Abstract

The English language has been considered a contributory factor causing confusion or misunderstanding in aviation communication; therefore, affecting safety of aircraft and passengers in air travels. The International Civil Aviation Organization or ICAO now requires aviation personnel involved in international operations to meet the language proficiency requirements imposed by the Organization. In Thailand English proficiency is a requirement. Nevertheless, no official training has been created to assess English language proficiency requirements for ICAO. This paper discusses essential elements that are important to the development of the training, which will suit the requirements as imposed by ICAO. This includes the concept of English for international users, qualifications for raters and interviewers, essence of pronunciation in relation to intelligibility and comprehensibility as well as the significance of plain English. The discussion is hoped to be recommended guidance leading to implementation of the training in the ICAO language proficiency requirements for Thailand.

Keywords: English as an International Language, Intelligibility, Comprehensibility

Introduction

The English language is spoken by the second largest number of native speakers in the world (Chaney and Martin, 2000) and it has been considered as lingua franca (Wardhaugh, 2006) due to its popularity in numerous nations. Statistics indicate that the number of non-native English speakers compared to native English speakers at the start of the 21st century amounted to approximately three (Graddol, 1997) to one (Graddol, 2006). In addition, English is employed as the official language of many international organisations, including the International Civil Aviation Organization (ICAO). English plays a vital role in the civil aviation industry...
globally as most civil aviation activities are international in nature. Thanks to the international characteristics of aviation, the needs for a common language employed by all stakeholders to serve as a means of communication is paramount, and the current common language is English.

In 1998 the ICAO Council started taking action to prioritise the matter of English language proficiency at the highest level to strengthen the relevant provisions in Annex 1 and Annex 10 to the Convention on International Civil Aviation (Chicago Convention) (Pelsser, 2010). This was due to an increasing awareness of several aviation related accidents and incidents that were contributed to by limited English proficiency on the part of the pilots and air traffic controllers involved (Doc. 9853, 2004). Since then the issue concerning regulations that will require all pilots and air traffic controllers to be or become proficient in English in order to carry out their duties with regard to international aviation has become controversial. Starting from 2003 onwards, all Contracting States to the Chicago Convention are required to meet the language proficiency requirements as set out in Annex 1 and Annex 10.

Thailand is a party to the Chicago Convention; therefore, it is bound by its commitments to the Convention. The Thai Government’s Department of Civil Aviation (DCA) has approved the Civil Aviation Training Center to assess the English language proficiency requirements of pilots and air traffic controllers with the aim of meeting the ICAO standards.

**Justification of Improving English Language Proficiency in Aviation**

Annex 10 to the Chicago Convention requires pilots and air traffic controllers to be proficient in languages used in ground stations of each country, but it also stipulates that English must be made available for international radiotelephony communications. The requirements in Annex 10 imposes an obligation on pilots and air traffic controllers to primarily apply ICAO standardised phraseology, which is in English, and to utilise plain English when the ICAO standardised phraseology cannot suffice (Annex 10, 2001). Although standardised phraseology may be the best method to deliver expressions related to aviation context, it is not possible for standardised phraseology to cover all aspects of aviation communication. Therefore, the application of the wider English language to complete aviation communication is unavoidable. The main purpose of the ICAO language proficiency requirements is to minimise opportunities for accidents where insufficient English proficiency may be a casual or contributory factor (ICAO Assembly, 1998). In order to achieve this, pilots and air traffic controllers must be able to express themselves using a combination of standardised phraseology and plain English when involved in international operations in a clear, concise and unambiguous manner. This concept is to cover both standardised phraseology and plain English. Failure to do so may result in serious consequences. There are three ways that language use can contribute to accidents or incidents (Doc. 9835,
1) incorrect use of standardised phraseology; 2) lack of plain English proficiency; and 3) the use of more than one language in the same airspace.

Annex 1 to the Chicago Convention concerns about language proficiency. It requires that the language proficiency requirements be applicable to the use of both phraseology and plain language. According to ICAO criteria, only recommendations on how to meet the language proficiency requirements for ICAO standardised phraseology exist as found in Annex 10 (Annex 10, 2006) or ICAO Operational Level 4 pronunciation descriptor of the Rating Scale. However, the criteria for plain English language to meet ICAO standards are not known. Nevertheless, Annex 1 requires that proficient speakers must be able to communicate in accordance with the holistic descriptors. Appendix 1 to Annex 1 describes that the holistic descriptors as follows:

- a) Proficient speakers shall communicate effectively in voice-only and in face-to-face situations;
- b) Proficient speakers shall communicate on common, concrete and work-related topics with accuracy and clarity;
- c) Proficient speakers shall use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings;
- d) Proficient speakers shall 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) Proficient speakers shall use a dialect or accent which is intelligible to the aeronautical community (Annex 10, 2006: Appendix 1)

The ICAO Rating Scale is found in Annex 1. It sets out criteria for levels of proficiency based on six categories namely pronunciation, structure, vocabulary, fluency, comprehension, and interactions. There are six levels ranging from pre-operational level to expert level.

