

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL AVIATION UNIVERSITY**

Faculty of Air Navigation, Electronics and Telecommunications
Aviation English Department

AGREED

Dean of Faculty of Air Navigation,
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« 15 » 09 2021

APPROVED

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Quality Management System
COURSE TRAINING PROGRAM
on

«Aviation English (part 2)»

Field of study: 27 «Transport»


Speciality: 272 «Aviation transport»

Educational and Professional Programs: «Air traffic service»

«Air navigation service systems»

Training Form	Semester	Total (hours/credits ECTS)	Lectures	Practicals	Lab. clas	Self-study	HW/CGP	TP/CP	Semester Grade
Full-time	8	120/ 4	54	-	66	-	8- credit

Index: CB-2-272-1/21-3.15; CB-2-272-2/21-3.15; CB-2-272-13/21-3.15

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Course Training Program on «Aviation English (part 2)» is developed on the basis of the Educational and Professional Programs on «Air Traffic Service», «Air navigation service systems», Bachelor Curriculum and Extended Bachelor Curriculum CB -2-272-1/21; CB -2-272-2/21; ECB -2-272-1/21; ECB -2-272-2/21 for Speciality 272 «Aviation Transport», Specializations “Air Traffic Service”, «Air navigation service systems” and corresponding normative documents.

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Document level – 3b
The Planned term between revisions – 1 year
Master copy



ЗМІСТ

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INTRODUCTION

Course Training Program on «**Aviation English (part 2)**» is developed based on the "Methodical guidance for the subject course training program", approved by the order № 249/од, of 29.04.2021 and corresponding normative documents.

1. EXPLANATORY NOTES

1.1. Place, objectives, tasks of the subject

The subject «**Aviation English (part 2)**» is the theoretical and practical basis of the set of knowledge and skills that form the profile of a specialist in the fields of aviation transport and transport infrastructure.

The purpose of teaching the subject is to acquire foreign language communication skills in a separate field of professional activity; to improve verbal communication and problem-solving skills; to study the specialized aviation terminology; to get acquainted with the latest achievements of science and technology in the field of air transportation infrastructure.

The tasks of the subject:

- preparing students for effective communication in their academic and professional environment;
- formation of communicative language competencies in real situations of academic and professional activity of future technical specialists;
- achieving the proficiency at the B1 level, which is the standard for obtaining a bachelor's degree.

1.2. Learning outcomes the subject makes it possible to achieve

As a result of studying this subject, the applicant must acquire the following learning outcomes (in combination with other educational components):

- communicate freely on professional issues in state and foreign languages orally and in writing;
- use modern information technologies, technical literature, databases, other resources and modern software to solve specialized complex problems of air transport.


1.3. Competences the subject makes it possible to acquire.

As a result of studying this subject, the student must acquire the following competencies (in particular, in combination with other educational components):

- ability to communicate in a foreign language;
- skills of using information and communication technologies;
- awareness of the organization and safety of air traffic;
- ability to work autonomously;
- ability to work in a team;
- ability to abstract thinking, analysis and synthesis;
- ability to analyze air transport facilities and their components, determine the requirements for their design, parameters and characteristics.

1.4. Interdisciplinary connections.

The subject «**Aviation English (part 2)**» is based on knowledge of such subjects as "Higher Mathematics", "Physics", "Principles of Flight of Aircraft" and is the basis for the study of further subjects, namely: "Aerodromes", "Meteorology", "Avionics". (Aircraft Equipment)," Fundamentals of Air Navigation", "Chains of Navigation Equipment", "Fundamentals of Applied Engineering Technologies" and others.

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2. COURSE TRAINING PROGRAM ON THE SUBJECT

2.1. The subject content

Training material is structured according to the module principle and consists of **two educational modules**: training module №1 "**Standard and non-standard situations on the ground and in the air**" and training module №2 "**Non-standard situations on the ground and in the air**", each of which is a logically complete, relatively independent, integral part of the subject, mastering which involves modular control work and analysis of the results of its implementation.

2.2. Modular structuring and integrated requirements for each module

Module №1 "Standard and non-standard situations on the ground and in the air"

Integrated requirements of the module №1: (know the terminology of the specialty, be able to use basic grammatical constructions in speech and in writing, have the ability to communicate in a foreign language on the topics of the module)

Topic 1. Navigation systems. Visual navigation. Flight planning. Air navigation maps. Pilotage. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication

Topic 2. Instrument control of the aircraft. Compass. Direction indicator. Situations of visual and instrumental motion control. GPS approach, reasons for use. Communication of the dispatcher with the pilot. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication

Topic 3. Emergencies during landing. Stable approach. Loss of control of the aircraft. Landmarks, terrain, communication between the pilot and the controller. The runway is blocked. Go-around procedure. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication

Topic 4. Troubleshooting. Ground equipment failure. Consequences of failure of technical equipment. Actions of pilots and aircrew in case of ground equipment failure. Electrical system failure. Situation management. Causes, consequences, measures to prevent an accident, the responsibilities of the air traffic controller, pilots and other personnel in this emergency. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication


Topic 5. Reducing the risk of landing. Actions to avoid risk. Visual links. Danger when landing. VOR and DME procedures. Crew resource management. Probable threats and mistakes, their prevention. Ways to solve the problem. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.

