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RADIOPHRASEOLOGY AS A SUBTITLE OF PROFESSIONAL COMMUNICATION OF AVIATION SPECIALISTS IN AVIATION ENVIRONMENT

Summary. The article states that flight safety, efficiency and preservation of the aviation environment depend on competent, well-prepared specialists for professional communicative interaction in the international aviation environment. Aviation events caused by errors in the process of conducting radio communication in English, it can occur due to the lack of an adequate proficiency level in professional communication. Choosing the right strategy of behavior in routine and non-routine situations, making the right decision, taking responsibility for the safety of passengers is a priority task in the aviation specialists training. Professional communication of aviation specialists cannot be reduced only to the use of technical terms, abbreviations and the phraseology proficiency of radio communication, key basis should be professional speech skills of a standard general language, which is an important component of the professional reliability of aviation specialists; but general English proficiency is a basic criteria for a successful career and competitiveness in the process of professional activity. Therefore, English proficiency is the international communicative equivalent of the political, economic and scientific development in modern society. Radiophraseology is a standardized set of language expressions, terms and clichés, which is designed to ensure maximum accuracy, conciseness and avoidance of ambiguity in routine and non-routine situations in the aviation industry. It is based on a clear regulation: a stable, certain lexical structure and the obligatory use of English in order to ensure and guarantee safety in the aviation environment.

The author indicates the main features of radiophraseology: stability and conciseness (the use of exclusively approved phrases that ensure a reduction in time for transmitting information and eliminating possible misunderstandings); reproducibility (constant use of language models in routine and non-routine situations, which allows to respond to messages immediately); stability of the lexical structure (components of phraseological units do not change and perform one syntactic function); lack of emotions (communication is directed for transmitting a factual information (reports about the situation, orders, permissions) avoiding the usage of an individual and emotional style); using of special codes (applying of the international phonetic alphabet (Alpha, Bravo, etc.)) and digital codes to ensure clarity, uniqueness and reliability of radio communication).

Key words: aviation specialists, aviation environment, flight safety, professional communication, radiophraseology.

Statement of the problem and its scientific/practical relevance. English is the professional language used for flight operations. English language proficiency is a top priority for profes-

sional training of pilots and air traffic controllers. The reliability and the efficiency of radiotelephony communication in English depend on not only lives and activity of participants' communication but also safety of flight. The aim of this scientific research is the professional training of aviation specialists, with particular emphasis based on the language component that generates special interest and significance of this issue.

Aviation safety directly depends on the quality of interaction between pilots and air traffic controllers. In aviation sphere, considerable attention to communication issues is paid not only by scientists and aviation experts, but also by International Aviation Organizations, primarily the International Civil Aviation Organization (ICAO). Main issues of "air – ground" verbal communication organization are indicated in the following documents: Manual of Radiotelephony [1]; Manual on the Implementation of ICAO Language Proficiency Requirements [2]; the Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM) [3] and Aeronautical Telecommunications [4], Guidelines for Aviation English Language Program [5]. ICAO phraseology is contained in procedures and found in these documents. The purpose of these manuals is to provide examples of the radiotelephony phraseology. While the procedures and phraseology specifically reflect the situation in an environment where very high frequency is in use, they are equally applicable in those areas where high frequency is used. ICAO phraseology is developed to provide efficient, clear, concise, and unambiguous communications and constant attention should be given to the correct use of ICAO phraseology in all instances in which they are applicable. However, it is not possible to provide phraseology to cover every conceivable situation that may arise and the examples contained in this manual are not exhaustive, but merely representative of radiotelephony phraseology in common use. Users may find it necessary to supplement phraseology with the use of "plain" language. When it is necessary to use plain language, it should be use according to the same principles that govern the development of phraseology in communication should be clear, concise, and unambiguous. Sufficient proficiency in the language being used is also required. In addition to correct use of phraseologies and adequate language proficiency, it is also important to keep in mind that the language being used in radiotelephony is often not the first language of the receiver or originator of a transmission. An awareness of the special difficulties faced by second-language speakers contributes to safer communications. Transmissions should be slow and clear. Direct statements that avoid idiomatic expressions are easier to understand than indirect statements or col-

loquialisms or slang [2]. The requirements have particular significance for the professional training of aviation specialists in ICAO documents. Therefore, their professional activity is characterized by high degree of dynamism, situational variability and unconventional situations occurring in aviation operational processes.

Presentation of the main research material. According to the Rules of Radiotelephony Communication and Phraseology in the Airspace of Ukraine, it was defined some particular categories of messages such as: emergency messages, urgency messages, medical emergency messages, meteorological messages, direction-finding messages, flight safety messages, as well as messages related to the regularity of flights.

