



Agenda Item 2: Safety Oversight
2.5 Safety – related topics

ICAO LANGUAGE PROFICIENCY

(Presented by the Secretariat)

SUMMARY

Safety experts are constantly seeking to identify means of improving safety in order to reduce the already low accident rates. In recent years, more attention has been focused on human factors that contribute to accidents. Communication is one human element that is receiving renewed attention. This Working Paper presents information on the new ICAO language proficiency requirements as presented in Annex 1, Annex 6, Annex 10 Annex 11 and PANS-ATM Document 4444. A brief review of ICAO Document 9835 “Manual on the Implementation of the ICAO Language Proficiency Requirements” is provided. A Power Point presentation of this material is also made available. The Working Paper suggests action to be taken by the Meeting

1. Introduction

1.1 In three accidents (one collision on the ground, one accident involving fuel exhaustion and one controlled flight into terrain), over 800 people lost their lives. What these seemingly different types of accidents had in common was that, in each one, accident investigators found that insufficient English language proficiency on the part of the flight crew or a controller had played a contributing role in the chain of events leading to the accident. In addition to these high-profile accidents, multiple incidents and near misses as a result of language problems are reported annually, instigating a review of communication procedures and standards worldwide.

1.2 In 1998, the ICAO Assembly, taking note of these accidents and incidents where the language proficiency of pilot and air traffic controller were causal or contributory factors, formulated Assembly Resolution A32-16 in which the ICAO Council was urged to direct the Air Navigation Commission to consider, with a high level of priority, the matter of English language proficiency and to complete the task of strengthening the relevant provisions of Annex 1 — *Personnel Licensing* and Annex 10 — *Aeronautical Telecommunications*, with a view to ensuring that air traffic control personnel 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.

1.3 Subsequently, the Air Navigation Commission established the Proficiency Requirements in Common English Study Group (PRICESG) to assist the Secretariat in carrying out a comprehensive review of the existing provisions concerning all aspects of air-ground and ground-ground voice communications and to develop new provisions as necessary. In March 2003, the Council adopted amendments to Annex 1, Annex 6 *Operation of Aircraft*, Annex 10, Annex 11, *Air Traffic Services and the Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444) relating to language proficiency in international civil aviation.

1.4 In order to support States' efforts to comply with the strengthened provisions for language proficiency, the development and publication of guidance material compiling comprehensive information on a range of aspects related to language proficiency training and testing were seen as necessary and as a result ICAO Document 9835 "Manual on the Implementation of the ICAO Language Proficiency Requirements" was finalized. The Document 9835 is currently only available online in the ICAO Website (www.icao.int).

2. Discussion

2.1 Concern over the role of language in many aviation accidents and incidents had been expressed for several years from different sources such as the ICAO Accident/Incident Data Reporting System (ADREP) database, the United States' National Transportation Safety Board reports, and the United Kingdom's Mandatory Occurrence Reporting Systems. Such concern heightened after a 1996 mid-air collision in which 312 passengers and crew members were killed in yet another accident in which insufficient English language proficiency played a role.

2.2 As a result, the 1998 ICAO Assembly approved Resolution A32-16 calling for the strengthening of relevant ICAO provisions concerning language requirements where the use of English is required. Resolution A32-16 led to the establishment of the Proficiency Requirements in common English Study Group (PRICESG) to assist ICAO in advancing the task established by the Air Navigation Commission on language competency, which included, among other elements, the following aspects:

- a) carry out a comprehensive review of existing provisions concerning all aspects of air-ground and ground-ground voice communications in international civil aviation, aimed at the identification of deficiencies and/or shortcomings;
- b) develop ICAO provisions concerning standardized English language testing requirements and procedures; and
- c) develop minimum skill level requirements in the common usage of the English language.