**Problems of Language Proficiency Requirements in Thailand**

As previously mentioned, the ultimate goal of the ICAO language proficiency requirements is to minimise accidents and incidents in civil aviation. The best way to achieve that is to ensure that pilots and air traffic controllers communicate in the way that avoids misunderstandings as much as possible. Although Annex 1 and 10 to the Chicago Convention requires pilots and air traffic controllers to be proficient in the English language, they do not strictly prescribe qualifications of interlocutors, raters or instructors. However, it is recommended that aviation English teachers, administrators and material developers for the purpose of ICAO language proficiency requirements should at least hold a certificate in TESL.

DCA has its regulation in relation to approved language proficiency testing centres. Section 5(3) of
the Regulation on Approved Language Proficiency Testing Centres 2009 states that any centres wishing to
obtain approval from DCA must have interviewers and raters before they can be approved. Notwithstanding the
criteria for an individual to become an interviewer or a rater do not exist. No current unofficial interviewers and
raters in Thailand have academic qualifications in TESL or relevant experience in teaching English at all. Most
of these individuals, however, have experience working in the aviation industry. The only organisation in the
country that offers a course on ICAO language proficiency requirements is the Civil Aviation Training Center.
Nevertheless, the course is primarily focused on explaining what the ICAO language proficiency requirements
are and the different stages in the interview process for the test. This covers the criteria in the ICAO Rating
Scale in a superficial manner. The course contains no language training in relation to civil aviation. There needs
to be language training, particularly for raters, as pilots and air traffic controllers undertaking the course require
feedback from the teachers/facilitators in the areas of English that require improvement in order to meet the
standards.

Since there are no criteria in relation to qualifications for interviewers and raters nor are there any
language training courses for the ICAO language proficiency purposes, it is highly likely that Thailand’s
standards are below par of those set by ICAO. This could lead to Thai pilots and ATCs involved in international
operations be removed from jobs. In addition, Thailand could be listed in aviation safety category, which would
prohibit Thai airlines from flying into other countries following the ICAO, United States Federal Aviation
Administration, or European Aviation Safety Agency conducting audits of the security measures implemented
by Thailand. The consequences of this would be a significant financial impact on the economy of Thailand.
Most importantly, failure to meet minimum ICAO standards could affect safety standards, potentially adversely
affecting the lives of people involved in the civil aviation industry, including passengers.

**Academic Recommendation and Guidance for Thailand**

In order to standardise the ICAO English proficiency level of interviewers, raters and instructors,
three essential English language skills must be mastered. These skills are as follows:

1. **Pronunciation**

The first and perhaps most essential skill that raters and interviewers must possess is the skill of
pronunciation. This is because pronunciation is one of the most influential factors impeding intelligibility and
comprehensibility of English (Jenkins, 2000). Both interviewers and raters must have profound knowledge
of phonemes. They must be able to differentiate various sounds in the English language. In relation to the
interrupters, they must be proficient in pronouncing words as they will need to be able to express themselves
clearly and precisely in each interview in order ensure that test takers are not adversely affected by their pronunciation. On the other hand, raters must possess higher caliber skills in terms of their levels of proficiency in pronunciation. This is because they will have to assess and analyse each test-taker’s performance as well as giving feedback on such performance. Failure to provide comprehensive feedback will place no benefit on the test-takers to use the English language in accordance with the standards; hence, it defeats the purpose of the language proficiency requirements.

Some scholars distinguish two cognitive processes in which people develop their language proficiency namely learning and acquisition (Foley, 2009). It is the learning process that will be discussed as it is the process for those who learn English as a second language as opposed to the acquisition process, which is the way that an individual learns a English from birth. Essentially, development of the English language learning process should aim to enable international users to become proficient in the English language based on the same standard. It does not necessarily mean that those who deploy this approach will become proficient in the English language as if they were a native English speaker. On the contrary, it means that they will be able to express themselves in a way that is intelligible to all individuals in the international community. The notion that all native speakers will perform at the highest level of proficiency in terms of using their first language has been found to be false (Todd, 2006). Native speakers may lack vocabulary in specific areas or their accent may be an impediment for others from a different region to understand (Suksiripakonchai, 2012). Therefore, native-like pronunciation may not be necessary for the purpose of the ICAO language proficiency requirements as long as the pronunciation is clear, precise and intelligible to listeners. However, certain features of the native-like pronunciation must be adhered to (Jenkins, 2000). This is because they are crucial to intelligibility for international users, both native and non-native, and those features include:

a. vowel length distinctions;
b. the correct placing of stress of a word;
c. the significant of intonation especially when it causes changes in terms of identifying new components of a message; and,
d. The avoidance of simplification or reduction of some consonant clusters in rapid speech such as “tes flight” instead of “test flight”.

A practical way to train Thai individuals to distinguish different phonemes in the English language is to compare each English phoneme to a word in Thai. It is vital that speech sounds in the English language are taught as different speech sounds that the same written word makes may convey different meanings. For example, the word ‘close’ if the ‘se’ is pronounced as an ‘s’, this word means ‘not far in position or time’ whereas if the ‘se’ is pronounced as a ‘z’, this word means ‘to change from being open to being not open’.
In relation to comparing a speech sound in English to a speech sound in Thai, it can be done by giving an example from a word in Thai compared to a speech sound in English. For example, in Thai the sound of the consonant ‘sh’ such as in the word sheep does not exist. However, to teach a Thai individual to understand the sound that this consonant makes is to compare it with the sound that the word “shoo” (meaning be quiet) in Thai makes.

