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INNOVATIVE LINGUISTIC AND METHODOLOGICAL APPROACHES TO TEACHING AVIATION TERMINOLOGY TO STUDENTS OF HIGHER EDUCATION INSTITUTIONS

The work is aimed at analyzing existing regulatory documents, standards and requirements for recommended methodologies and approaches to teaching aviation English with an emphasis on terminology, analyzing the experience of implementing linguistic and methodological foundations of teaching aviation terminology in higher education institutions, researching and theoretically substantiating the pedagogical conditions for implementing the foundations of teaching aviation terminology, and developing recommendations for improving the efficiency of the process of teaching aviation terminology by implementing all these foundations into the university's educational process. Recommendations for improving the efficiency of the process of teaching aviation English by implementing linguistic and methodological foundations of teaching aviation English terminology, which were obtained during the implementation of this work, will be used in the educational process of the university when studying scientific and technical terminology of the English language in the field of aviation by implementing recommended methods and approaches. The study of the linguistic and methodological foundations of the teaching of aviation terminology is based primarily on an understanding of the main features of aviation English, which is used for the exchange of messages between pilots and air traffic controllers, and which, like any other professional field, is characterized by the existence of specific terminological vocabulary, the possession of which is essential for aviation specialists to acquire proper communicative competence. In aviation higher education institutions, the teaching of English language has certain peculiarities that may depend on the student's choice of specialty. Thus, future pilots, air traffic controllers, and aviation engineers are required to have a certain level of proficiency in specific aviation terminology, which is defined as a professional need for specific communication inherent to specialists. The definition of such a concept as "Aviation English" is presented in ICAO Document 9835 (Doc 9835-AN/453 Manual on the Implementation of the ICAO Language Proficiency Requirements, 2004). The problem of learning aviation terminology was and still is relevant in modern teaching practice. A teacher of aviation English needs to understand what are the main characteristics of terminological vocabulary, how to semanticize its meaning in specific texts, and what exercises can be used to activate its further use in speech.

Key words: foreign language, lexicon, aeronautical, specific, education, experts.

Formulation of the problem. The current stage of development of the Ukrainian educational system and the growing role of Ukraine in international cooperation places new demands on the level of professional activity and communication skills of flight crews, air traffic controllers and ground handling personnel in the field of aviation English, including scientific and technical terminology.

Nowadays, knowledge of foreign languages is not only an indicator of education and intellectual development, but also a professional necessity, which requires systematic and persistent work, time and effort on the way to endless development of the personality of each specialist. Thus, the need of the hour is to train qualified specialists, because the global integration, which leads to the expansion of international relations, motivates today's graduates of higher military educational institutions not only to have professional knowledge, but also to be ready to use a foreign language in professional and research communication.

The introduction of the International Civil Aviation Organization's (ICAO) Level 4 English Proficiency

Requirements (LPRs) in 2003, and the subsequent steps taken to ensure their effective and timely implementation, have had a significant impact on the current aviation English teaching environment. To address the challenges faced by aviation English teachers and users of the new curricula developed to meet the new ICAO requirements, the International Civil Aviation English Education Association (ICAEA), in collaboration with ICAO, is finalizing a series of Aviation English Curriculum Guidelines. These will be invaluable to all users of aviation English as they adapt their training programs to achieve the ultimate goal of ensuring aviation safety.

Other than the existing internationally recognized accreditation structures and bodies for teaching English as a foreign language, including the qualifications required for teachers of English as a foreign language, there is currently no formal accreditation or qualification system for educational institutions or teachers who develop or practice aviation English terminology. As a result, the testing and teaching of aviation English is an unregulated area. As a result, such

training is characterized by specific objectives, content, qualification criteria, conditions of use, and professional and personal qualities that distinguish it from language training in any other field of human activity.

The paper proposes the analysis, development and further implementation of scientific and methodological recommendations for improving the effectiveness of the English language teaching process with an emphasis on modern educational and scientific aviation terminology in order to improve the methodology of teaching aviation English.

Aviation English includes:

- ICAO Phraseology (standard radio communication phraseology clearly defined in ICAO documents);
- English for Specific Purposes (professional English that requires knowledge of aviation terminology);
- English for General Purposes (general English, which provides the ability to communicate freely on any topic). Therefore, aviation students must be competent users of general and professional English.

Analysis of recent research and publication.

The International Civil Aviation English Education Association (ICAEEA), with the assistance of ICAO, has developed the Aviation English Training Programs Guidelines to assist the aviation community in the selection and engagement of aviation English training providers and to establish acceptable standards of good practice in aviation English training.