2.3 The study group was comprised of operational and linguistic experts with backgrounds in aviation (pilots, air traffic controllers, and civil aviation authority representatives) or aviation English training and applied linguistics, representing Contracting States and international organizations covering most main linguistic areas. The PRICESG met throughout the years 2000 and 2001, presenting the Secretariat amendments to Annex 10 and PANS-ATM, Doc 4444 applicable on 1 November 2001 regarding the harmonization of radiotelephony speech and improvement in the use of standard phraseology, in partial response to the task assigned.

2.4 The 33rd Session of the ICAO Assembly noted that provisions related to language proficiency were being developed and considered that the objective should not be limited to the English language. To complete the assigned task, the Secretariat proposed amendments to the Annexes 1,6,10,11 and Document PANS-ATM 4444 which were adopted by the ICAO Council in March 2003.

2.5 The Secretariat also prepared guidance material in the form of ICAO Document 9835 "Manual on the Implementation of the ICAO Language proficiency Requirements" which although finalized, is currently only available on the ICAO Website (www.icao.int). While the ICAO Language Proficiency Requirements were developed for use in assessing language proficiency in all languages used for radiotelephony communications, not just in the English language, much of the focus of the manual is on English language training issues, as this is the area in which most States and aircraft operators require specific guidance. The principles, however, are largely transferable to other language training programmes as well.

2.6 The purpose of the manual is not to provide a comprehensive language learning education to language instructors or training programme developers, nor to provide a curriculum but rather to serve as a guide. The target audience for this manual includes the training managers of civil aviation administrations, the airline industry, and training organizations. ICAO Document 9835 is laid out as follows:

Chapter 1. Introduction

2.7 Inadequate language proficiency has played a role in accidents and incidents and led to a review of ICAO language requirements. Assembly Resolution A32-16 urged the Council to direct the Air Navigation Commission (ANC) to consider this matter with a high level of priority, and strengthen the provisions related to the use of the English language for radiotelephony communications. Both ICAO phraseologies and plain language are required for safe radiotelephony communications and all States and organizations have an important role to play in improving communications.

Chapter 2. ICAO Standards and Recommended Practices (SARPs) concerning Language Proficiency Requirements

2.8 The purpose of this chapter is to explain and elaborate on the Standards and Recommended Practices (SARPs) related to language use in aeronautical radiotelephony communications and to provide an explanation of the principles underlying the ICAO language proficiency requirements. The information contained in this chapter is intended to be useful to administrators of civil aviation authorities, airlines, and air traffic service providers. Information specifically relating to the Language Proficiency Requirements — the Holistic Descriptors and Rating Scale — will be of use to training managers, language trainers and assessors.

2.9 The SARPs relating to language use for aeronautical radiotelephony communications that were adopted by the ICAO Council in March 2003 are found in Annex 1 — *Personnel Licensing*; Annex 6 *Operation of Aircraft*, Part I and Part III; Annex 10 — *Aeronautical Telecommunications*, Volume II — *Communication Procedures including those with PANS status*; and Annex 11 — *Air Traffic Services*

2.10 The language-related SARPs can be broadly categorized into three types: Annex 10 SARPs clarify which languages can be used for radiotelephony communications; Annex 1 SARPs establish proficiency skill level requirements as a licensing prerequisite; and Annexes 6 and 11 provide for service provider and operator responsibility

2.11 The SARPs contained in Annex 10, Volume, lay the foundation for the language proficiency requirements, stipulating that English be made available for international radiotelephony communications. The key changes brought about by the Annex 10 amendments were:

- a) stipulating the use of ICAO phraseology specifically;
- b) clarifying that both phraseology and plain language proficiency are required; and
- c) strengthening the provisions that English be made available.

2.12 The language proficiency requirements in Annex 1 apply equally to native and non-native speakers and both pilots and controllers are required to demonstrate Operational Level 4 language proficiency in the use of both ICAO phraseology and plain language by 2008.

