

*H.O. Maksymovych,
T.V. Shulga
(National Aviation University, Ukraine)*

Language training of aviation specialists within a content-oriented approach

The article emphasizes the importance of language proficiency communications for the aviation industry, determines the notion of "aviation language," and the requirements for English proficiency of aviation specialists and its impact on flight safety. It also analyses the concept of "contextual learning" and its role as a model of the specialist's future professional activity.

Since the borders of states cease to be an obstacle for the active communication of professionals, and the exchange of information and experience becomes a necessary prerequisite for productive and effective work, knowledge of a foreign language becomes the norm and condition in professional activity. The introduction of linguistic culture determines the status of a modern, highly qualified specialist. In the context of radical changes in the economy, and social spheres, the education system, as a public function, reflects changes in society and affects its development. The aviation industry is no exception. Flight safety directly depends on the language competence of civil aviation specialists following new requirements and a modern approach to the quality of teaching profession-oriented English.

Profession-oriented English is an essential component of training aviation specialists. According to statistics, the main factor of aviation accidents and aircraft crashes is the insufficient level of professional English language of the crew members or air traffic controllers. In this regard, high-quality language professional training of civil aviation specialists according to the standards and recommendations of the International Civil Aviation Organization (ICAO) ensures air traffic safety. According to published statistics, 40 large passenger commercial aircraft accidents were registered in 2020, five of which resulted in fatalities. In total, 299 passengers and crew members died in aircraft crashes, compared to 257 in 2019, when 86 aircraft crashes occurred (eight of them had victims). Naturally, the language problem was not always the main cause of accidents. However, more often, it was an accompanying factor in the development of events, where objective language factor was superimposed on human errors and led to terrible consequences.

As is known, the concept of "safety" in aviation security is seen as controlling and managing risk factors. Thus, safety is the state where the possibility of harm to persons or property damage is reduced to and maintained at or below an acceptable level through a continuing process of hazard identification and safety risk management [1; p.2-1].

The problem of training highly qualified specialists in the aviation industry does not lose its primary importance, and its relevance is growing every year. Furthermore, learning English for an international pilot or air traffic controller is a priority, primarily due to flight safety requirements. However, since English is now

the most widely used language in the international aviation community, improving spoken English is exactly what the community's attention focuses on.

At a new stage of aviation development, an indispensable condition for implementing flight safety is high, specified requirements for the level of language training based on mandatory testing and certification. Among the requirements for safety management is the proper language competence of air traffic controllers for air traffic services (ATS) for international air traffic [2]. International agreements in the field of civil aviation and air navigation are compulsory for ICAO member countries, and therefore, Ukraine, as a full ICAO member state, is governed by Ukrainian regulations on air navigation in accordance with ICAO standards and recommended practices. All this leads to the need for the active use of a foreign language in the professional training of future aviation specialists.

The primary purpose of the ICAO language requirements is to provide specialists with an appropriate level of aviation English, which will reduce incidents and cases in the communication process since aviation English is used in different areas of aviation.

The term "aviation language" covers a wide area, which can include various professions (engineers, technicians, flight crews, etc.) working in the field of aviation and various directions, such as the operation of airfields, aircraft maintenance, flight activities, air traffic management, etc. Aviation professionals, including pilots and air traffic controllers, must demonstrate the ability to speak and understand professional English at an Operational Level 4 in accordance with international standards. According to the ICAO qualification scale, aviation specialists' English level must meet the specified language requirements: correct pronunciation of sounds and words, grammatical structure, vocabulary, speed of speech, dialogue, and understanding. At the Operational Level 4 on the ICAO scale professionals can speak fairly quickly, ask and answer questions without hesitation, master basic grammatical structures, and understand general and specific work-related topics.

Profession-oriented language training at an aviation university is significantly different from language training at any other non-linguistic university, namely, by specific goals, criteria for assessing language competence, the content of training, as well as the features of aviation English, which are characteristic for conducting radio negotiations "Pilot-Air Traffic Controller."

According to ICAO language proficiency requirements (Document 9835), the language factor accompanies aviation incidents and accidents in cases where:

- the crew or dispatcher does not use the standard phraseology of radio exchange when performing standard procedures;
- pilots do not speak English at a level sufficient to explain the problem on board;
- the crew or the air traffic controller switch from English to their native language when communicating in the same airspace [3; p.17].

In F. Shokros's opinion, the main task of the professional language is to study the radio exchange between the pilot and the air traffic controller in communication; a language without grammatical structures is considered a priority in aviation activities and is provided without visual objects.

