

УДК 378.091.33:656.7.052.4  
DOI 10.33251/2522-1477-2020-8-203-207

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### **THE BRIEF REVIEW OF AVIATION DOCUMENTS RELATED TO THE LANGUAGE TRAINING SYSTEM FOR AVIATION SPECIALISTS**

*The purpose of this study is to disclose the main aviation documents related to the language training system for aviation specialists. The language of profession is an integral part of aviation specialists' professional communication, and its proficiency is their main task. English has been chosen as the international language of radiotelephony phraseology which is developed to provide efficient, clear, concise, and unambiguous communication, and constant attention should be given to the correct use of ICAO phraseologies in all instances in which they are applicable. Radiotelephony English, which includes but must not be limited to ICAO phraseology and can require the use of "general" English, as a sub-category of aviation English, is the language used in radiotelephony communications. The paper emphasizes the fact that adhering to ICAO documents, Aviation English training and language skills acquisition are ultimately focused on a specific goal of aviation safety. Thus the main objectives of aviation language training of flight crew members and air traffic controllers are to involve aviation personnel into wide usage of language means covering a wide range of topics related to aviation.*

**Key words:** aviation English, ICAO documents, plain English, professional aviation communication, Radiotelephony Phraseology.

**Introduction.** Nowadays the rapid development of science and technologies has caused the emerging of various human performance spheres, and as a result, presentation of communication for specific purposes is of great importance. In the joint professional activity of the air traffic controllers (ATC) unit communication appears based on the range of interests, which is characterized by a limited exchange of information regarding joint work or training. Professional concepts, scientific and technical terminology are used during such cooperation, which determines the degree of mutual understanding when performing the work. Activities and lives of communication participants depend on level of professional communication, namely communication in the mode "a pilot – a controller".

**Review of recent sources of research and publications.** The language of professional communication is "language communication of representatives of one professional group in a situation that is associated with the direct performance of their official or professional duties" [1, p. 151]. Mainly, scientific research in the sphere of Aviation English is limited to the twentieth century. At different times, the professional communication of aviation specialists has been highlighted in the works of domestic and foreign researchers, namely: O. Akimova, B. Aliakrinsky, D. Broadbent, L. Herasymenko, Ye. Kmita, O. Kovtun, V. Kolosov, D. Makmilan, T. Malkovska, O. Moskalenko, B. Lomov, K. Platonov, A. Pchelinov, T. Tarnavska and others.

Today, scientists focus on the problem of professional communication in aviation, because flight safety depends on the level of participants understanding in the mode "a pilot – a controller" interaction.

**Setting an objective.** The objective of the article is to disclose the main aviation documents related to the language training system for aviation specialists.

**Presentation of basic material.** Special requirements for professional communication have been formed in aviation. There is a specific communication for air traffic controllers and pilots known as "Civil Aviation Radiotelephony Communication".

Because of the development of aviation and technical base, transcontinental flights became especially important in the organization of air traffic, including the air radiotelephony exchange. The lack of knowledge of radiotelephony exchange led to the necessity to use a single mandatory language for international aviation. So, the English language has become an official language of radiotelephony communication in aviation because according to statistics, there were significantly fewer aviation events when this language was used by aviation personnel.

Research of professional communication in aviation started in the second half of the last century, especially in the scientific works of D. Broadbent, J. G. Webster, J. F. Cartis, B. Lomov, M. Petrov, K. Platonov, V. Spit, G. Feuerbank, F.S. Frick and others.

Professional aviation communication began to be considered in the 80s as a component of ATCs and pilots' professional activities. A. Pchelinov, the Soviet training pilot, was the first to publish an article about the professional communication of the flight crew. A. Pchelinov stressed the existence of certain requirements for dialogues planning that allowed the effectiveness of the communication process. "Poor radio communication is one of the causes of aviation events, in particular, the lack of practical skills and abilities to provide it, poor articulation, insufficient skills of instructions" [2, p.128].

V. M. Tsvetkov came to the conclusion that the factors of aviation accidents are: insufficient level of correct understanding of information, inability to describe situation; poor knowledge of vocabulary and phraseology; slow and complicated perception of foreign speech; lack or absence of experience in communicating in English [3].

It was at the end of the twentieth century when not only scientists and aviation operators but also world aviation organizations paid great attention to aviation communication. First of all it was the International Civil Aviation Organization (ICAO) that began to realize that aviation safety directly depended on quality of speech interaction between ATCs and pilots.