2.13 Additionally a Standard in Annex 1 stipulates recurrent testing for pilots and controllers who demonstrate language proficiency below Expert Level 6 while Annexes 6 and 11 stipulate service provider or airline oversight of personnel language proficiency. The ICAO minimum proficiency requirements described in Operational Level 4 do not require “native” or “native-like” proficiency. As Operational Level 4 is significantly below Expert Level 6, it can be assumed that language loss can occur in individuals with Level 4 proficiency. Therefore, a Standard *requiring* recurrent language testing and a Recommended Practice *recommending* a schedule for re-testing were introduced into Annex 1.

2.14 The ICAO Language Proficiency Requirements consist of a set of holistic descriptors (**Appendix A to this paper**) and Operational Level 4 of the ICAO Rating Scale (**Appendix B to this paper**). The five holistic descriptors provide all-embracing characteristics of proficient speakers and establish some context for communications. The Rating Scale describes the discrete features of language use. (“Holistic” refers to the communicating person as a “whole”, in contrast to the descriptors in the Rating Scale which instead examine individual, discrete features of language use.) In this regard, a language proficiency rating scale may be thought of as a guide to good judgment, a first important step towards applying greater consistency worldwide in the language standards to which pilots and air traffic controllers are held. The holistic descriptors and descriptors in the Rating Scale are designed to convey a notion of a standard to be used as a frame of reference for teachers and assessors to be able to make consistent judgment about pilot and controller language proficiency.

2.15 The ICAO Rating Scale contained in the Appendix B to this Working Paper delineates six levels of language proficiency ranging from Pre-elementary (Level 1) to Expert (Level 6) across six areas of linguistic description: pronunciation, structure, vocabulary, fluency, comprehension, and interactions. The number of levels was determined as sufficient to show adequate progression in developing language proficiency without exceeding the number of levels between which people are capable of making meaningful distinctions. It is not an “equal interval” scale; the amount of time required to progress between levels will vary, i.e. moving from Elementary Level 2 to Pre-operational Level 3 may take longer or more training than moving from Operational Level 4 to Extended Level 5.

2.16 It is important to note that the Rating Scale does not refer to “native” or “native-like” proficiency, a philosophical decision that “native” speech should not be privileged in a global context. All participants in aeronautical radiotelephone communications must conform to the ICAO proficiency requirements, and there is no presupposition that first-language speakers necessarily conform.

Chapter 3: Linguistic Awareness

2.17 This chapter points out that States should ensure that their use of phraseologies aligns as closely as possible with ICAO standardized phraseologies and that pilots and controllers should be aware of the natural hazards of cross-cultural communication. It also emphasizes that plain language should be specific, explicit, and direct and also suggests that English-speaking organizations, airlines or training centres may wish to explore how they might provide cost-efficient English language learning opportunities to code share partners and other airlines at minimal cost.

2.18 For the purposes of the discussion here, it is enough to point out that the introduction of ICAO language proficiency requirements, in which the use of English as the common language of international radiotelephony communications is embodied as an ICAO Standard, offers an opportunity to reinforce strict adherence to standard ICAO phraseology. There is much anecdotal evidence of the difficulties caused by the use of non-standard phraseology, particularly for users of English as a second, or additional, language.

2.19 It is vital that both native and non-native speakers conform to ICAO standardized phraseology which has been so carefully and painstakingly developed over the last fifty years. The use of ICAO standardized phraseology is now embodied as an ICAO Standard (Annex 10, Volume II, 5.1.1.1) which reads: “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”.

2.20 Although the careful use of ICAO phraseologies is one means to increased communication safety, no set of phraseologies, however extensive, can account for the breadth of human communicative need, even within the relatively constrained environment of air traffic control communications. In all those situations for which phraseologies cannot suffice, of urgency, emergency, or other non-routine but normal circumstances, controllers and pilots will use plain language. While ICAO phraseologies should always be used in the first instance, there will always be situations, some routine, for which phraseologies do not exist.

2.21 In this context, if native speakers are simply aware of the challenges faced by speakers of English as a foreign language (EFL), they can for example, focus on keeping their intonation neutral and calm, be explicit, rather than indirect, in their communications and train themselves away from the use of jargon, slang, and idiomatic expressions. They can ask for read backs and confirmation that their messages have been understood, and they can attend more carefully to cross-cultural communication situations, taking greater care to avoid the pitfalls of “expectancy,” a topic well covered in Human Factors literature.