His findings follow ICAO requirements, which may affect possible hazardous conditions and incidents. For example, when performing routine actions, specialists must adhere to the standard phraseology of radio exchange; it can also be noted that the spoken language must be at an appropriate level to understand the situation that has arisen accurately.

F. Shokros identifies the following features of aviation English, which must be taken into account when determining the content of training:

- aviation language is intended to ensure clear communication between pilot and air traffic controller;
- the language used operates with very specific words, functions, and expressiveness;
- effectiveness, not linguistic correctness, is the main criterion for assessing language proficiency;
- communication is mainly supported by language, without additional visual aids [4; p.4,6].

Thus, when determining the training content, it is necessary to remember that the language of radio exchange has big differences compared to spoken English in the application of grammatical structures of standard phraseology to ensure intelligible communication. The primary purpose of "Pilot - Air Traffic Controller" radio communication is not the use of complex grammatical structures and idiomatic units but communication efficiency. The language of radio communication is also rich in terminology, code signs, peculiarities of pronunciation and intonation, and standard language models.

These features require the formation of such skills as the ability to transmit or receive information, understand different accents of the aviation community, request data, report on non-standard situations, and avoid a communication misunderstanding and its possible consequences.

Ease of understanding the language becomes a top priority for aviation English training in operation. After all, as mentioned earlier, aviation English is more a means of communicative interaction than the goal of learning.

In order to achieve Operational Level 4, the document ICAO 9835 suggests using the content-oriented teaching method to increase the level of the student's language competence for solving tasks. This technique is based on the fundamental correspondence between the language training course's subject content and the students' interests. According to document 9835, when choosing the forms of language training, the emphasis should be on context-oriented tasks, exercises created to improve interaction and team cohesion, the ability to solve problems, role-playing games, and modeling situations.

In order to improve the quality of language training of students at aviation universities, it is necessary to develop immersion technologies in speech situations, which are typical for future professional activities in the aviation field. It is necessary to create organizational and pedagogical conditions for the development of students' language and educational and cognitive competencies within the framework of the functional and content approach [5; p.237].

Taking into account the above-mentioned features of profession-oriented language training at an aviation university, a set of the following organizational and pedagogical conditions is proposed:

- the use of professional technologies that bring classes closer to practical professional activity. According to ICAO Circular 323-AN/185, the closer the subject's content is to real situations, actions, functions, and subjects that students encounter in their professional activities, the more efficient and effective the course's educational materials are [6; p.19]. Using quasi-professional technologies brings educational classes as close as possible to actual professional activity and the relationships of people engaged.

- interdisciplinary integration and joint activities with flight crew instructors and the training center in order to adjust the training process. The selection of the content of the educational material includes the use of knowledge in such disciplines as "Navigation," "Meteorology," "Aircraft Operations," "Air Traffic Management," etc. [5; p.238].

- the use of recordings of actual radio communications on the "Pilot-Air Traffic Controller" communication channel. Audiovisual materials must contain content and situations, so valuable for improving listening and vocabulary.

Summary. Using various forms and methods of contextual learning allows the development of students' creative abilities and the ability to use the acquired knowledge in real professional situations. Thus, the content of the training, aimed at the formation of professional and educational competence and the full training, is the main step to the Operational Level 4 of ICAO requirements for the language competence of aviation specialists. This training method will increase the level of language competence, critical thinking, ability, and readiness to solve professional tasks and will provide a tool for solving problems of industry interaction.

References

1. Safety Management Manual: Doc 9859 AN / 474. – 3rd ed. – Canada, Montreal: ICAO, 2013. – p. 2-1.
2. Наказ про затвердження Авіаційних правил України "Організація повітряного руху". Міністерство юстиції України.– 2022. – № 1920.
3. Manual on the Implementation of ICAO Language Proficiency Requirements: Doc. 9835 AN / 453. – 2nd ed. – Canada, Montreal: ICAO, 2010. – p.17.
4. Шокросс, Ф. Новые директивы по программам обучения авиационному английскому языку // ИКАО. – 2009. – Т. 64. – №3. – С. 4-6.
5. Шлямова А.А. Педагогічні умови мовної підготовки у авіаційному вузі // Інноваційна наука. -2016. - №1-2 (13). - С. 236-238.
6. Рекомендації щодо програм навчання авіаційній англійській мові: Циркуляр ІКАО 323-AN/185. - Канада, Монреаль: ІКАО, 2010. – С.19.