Formation of the concept of training of aviation specialists, development of curricula and syllabi, improvement of the pedagogical and methodological base is regulated by legislative and regulatory documents, in particular: Law of Ukraine "On education" (2017), "On higher education" (2014), "Regulations on the procedure for innovative educational activities" (2000), "Strategy for the development of the air navigation system of Ukraine for 2015-2025" (2014), recommendations of the European Organization for the Safety of Air Navigation (Eurocontrol), standards and recommended practices (SARPS), such as document no. 9835 An /453 "Guidelines for the Implementation of ICAO Language Proficiency Requirements" (2010) [8], Document No. 9859 An/474 "Guidelines for Flight Safety Management" (2013) [2], Document No. 4444 "Rules for Air Navigation Services. Air Traffic Organization" (2016), Document No. 8400 "Rules of Air Navigation Services. ICAO Abbreviations and Codes" (2016), Document No. 9432 An/925 "Radiotelephone Manual" (2007), ICAO Circular No. 318-An/180 "Language Testing Criteria for Global Harmonization" (2009), ICAO Circular No. 323-An/185 "Recommendations for Aviation English Language Training Programs" (2009), etc.

According to paragraph 1.2.9.4. of Amendment 164 to Annex 1 of the Chicago Convention on the Issuance of Certificates to Air Personnel (Doc. 9835-AN/453 "Guidelines for the

Implementation of ICAO Language Proficiency Requirements") adopted by the International Civil Aviation Organization (ICAO), pilots of airplanes and helicopters, air traffic controllers and operators of air traffic control stations must be able to communicate in English and understand it at the fourth of the six working levels defined. Thus, the mastery of aviation terminology in English by aviation specialists has gained professional significance and is a professional necessity, so that in today's environment the acquisition of a certain level of communicative competence by specialists is considered as important a component of professional competence as purely technical knowledge, skills and abilities. In other words, the possession of a sufficient level of language/communication skills is an integral part of the professional training of a future aviation professional.

The objective of this work is the process of teaching aviation terminology, taking into account the results of the analysis of linguistic and methodological foundations, existing regulations, modern standards and requirements for recommended methods and approaches to teaching scientific and technical terminology in the field of aviation.

The purpose of the study is to improve the effectiveness of teaching English with a focus on modern educational and scientific aviation terminology.

Research methods – analysis of linguistic and methodological foundations and substantiation of recommendations for improving the level of proficiency in terminological units of aviation English.

Research results. The term "aviation language" covers a relatively wide area and includes all situations of language use by representatives of various aviation professions (flight crews, engineers, technicians, ground support personnel). Usually, highly specialized use of a language can lead to the formation of a linguistic subsystem or sublanguage, which is what has happened to the broad stratum of English that serves the aviation industry. A sublanguage is formed from the material of natural spoken language, is linguistically dependent on it, and is characterized by the use of highly specialized vocabulary, a large number of terms, and the presence of somewhat non-standard forms and constructions.

In this sense, aviation English is a typical example of a sublanguage and has a large number of its own subsystems used in quite different areas of the aviation sector: significant differences in terminology are quite obvious and undeniable, for example, in aircraft construction, ground handling services and aviation radiotelephony, despite the fact that all these language subsystems belong to the broad category of aviation sublanguage.

The language of aviation radiotelephony covers a fairly limited number of situations of language use by representatives of only two aviation specialties – air traffic controllers and flight crew members – and

includes two components: standard ICAO phraseology and the use of colloquial speech. The specificity of the aviation radiotelephony subsystem is determined by a number of factors and characteristics that distinguish it as a special language subsystem subject to ICAO language proficiency requirements.

Let's consider standardized ICAO phraseology and spoken language as two aspects of the aviation language of radiotelephony. The purpose of the aviation radiotelephony language is to exchange information in a clear, concise, and accurate manner. The use of standardized phraseology, which is intended for use by all participants in aviation radiotelephony and has a specific technical function of ensuring effective and safe communication, minimizes the negative impact of the factors listed above in the characteristics of the concept of "aviation language". The ICAO phraseology was developed to ensure maximum accuracy, conciseness and unambiguity of understanding of words and expressions used in radio telephone communications.

The ability to use spoken language confidently can be critical in emergency and crisis situations to deal with a range of urgent issues when the amount of language required to solve the problem is beyond the scope of standard phraseology. The need to use spoken language also exists in many everyday situations.

The composition of the most frequently used vocabulary and terminological competence of pilots and air traffic controllers is determined by the topics most frequently involved in their professional communication. The subject and topic areas of professional communication also clearly outline the dominant communication functions of the participants in radio communication, which are divided into four categories according to their role in piloting and air traffic control:

a) inducement to action:

- 1) instructions;
- 2) request and offer to perform an action;
- 3) advice / consultation;
- 4) authorization/approval of an action;
- 5) initiative;

b) exchange of information:

- 1) information about the current situation;
- 2) information on future actions/events;
- 3) information on events of the immediate past;
- 4) formulation of the need/requirement;
- 5) formulation of available capabilities to perform

the task;

c) management of the pilot-dispatcher relationship (courtesy markers):

- 1) greeting;
- 2) expressing a complaint/comment/approval/apology;

d) dialog management:

- 1) checking understanding;
- 2) self-correction;

3) requesting / providing an answer;

4) requesting / granting permission;

5) confirmation / non-confirmation;

6) use of paraphrase;

7) clarification;

8) starting/ending a dialog.