The main ICAO's aims and objectives, as stated in the Chicago Convention, are:

- to foster the planning and development of international air transport;
- to ensure the safe and orderly growth of international civil aviation throughout the world; encourage the arts of aircraft design and operation for peaceful purposes;
- to encourage the development of airways, airports, and air navigation facilities for international civil aviation; meet the needs of the peoples of the world for safe, regular, efficient, and economical air transport;
- to prevent economic waste caused by unreasonable competition; ensure that the rights of contracting states are fully respected and that every contracting state has a fair opportunity to operate international airlines;
- to avoid discrimination between contracting states; promote safety of flight in international air navigation;
- to promote generally the development of all aspects of international civil aeronautics [4].

Thanks to the international standardization and strict requirements of ICAO to the language training of aviation specialists, aviation English language study becomes a regulated system of professionally oriented language training with a specific set of goals, objectives and technologies training.

Aviation English training and language skills acquisition are ultimately focused on a specific goal of aviation safety. Unlike everyday conversations or intellectual discussions, inaccuracy in the

radiotelephony communications or misunderstanding of the message pose a real threat to people's lives. Any failure in communication between the crew and the air traffic controller can lead to serious consequences, for example, reaching the wrong flight level, and as a result it can lead to dangerous collisions, air miss or even air crash.

According to the Manual on the Implementation of ICAO Language Proficiency Requirements Doc 9835 AN/453, the language factor can contribute to accidents and incidents where standard phraseology is used wrong; insufficient level of knowledge of the plain language; using more than one language in one airspace [5]. The likelihood of a communication failure between the pilot and the controller is significantly reduced due to the usage of standard phraseology, which is intended for usage by all participants in radio communications via the Pilot-Controller communication channel.

The rules of radiotelephony communication are contained in Chapter 12 "Phraseologies" of Doc 4444 Air Traffic Management. These rules are the basis for the "regulated" language for special purposes used in routine flight situations. This chapter consists of "typical phraseologies to be used in the provision of air traffic services, arranged in groups to relate to the particular phase of air traffic services with which they are generally employed" [6, p.11]. So, standard phraseology provides means of communication for most situations encountered in everyday working experience by air traffic controllers and flight crews. However, memorizing ICAO standard phraseology does not mean acquiring professional language competence; therefore, such a method cannot be considered as a reliable aviation English language for radiotelephony communication. There are three ways that can be a contributing factor language in accidents and incidents:

- a) incorrect use of standardized phraseologies;
- b) lack of plain language proficiency;
- c) the use of more than one language in the same airspace [5, p. 14].

Sometimes an abnormal situation occurs on board. In such cases, standard phraseology does not offer any typical forms of verbal communication, and therefore, pilots and air traffic controllers have to use plain English and aviation English.

Plain English in aeronautical radiotelephony communication refers to the "spontaneous, creative and noncoded use of the English language, albeit limited to the functions and topics (aviation and non-aviation) of radio communication, although constrained by the functions and topics (aviation and non-aviation) that are required by aeronautical radiotelephony communications, as well as by specific safety-critical requirements for intelligibility, directness, appropriacy, non-ambiguity and concision" [5, p. 35].

Thus, the main purpose of aviation language training of flight crew members and air traffic controllers are to involve aviation personnel into wide usage of language means covering a wide range of topics related to aviation.

Nevertheless, in accordance with ICAO Circular 323-AN/185 "Guidelines for Aviation English Training Programs", language training in aviation is characterized by specific tasks, content, criteria of language proficiency, and conditions for using. The following professional peculiarities are completely different from the language teaching in any other area of human activity:

- language is designed to provide unambiguous communication between pilot and the controller;
- used language is characterized by a very specific vocabulary, expressions and functions;
- the final criterion for assessing language proficiency is communicative competence, and not linguistic correctness;
- communication is carried out mainly orally and without visual contact;
- communication can not only influence the safety of passengers and individual air carriers, but also has a serious economic impact on all persons employed in the airline industry [7, p. 11].

At the new stage of aviation development, the indispensable condition for the implementation of flight safety is high, and there is a number of specific requirements for the level

of language training on the basis of mandatory testing and certification.

Today, there is a significant change in approaches to teaching aviation language, in particular, the definition of clear objectives presented in the ICAO language proficiency assessment scale in relation to the level of proficiency in speech skills such as speaking and listening. The determinant factor in the development of the language training system for aviation specialists is the necessity to achieve operational level 4 according to the ICAO rating scale.

