency Rating Scale (contained in Doc 9835, Appendix A).

3.5. Importantly, the model using two primary raters (one interlocutor and one rater) is established in Doc 9835 and recommends that one of them should be a language expert and the other an air traffic expert.

3.6. During the second phase, while the interlocutor conducts the interview, the rater directs his undivided attention to follow up the candidate's performance and score according to the ICAO table.

At the end of the test, the interlocutor also scores the candidate, in order to compare the ratings given by both experts. If there is a discrepancy as to the candidate's proficiency level, each one strengthens their arguments and defines the level of the candidate. This whole process is intended to provide accurate results and place the candidate in the appropriate proficiency level.

4. Peculiarities of the Brazilian Test

4.1. Due to the large number of air traffic controllers in Brazil (more than 3,000 professionals) and the size of the territory, there was a need for the first phase of the exam to have an eliminatory character. The interviews in the second phase are conducted at the headquarters of the Regional Units of DECEA (CINDACTA and SRPV SP) and in cities where there are ATS Units in which there was a considerable number of candidates qualifying to perform the second phase of EPLIS. In 2010, interviews were conducted in 38 cities, over a period of three months.

4.2. EPLIS follows the provisions of Doc 9835, with total emphasis on listening and speaking questions. The raters are being trained in Plymouth since 2007 (so far, 16 professionals have already received this training directly from the creators of the "TEA" Examination, from the Mayflower College). These 16 professionals and all other raters receive training at ICEA, in regular meetings throughout the year, which aim to maintain the performance of these professionals, to ensure the reliability provided in Doc 9835, item 6.3.4.3.

4.3. Like any other proficiency exam, EPLIS is a test in which it is impossible to completely eliminate the subjectivity of the rater. However, the training sessions mentioned in the previous item are designed to minimize this aspect. Moreover, after the tests are conducted and before the results are informed to candidates, there is a meeting at ICEA, where all candidates whose Level of Proficiency generated doubts are reassessed by the whole team at the request of the two raters who conducted the interview.

4.4. Importantly, to allow revaluations as previously mentioned, or to meet an appeal request from a candidate who disagrees with the score he/she received, all interviews are recorded and archived in ICEA.

4.5. As provided in Doc 9835 (item 6.3.2.5), EPLIS does not focus on discrete-point items, on grammar explicitly or on discrete vocabulary items that are not relevant to the context of aviation. EPLIS is centered on the ability of the candidate to communicate in English. The test does not assess phraseology, but rather the use of English in an operational aviation context (DOC 9835 - item 6.3.2.9).

5. Validation Process

5.1. During 2010, the EPLIS went through a validation process conducted by UNICAMP, by means of a team of five professionals, three of them with a PhD in Applied Linguistics.

5.2. Both phases of the Examination were analyzed during the validation process. The UNICAMP team interviewed the assessors and designers of EPLIS, followed several interviews, and attended some rater training meetings and recurrent training sessions.

5.3. In late 2010, a report of the validation process was delivered to DECEA, with suggestions and criticisms about the EPLIS. The work of the UNICAMP team was extremely important, because process improvements have been identified by specialists in this area. Currently, the team responsible for EPLIS

at ICEA is working to implement the report's suggestions, with a view to continuing to meet the guidelines established by ICAO.

6. CONCLUSION

6.1. Looking at the history of Brazil's actions with regard to evaluating the level of English proficiency of SISCEAB air traffic controllers and aeronautical telecommunications operators, it is noted that DECEA has satisfactorily followed the guidelines contained in the Doc 9835.

6.2. To date, 04 editions of EPLIS were conducted, taken annually by each professional, until he/she can demonstrate at least proficiency level 4. Over 3,000 professionals take the Examination, considering that there are parameters that guide the revalidation process (item 2.4) and that each year about 300 new air traffic controllers enter the system.

6.3. In 2010, a validation process conducted by a renowned Brazilian university and not linked to DECEA, through its Applied Linguistics professionals, reviewed the EPLIS, praising the model and suggesting ways to further stabilize the English language testing in Brazil.

7. Action by GREPECAS

7.1. The meeting is invited to:

a) Take note of the information provided in this working paper; and

b) Evaluate mechanisms for exchanging the lessons learned from the process of English Proficiency Testing, to harmonize the applicable criteria, as well as to ensure the operational safety and efficiency of air navigation in the CAR/SAM Regions.

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