Emphasizing the various speech sounds that do not exist in the Thai language is essential. Failure to teach learners about this fact will result in learners not knowing how to make those speech sounds. For example, the speech sound that ‘…st’ makes does not exist in the Thai language. It is essential to teach language learners that both the consonants ‘s’ and ‘t’ are pronounced. For language learners who have less experience with English, they might not know that both consonants are pronounced and they may only pronounce one of these consonants. For example, the word ‘test’ both ‘s’ and ‘t’ at the end of the word are pronounced, less experienced learners may pronounce this word as ‘tes’ or ‘tet’, and these two words do not exist in English. It may be of help if learners know how to spell a word so that they are aware of each letter that is in a word, which will enable them to know that each letter needs to be pronounced.

One other important feature of the pronunciation skill is ‘stress’ as it is a problematic area of Thai learners of English (Khamkhien, 2010). Each English word that has more than one syllable has a stress on one of the syllables. It is also of significance to teach language learners to stress on the right syllable. Putting a stress on a wrong syllable in a word may cause an impediment to intelligibility to listeners. For example, the word ‘aluminium’ the stress is on the third syllable. Should someone put a stress elsewhere, it may not be intelligible to listeners.

There are other factors that language learners and both interviewers and raters need to be aware of, which are discourse and intonation. These factors enable language learners to use the English language in a more appropriate manner especially when communicating with an individual from a different cultural background. However, language learners should try to master the pronunciation before they move on to use discourse level.

2. Grammar

The next step of training is in relation to grammar. While interviewers may not need to possess the highest level of proficiency in the English grammar, raters must know the intricacies of English grammar as they need to be able to evaluate it. Poor use of the English grammar may cause misunderstanding. For instance, in English there are different tenses such as present test, past tense and so on. One mistake may wrongly convey the intended message. For example, “the aircraft is turning left” this sentence conveys a message that the aircraft is in the process of turning to the left, compared to “The aircraft has turned left” this sentence
conveys a message that the aircraft has already finished turning itself to the left. When an air traffic controller communicates with a pilot, they must use correct grammar in order to send the correct message. This is because, in civil aviation particularly when in the air, if a wrong message is sent out, it may lead to serious damage or crashes. Therefore, grammar is a fundamentally important element in the ICAO language proficiency.

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3. Plain English

After language learners are aware of technical aviation terminology they need to master their pronunciation and they cannot neglect the importance of grammar as these together create clear and precise messages. Once this has been achieved they will need to further develop their communication method by using plain English. Plain English, otherwise known as plain language, is referred to as a way to communicate in an uncomplicated manner sometimes called bobbledybook. This stage of learning is vital in communication especially international communication. This is because the purpose of using plain English is to minimise confusion in communication (Office of Parliamentary Council, 2003). Plain English covers various aspects of the English language as follows:

3.1 Using verb instead of noun. This is to be more direct and to use less words.

- decide making a decision
- investigate conducting an investigation
- terminate bring to a termination

It is evident in the above examples that the verb form uses fewer words improving intelligibility in when spoken.

3.2 Using active voice instead of passive voice. This is because active voice uses fewer words and

Passive – Your baggage may be collected at belt number 1.
Active – You can collect your baggage at belt number 1.

With the active voice it is clear that the subject is doing the action as opposed to the passive voice, which creates ambiguity about who does the action. To make it clearer in this passive voice sentence, it is possible to do so by adding a subject after the verb, but it uses more words making the sentence longer.
3.3 Using simple words.

commence = start          transmit = send

discontinue = stop        assist = help

This is a direct way to communicate effectively because using common words imposing fewer risks for errors to interfere with the intended message. For example, the word “mortgagee” means “a lender” and the word “mortgagor” means “a borrower”. It would be easy to generate confusion using the words mortgagee and mortgagor whereas the words “borrower” and “lender” and much less easily misunderstood.

Conclusions

In conclusion, the English language is a means of communication in international civil aviation. Nevertheless, different individuals, particularly people who come from non-English speaking countries or regions, possess varying levels of proficiency, including native English speakers themselves. The ICAO has passed regulations governing the language proficiency requirements in its Annexes 1 and 10 with the hope of standardising flight crews’ ability to communicate in a clear and precise manner. The problem in Thailand lies with no English language training for testing officers for the ICAO language proficiency requirements having been created. In order for Thailand to meet the ICAO requirements, it is paramount that English language training be created to equip testing officers with necessary skills for radiotelephony communication. The most important feature is pronunciation skill. However, pronunciation alone will not result in the most desired outcome without good English grammar and the use of plain English.

References


**Author**

Watthana Suksiripakonchai

Lecturer of School of Tourism and Hospitality Management, Suan Dusit Rajabhat University, Thailand

email: erskine_21@hotmail.com