There is ICAO language proficiency rating scale which includes six levels, namely: Level 6 (Expert); Level 5 (Extended); Level 4 (Operational); Levels 1-3 (Non-operational). There are six main descriptors of language proficiency that are assessed in the ICAO testing: pronunciation, structure, vocabulary, fluency, comprehension, interaction. Pronunciation (phonological competence) must be clear enough to be understood by the international aviation community. Pronunciation is particularly susceptible to the influence of the native language or regional dialects, and it plays a very important role in an adequate understanding of the message. Structure (grammatical competence) – means the accurate and appropriate usage of basic and complex syntactic and grammatical features of the language such as tenses and modality. Used grammatical structures should assist to transmit information clearly between pilots and controllers. Vocabulary (lexical competence) should be sufficient for routine communication and communication in non-standard situations. Lexical competence is evident in such indicators as vocabulary range, speed and accuracy. This skill also includes the ability to paraphrase. Fluency is sufficient for a controller to communicate with several aircraft simultaneously and without delay. Pilots must be able to receive information and instructions and respond to them adequately and in a timely manner. This skill assumes the ability to produce unprepared statements, maintaining appropriate rate of speech to the situation. Comprehension means understanding. Controllers and pilots must be able to communicate in routine situations, in the event of non-standard situations. They must have the skills and strategy to clarify information. The skill of interaction means the ability to engage in spontaneous spoken dialogue and successfully achieve communication goals. Interaction between pilots and controllers must be effective, both pilots and controllers must check, confirm and clarify the received information. The skill is characterized by the degree of speed and accuracy of speech reaction, the ability to request new information, take the initiative in a conversation, respond to the interlocutor's remarks, identify and correct misunderstandings as they occur [5, pp. 28, 29].

**Conclusion.** Thus all, today the urgent problem of higher education is the highly qualified, comprehensively developed aviation specialists, competent in their professional sphere. Foreign language competence plays a leading role in professional communication, which is based on the knowledge of radiotelephony phraseology and a sufficient level of plain English knowledge. English has been chosen as the international language of radiotelephony phraseology which is developed to provide efficient, clear, concise, and unambiguous communication, and constant attention should be given to the correct use of ICAO phraseologies in all instances in which they are applicable. So, Radiotelephony English, which includes but must not be limited to ICAO phraseology and can require the use of "general" English, as a sub-category of aviation English is the language used in radiotelephony communications. It goes without saying, flight safety depends on the reliability of radiotelephony communication, mutual understanding by the participants of this interaction.

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### **КОРОТКИЙ ОГЛЯД АВІАЦІЙНИХ ДОКУМЕНТІВ, ЩО МАЮТЬ БЕЗПОСЕРЕДНЕ ВІДНОШЕННЯ ДО МОВНОЇ ПІДГОТОВКИ АВІАЦІЙНИХ ФАХІВЦІВ**

**Анотація.** У статті окреслені основні документи ІКАО, які мають безпосереднє відношення до мовного аспекту діяльності авіаційних фахівців. Мова професії є головним функціональним компонентом професійного спілкування диспетчерів управління повітряним рухом та пілотів, а її опанування є їх першочерговим завданням. На сучасному етапі особлива увага науковців спрямована на вивчення мови, яка обслуговує професійну сферу спілкування.

На сьогодні не лише науковці приділяють велику увагу до професійної авіаційної комунікації, а й світові авіаційні організації і, перш за все, ІКАО, розуміючи, що безпека в авіації безпосередньо залежить від якісної мовленнєвої взаємодії льотного складу і диспетчерів управління повітряним рухом. Сучасні вимоги до професійного мовлення авіаційних спеціалістів базуються на ряді нормативних документів ІКАО, висвітлених у статті. Документ 4444, документ ІКАО Правила аеронавігаційного обслуговування «Організація повітряного руху» присвячений фразеології радіообміну. Мовним аспектам радіозв'язку в авіації присвячений Документ 9835 «Керівництво з запровадження вимог ІКАО щодо мовної відповідності». ІКАО має шість робочих мов, саме англійську мову було обрано міжнародною мовою радіотелефонного зв'язку цивільної авіації. Шкала оцінювання володіння англійською мовою включає шість рівнів. Професійне мовлення диспетчерів управління повітряним рухом і пілотів оцінюються за критеріями володіння англійською мовою, що включають: вільність говоріння, взаємодію, словниковий запас, граматичні конструкції, вимову й розуміння.

У статті наголошено, що основна мета мовної підготовки авіаційних спеціалістів - повне занурення у всебічне використання мовних засобів, які мають безпосереднє відношення до тем, пов'язаних з авіацією.

**Ключові слова:** авіаційна англійська мова, англійська мова, документи ІКАО, професійне спілкування, фразеологія радіомовлення.

Одержано редакцією: 15.09.2020 р.  
Прийнято до публікації: 28.09.2020 р.