Chapter 4. Language Training and Radiotelephony Communications

2.22 An important first step in the establishment of efficient and cost-effective language learning programmes is the selection of appropriately and adequately qualified teachers. Language teaching is a professional activity that requires specialized training.

2.23 Flight crews and air traffic controllers need to acquire phraseologies, but aviation English training should not be limited to phraseologies.

2.24 Language proficiency is an intricate interplay of knowledge, skills, and competence, requiring much more than memorization of vocabulary items thus learning a language is much more difficult than one would believe.

2.25 Many factors influence the language learning process. It is difficult to predict how long any particular individual will require to reach the ICAO Operational Level 4 proficiency; as a general rule of thumb, between 100 and 200 hours of language learning contact hours are required for *measurable* improvement. This number can be reduced by involvement in specific-purpose classes which focus solely on speaking and listening.

2.26 There are no short cuts in language learning. Time, motivation, and mature effort are always required.

Chapter 5. Compliance with ICAO Language Proficiency Requirements

2.27 The purpose of this chapter is to provide guidance to State aviation authorities, airlines, air navigation service providers (ANSPPs), and training establishments on the various ways to ensure compliance with the ICAO language proficiency requirement. It covers three major topics:

- a) Compliance with Annex 1 Standards 1.2.9.1 and 1.2.9.2 (general proficiency requirements that do not refer to the level of the rating scale);
- b) Demonstration of proficiency at the expert level; and
- c) Demonstration of proficiency at Levels 4 and 5.

2.28 While the evaluation of language proficiency according to the ICAO language proficiency rating scale is only required as of 5 March 2008, there are good reasons to start formal evaluation of language proficiency earlier:

- a) *Recruitment.* It is likely that most air traffic service providers and airlines will want their new recruits to meet the language proficiency requirements as a prerequisite for recruitment;
- b) *Benchmarking.* The establishment of the training programme required to bring existing staff to the appropriate level would require an accurate assessment of the level of language proficiency of existing staff; and
- c) *Deadline.* To be prepared for the 5 March 2008 deadline.

2.29 It is useful to understand the circumstances into which the ICAO language proficiency requirements have been introduced, in the context of English language testing and training. Without an ICAO Standard clarifying the level of proficiency required, it has been difficult for the industry to invest in English language training. As a result, the ICAO SARPs concerning language proficiency requirements introduce a need for high-quality and aviation-specific language training materials and programmes beyond what is currently available and call for the development of academically sound, high-quality, aviation appropriate language testing services.

Chapter 6. Aviation Language Testing

2.30 The purpose of this chapter is to provide guidance to State aviation authorities, airlines, air navigation service providers (ANSPs), and training establishments in the selection or development of suitable, effective language tests as States seek to comply with ICAO language proficiency and testing requirements. A particular objective of this chapter is to help ensure that the language assessment measures and language tests developed for the civil aviation industry are reliable, valid, and practical.

2.31 SARPs in Annex 1 require that flight crews and controllers demonstrate language proficiency at the ICAO Operational Level (Level 4). Annex 11 and Annex 6 assign responsibility to air traffic services providers and aircraft operators, respectively, to ensure that their personnel meet ICAO language proficiency requirements. Testing serves two purposes: it fulfils ICAO provisions requiring that pilots and controllers demonstrate language proficiency sufficient for safe and efficient radiotelephony communications, and it provides benchmarks by which the effectiveness of language training and language learning may be evaluated.

2.32 While the ICAO language proficiency requirements establish testing requirements, the development of tests and testing procedures is left to States, airlines, and training organizations, with the State Aviation Authorities maintaining oversight responsibility. However, language speaking *proficiency* tests require that certain specific procedures be used, and this requirement will guide the implementation or development of tests for aviation language proficiency. Language testing has a central role to play in aviation because careers and safety are at stake. State aviation authorities, airlines, air navigation service providers and training establishments can ensure that language tests which are developed to meet the need of the aviation industry are sufficient, appropriate, and fair by adhering to the minimal guidelines established in this manual.