When developing a curriculum for a professional aviation language course, an important aspect is the selection and development of materials and textbooks. It is rare to find a textbook that meets all the requirements for the development of English communicative competence in the specialty, taking into account aviation terminology, and it is important to develop and select your own sets of resource materials with a system of exercises to develop the necessary competencies and language skills. The first place among educational resources is occupied by authentic materials in the field of the student's chosen specialization, which can logically supplement the existing textbooks of foreign and domestic authors. It is important to select audio and video recordings, media publications, Internet resources, etc. Such additional resources can become a means of organizing independent self-study, opportunities for self-assessment and taking responsibility for their own learning and professional development.

Conclusions. The general methodological recommendations for the organization the educational process and the selection of the linguistic material for learning the terminology of the aviation language include the following:

– contextual training taking into account future professional needs (modeling quasi-professional tasks that would reproduce real situations of professional interaction and communicative functions of participants in radio telephone conversations, taking into account the topics regulated by ICAO documents);

– maximization of conversational practice through the use of interactive learning and organization of interaction of all cadets as participants in the learning process;

– maximizing the use of auditory and visual (rather than textual) stimuli that reproduce the conditions of real professional situations;

– application of communicative teaching methods focused on the formation and development of priority (in the context of aviation English) language aspects – speaking and listening skills;

– development of all six aspects of language proficiency (according to the ICAO qualification scale and language skill descriptors) – pronunciation, grammatical structures, vocabulary of specialized terms, speaking rate, comprehension, communication. The choice of the model of the organization of the educational process, as well as other factors, depends on the achievement of the final goal – the development of the communicative abilities of the future specialist – and represents the optimal combination

of several forms of the organization of the educational process. The curriculum should also promote the development of skills for independent mastery of aviation English with an emphasis on terminology (familiarizing students with available teaching materials, criteria for their selection, developing skills to adapt teaching materials to their own learning needs, providing general methodological recommendations for independent work), as self-education is an economical way to develop and maintain language skills as a component of professional training. Individual lessons with a teacher can be preferred in case of remedial learning or to overcome individual difficulties of the students.

From the above, we can conclude that the development of students' communicative English competence in the process of learning aviation terminology has certain peculiarities and requires a comprehensive systematic approach, continuous improvement of the content of educational material and practical implementation of knowledge.

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Денисова С. Інноваційні лінгвістично-методичні підходи до викладання авіаційної термінології студентам закладів вищої освіти

Метою роботи є аналіз існуючих нормативних документів, стандартів та вимог до рекомендованих методик та підходів до навчання авіаційної англійської мови з акцентом на термінологію, аналіз досвіду впровадження лінгвометодичних засад навчання авіаційної термінології у вищих навчальних закладах, дослідження та теоретичне обґрунтування педагогічних умов реалізації засад навчання авіаційної термінології та розробка рекомендацій щодо підвищення ефективності процесу навчання авіаційної термінології шляхом імплементації всіх зазначених засад в освітній процес університету. Рекомендації щодо підвищення ефективності процесу навчання авіаційної англійської мови шляхом впровадження лінгвометодичних засад навчання авіаційної англійської термінології, які були отримані в ході виконання даної роботи, будуть використані в освітньому процесі університету при вивченні науково-технічної термінології англійської мови в галузі авіації шляхом впровадження рекомендованих методів і підходів. Вивчення лінгвістичних та методичних засад навчання авіаційної термінології базується насамперед на розумінні основних особливостей авіаційної англійської мови, яка використовується для обміну повідомленнями між пілотами та авіадиспетчерами, і яка, як і будь-яка інша професійна сфера, характеризується наявністю специфічної термінологічної лексики, володіння якою є необхідним для набуття авіаційними фахівцями належної комунікативної компетенції. В авіаційних закладах вищої освіти викладання англійської мови має певні особливості, які можуть залежати від вибору студентом спеціальності. Так, від майбутніх пілотів, авіадиспетчерів, авіаційних інженерів вимагається певний рівень володіння специфічною авіаційною термінологією, що визначається як професійна потреба у специфічному спілкуванні, притаманна фахівцям. Визначення такого поняття, як «авіаційна англійська мова», подано в документі ІКАО 9835 (Doc 9835-AN/453 Manual on the Implementation of the ICAO Language Proficiency Requirements, 2004). Проблема вивчення авіаційної термінології була і залишається актуальною в сучасній практиці викладання. Викладачеві авіаційної англійської мови необхідно розуміти, які основні характеристики термінологічної лексики, як семантизувати її значення в конкретних текстах та які вправи можна використовувати для активізації її подальшого вживання в мовленні.

Ключові слова: іноземна мова, лексика, авіаційний, спеціальний, освіта, фахівець.