Ukrainian laws and regulations clearly define radiotelephony communication procedures:

1) messages must be transmitted in a concise form, using standard phraseology and in a normal spoken tone;

2) aviation personnel must ensure clear and distinct communication. Pronounce each word clearly and distinctly, keep a speaking rate not exceeding 100 words per minute, reduce the speaking rate when transmitting messages to aviation specialists that requires recording in order to write down them, make a short pause before and after numbers for clear comprehension, maintain a constant level of speech volume;

3) it is necessary to make short pauses in order to ensure the frequency is being used not occupied, to give opportunity for receiving messages and to request readback if some part of the message is not understandable during the transmitting long messages;

4) messages should consist of the appropriate parts and transmitted in the following order:

- a) the message indicates the addressee and the originator
- b) the text of the message [6].

English is one of the official languages of ICAO. The opportunity to obtain professional education in English is especially important for future specialists in the aviation industry. The modern vision of the problem of professional communication of aviation specialists is that, it cannot be reduced only mastering the phraseology of radio exchange, applying technical terms and abbreviations, the basis of which should be professional speech skills of a standard general speech. They are important components of the professional reliability of aviation specialists, but also knowledge of general English, that firstly, it will contribute to a deeper immersion in the culture of the country of studying. Secondly, knowledge of English is the main criteria for a successful career, as well as an important competitive advantage in the process of professional activity, and in general, English is the international equivalent of communication in the modern world, because the economic, political, and scientific life of society is carried out by it [7].

If we consider the factor of foreign language proficiency, the situation becomes even more complicated. ICAO uses six levels scale to assess English proficiency: Level 6 (Expert), Level 5 (Extended), Level 4 (Operational), Levels 1-3 (Non-operational). Proficiency English of ICAO level 4 is an essential requirement for all aviation professionals and it is tested by all aviation schools and air companies. Pilots and air traffic controllers are usually required to pass a proficiency English test for level 4 in accordance with ICAO requirements [1]. The International English Language Test consists of six key components: pronunciation, structure, vocabulary, fluency, comprehension and interaction. According to the ICAO scale, a person with the 4th operational level can have an accent that does

not complicate understanding, master grammatical constructions in such way, if the mistakes suddenly occur, they do not confuse the meaning of the message. The person is able to paraphrase an expression if the vocabulary is not enough for explanation, to speak at a rate corresponding to the ICAO scale, to understand the interlocutor and to be able to resolve doubts about the accuracy of understanding by confirming, clarifying and checking the information.

Professionally oriented language training of aviation specialists is characterized by specific goals, criteria for assessing language competence, training content and key features of aviation English that is characterized by conducting radio communication "Pilot – ATC". It has been underlined that aviation English is an independent subtitle of language, because it has a number of specific features that differentiates it from spoken English. The purpose of language training is determined by the ICAO requirements in order to ensure a high level of professional language competence aviation specialists (pilots and air traffic controllers) to minimize the number of cases of inadequate communication in the air. In fact, training of aviation English for radio communication and having professional language competence is directed towards achieving world flight safety indicators [7].

First of all, effective professional language training must take into account the specifics of profession in aviation industry and its professional and communicative requirements and needs. The pilot has an integral and leading role in the "man – machine – environment" system, the interaction between man and machine occurs on the principle of active participation of the person, who organizes the entire system and directs it to achieve a certain result, i.e. the principle "active operator" is implemented [8]. Flight operation is one of the most complex and dynamic activity, the flight crew of sophisticated modern aircraft works at the limit of human capabilities; flight operation activity is as a profession that belongs to the category of "dangerous professions" [9]. The peculiarities of a pilot's work (information overload, forced high pace of work due to time limits and shortages, work in stressful conditions) are intensified by the fact that a person is as a link in the complex system "aircraft – pilot – environment". A pilot has his own limitations and can provoke errors in flight operation and lead to the occurrence of emergency situations [10].

The language barrier is increasingly emerging not a secondary issue but one of the key causes of aviation accidents on international air routes. Aviation incidents and accidents may often happen in situations where there has been a language misunderstanding between pilots and air traffic controllers. The language factor leads to aviation non-routine situations in cases:

1) the pilots or the air traffic controllers do not use standard radiotelephony phraseology while performing normal flight operations;

2) flight crew has insufficient level of plain English to explain a problem that has occurred on board during the flight;

3) the pilots or the air traffic controllers revert from English to their native language over radio communication within the same airspace [11].

It is necessary to apply immersing technologies in language situations in order to improve the quality of language proficiency training for aviation specialists that is typical for future professional activity in the aviation industry. Taking into considerations all men-

tioned features of professionally oriented language training, the following approaches are suggested:

1) the usage of quasi-professional technologies in classroom language activities and became close to real professional practice;

2) interdisciplinary integration through the application of knowledge from such subjects as Aircraft Operations, Navigation, Meteorology, Air Traffic Management, etc.;

3) the usage of real radiotelephony communications over the “Pilot – Air Traffic Controller” communication channel [5].