Chapter 7. Aviation Language and Aeronautical Radiotelephony Communicative Language Functions

2.33 The objective of this Chapter is to provide an introduction to aviation language and to a set of aeronautical communicative language functions and is meant to be of particular use to language teachers in the aviation field. It also shows that there are three distinct roles of language as a factor in aviation accidents and incidents:

- a) use of phraseologies;
- b) proficiency in plain language;
- c) use of more than one language.

Chapter 8. Additional Support for Teaching and Learning

2.34 Chapter 8 contains information directed to aviation language teachers, material developers, and to pilots and air traffic controllers on factors which improve language learning.

3. Conclusion

3.1 Improving communications cannot be seen as an obligation of non-native English-speaking States and personnel alone. All ICAO Contracting States, airlines, service providers, and training organizations have a stake in and an obligation to shoulder a fair share of the burden. There are a number of ways that native English-speaking States, organizations, and personnel can help. The first and easiest measure is for Contracting States to improve their own standards for communications and to align phraseologies closely with ICAO phraseologies.

3.2 Airlines can assist their code-sharing partners and others in the establishment of high-quality, aviation-specific English programmes, either by providing qualified language training personnel in country or by making English language training available at low cost for international partners at existing training centres. In short, those native and highly-proficient English speaking States and organizations, which are naturally at an advantage regarding the provisions for the strengthened use of English, can facilitate the movement towards a safer communication environment by giving assistance to those non-native English-speaking States not so advantaged. An aviation community cooperatively committed to communicating better will fly more safely.

3.3 In summary, the ICAO language proficiency requirements:

- **strengthen** the requirement for English to be provided by air navigation service providers for international flights by upgrading it from the level of a Recommendation to that of a Standard (Annex 10);
- **establish** minimum skill level requirements for language proficiency for flight crews and air traffic controllers (Annex 1);
- **introduce** an ICAO language proficiency rating scale applicable to both native and nonnative speakers (Annex 1);
- **clarify** the requirement for the use of both plain language and phraseologies (Annexes 1 and 10);
- **standardize** on the use of ICAO phraseologies (Annex 10);
- **recommend** a testing schedule to demonstrate language proficiency (Annex 1); and
- **provide** for service provider and operator oversight of personnel compliance (Annexes 6 and 11).

3.4 Implementation of the ICAO language proficiency requirements cannot realistically completely eliminate all sources of miscommunication in radiotelephony communications. Rather, the goal is to ensure, as far as possible, that all speakers have sufficient proficiency in the language used. While communication errors will probably never completely go away, disciplined use of ICAO phraseology, compliance with the ICAO language proficiency requirements, alert awareness of the potential pitfalls of language, and an understanding of the

difficulties faced by non-native English speakers will enable pilots and controllers to more readily recognize communication errors and work around such errors.

4. Suggested Action

- a) take careful note of the information presented in this paper
- b) initiate preparatory activities in an effort to comply with the ICAO language proficiency requirements by 5 March 2008

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APPENDIX A

HOLISTIC DESCRIPTORS

To meet the language proficiency requirements contained in Chapter 1, Section 1.2.9 (Annex 1), 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.

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 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.

APPENDIX B

ICAO LANGUAGE PROFICIENCY RATING SCALE

1.1 Expert, Extended and Operational Levels

LEVEL	<i>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>VOCABULARY</i>	<i>FLUENCY</i>	<i>COMPREHENSION</i>	<i>INTERACTIONS</i>
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.

1.2 Pre-operational, Elementary and Pre-elementary Levels

LEVEL	<i>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.	VOCABULARY	FLUENCY	COMPREHENSION	INTERACTIONS
<i>Levels 4, 5 and 6 are on preceding page.</i>						
Pre-operational 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.
Pre-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).