Radiotelephony communication is characterized by standardized language models, aviation terminology, code signals, intonation patterns and specific pronunciation. These key features require the development of skills such as the ability to understand various accents within the aviation community, transmit or receive information, report non-routine situations, request data and clarify the information in case of misunderstanding in order to prevent miscommunication and all possible unpredictable consequences.

It is characterized by highly specific vocabulary, expressions and functions. The ultimate criteria for assessing proficiency language is communicative competence, not linguistic conformity. Radiotelephone communication is conducted mainly orally and often without visual contact. The issue of communication cannot only affect the safety of passengers and air companies, but also it has a serious economic impact on all participants involved in the aviation industry. It can cause direct expenses for training and testing and has indirect effects on the recruitment and staffing of personnel [12].

Conclusions and prospects for further research. Radiotelephony phraseology is a standardized set of phrases and expressions that is used to ensure clear and unambiguous communication during radiotelephony exchanges, especially in aviation. It minimizes misunderstandings, enhance safety, and it is based on clearly defined rules. English is often applied as the international language, as well as the national language, for example, Ukrainian.

We can identify some key aspects of radiotelephony, such as:

1) clarity and conciseness: the applying of short, unambiguous phrases;

2) standardization: a set of phrases for routine situations (take-off, landing, start-up, line-up, pushback);

3) avoidance of ambiguity: words and phrases are selected in order to understand clearly even during poor communication conditions;

4) international standards: standard phraseology is used to ensure flight safety in accordance with the regulations in Ukraine;

5) alphabet and numbers: a special phonetic alphabet (Alpha, Bravo, Charlie etc.) and standardized rules for the pronunciation of numbers are used to avoid mistakes. Radiotelephony phraseology can be defined as a tool for the rapid and safe exchange of information between flight crew and ground service.

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Демченко І. Фразеологія радіообміну як складова професійної комунікації авіафахівців в авіаційному середовищі

Анотація. У статті констатується безпека польотів, ефективність та збереження авіаційного середовища залежить від компетентних, добре підготовлених до професійної комунікативної взаємодії в міжнародному середовищі фахівців авіаційної галузі. Авіаційні події, спричинені помилками в процесі ведення радіообміну англійською мовою, відбуваються через брак належного рівня володіння професійною комунікацією. Обирати правильну стратегію поведінки в стандартних та нестандартних ситуаціях, ухвалювати правильне рішення, брати на себе відповідальність за безпеку пасажирів – пріоритетне завдання у підготовці авіафахівців. Професійна комунікація авіафахівців полягає в тому, що не може зводитися тільки до вживання технічних термінів, аббревіатур і опанування фразеології радіообміну, її ключовою основою мають бути професійномовленнєві вміння стандартного загальнономовленнєвого характеру, що становить важливим компонентом професійної надійності авіафахівців; але володіння загальною англійською мовою є базовим критерієм для успішної кар'єри та конкурентоспроможності в процесі професійної діяльності, оскільки, володіння англійською

мовою є міжнародним комунікативним еквівалентом економічного, політичного та наукового розвитку сучасного суспільства.

Фразеологія радіообміну являє собою стандартизований набір сталих мовних виразів, термінів та кліше, які розроблені для забезпечення максимальної точності, лаконічності й уникнення двозначності в екстремальних та нестандартних ситуаціях авіаційної галузі. Вона ґрунтується на чіткому регламенті: стабільному, певному лексичному складі та обов'язковому використанні англійської мови для забезпечення та гарантування безпеки в авіаційному середовищі. Автором зазначено основні властивості фразеології радіообміну: стабільність та лаконічність (вживання виключно затверджених фраз, які забезпечують скорочення часу для передачі інформації та усунення можливих непорозумінь); відтворюваність (постійне застосування мовних моделей в стандартних та нестандартних ситуаціях, що дає змогу миттєво реагувати на повідомлення); стійкість лексичного складу (складові

фразеологізмів, які не змінюються, функціонують як єдине ціле, виконують одну синтаксичну функцію); відсутність емоційності (спілкування спрямоване на передавання фактичної інформації (повідомлення про ситуацію, накази, дозволи) уникаючи використання індивідуально-емоційного стилю); застосування спеціальних кодів (вживання міжнародного фонетичного алфавіту (Alpha, Bravo тощо) та цифрових кодів для забезпечення чіткості, однозначності і надійності радіозв'язку).

Ключові слова: авіафахівці, авіаційне середовище, безпека польотів, професійна комунікація, фразеологія радіообміну.

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