Module № 2 "Not-standard situations on the ground and in the air"

Integrated requirements of the module №2: (know the terminology of the specialty, be able to use basic grammatical constructions in speech and in writing, have the ability to communicate in a foreign language on the topics of the module)

Topic 1. Language and communication in aviation. Misunderstanding and communication errors. Examples of misunderstanding and ability to manage the problems. Communication on the ground. Handling incidents involving vehicles (ambulance, tow, etc) Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.

Topic 2. Runway incursion. The causes of runway incursion. ICAO recommendation for avoiding runway incursion. Situational awareness. Watching video "When attention is diverted".

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Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.

Topic 3. Environmental threats. Windshear. Icing. Volcanic ash clouds. Handling abnormal conditions in flight. Informing pilots about environmental threats. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.

Topic 4. Level busts. Level bust situations and its reasons. Recommendations for pilots for avoiding level busts. Watching video “Level bust”. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.


Topic 5. Handling a technical malfunction. Technical malfunction. Aircraft system failure. Consequences of a technical failure. Electrical failure during approach. Watching video “Loss of communication”. Decision making under stress. The effects of stress. Managing abnormal situations. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.

2.3. Training schedule of the subject

№	Theme (thematic section)	Total, hour		
		Mode of study: Full-time		
		Total	Practicals	Self-study
1	2	3	4	5
Module №1 “Standard and not-standard situations on the ground and in the air”				
1.1	Navigation systems. Visual navigation. Flight planning.	8 семестр		
		4	2	2
1.2	Air navigation maps. Pilotage.	4	2	2
1.3	Instrument control of the aircraft. Compass. Direction indicator.	4	2	2
1.4	Situations of visual and instrumental motion control. GPS approach, reasons for use. Communication of the dispatcher with the pilot.	4	2	2
1.5	Emergencies during landing. Stable approach. Loss of control of the aircraft.	4	2	2
1.6	Landmarks, terrain, communication between the pilot and the controller. The runway is blocked. Go-around procedure.	4	2	2
1.7	Troubleshooting. Ground equipment failure. Consequences of failure of technical equipment.	4	2	2
1.8	Actions of pilots and aircrew in case of ground equipment failure. Electrical system failure. Situation management.	4	2	2
1.9	Causes, consequences, measures to prevent an accident, the responsibilities of the air traffic controller, pilots and other personnel in this emergency.	4	2	2
1.10	Reducing the risk of landing. Actions to avoid risk. Visual links. Danger when landing.	5	2	3



1.11	VOR and DME procedures. Crew resource management. Probable threats and mistakes, their prevention. Ways to solve the problem.	5	2	3
1.12	Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.	5	2	3
1.13	Module Test №1	5	2	3
Total by the module №1		56	26	30
Module №2 "Not-standard situations on the ground and in the air"				
2.1	Language and communication in aviation. Misunderstanding and communication errors.	5	2	3
2.2	Examples of misunderstanding and ability to manage the problems. Communication on the ground. Handling incidents involving vehicles (ambulance, tow, etc)	5	2	3
2.3	Runway incursion. The causes of runway incursion. ICAO recommendation for avoiding runway incursion.	5	2	3
2.4	Situational awareness. Watching video “When attention is diverted”. Using active vocabulary in similar situations of professional communication.	5	2	3
2.5	Environmental threats. Windshear. Icing. Volcanic ash clouds.	5	2	3
2.6	Handling abnormal conditions in flight. Informing pilots about environmental threats.	5	2	3
2.7	Level busts. Level bust situations and its reasons.	5	2	3
2.8	Recommendations for pilots for avoiding level busts. Watching video “Level bust”. Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.	5	2	3
2.9	Handling a technical malfunction. Technical malfunction. Aircraft system failure.	5	2	2
2.10	Consequences of a technical failure. Electrical failure during approach.	5	2	2
2.11	Watching video “Loss of communication”. Using active vocabulary in similar situations of professional communication.	5	2	2
2.12.	Decision making under stress. The effects of stress. Managing abnormal situations.	4	2	2
2.13.	Ability to use active vocabulary on the topic and appropriate grammatical constructions in situations of professional communication.	4	2	2
2.14.	Module test work №2	4	2	2
Total by the module №2		64	28	36
Total by the subject		120	54	66

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3. BASIC CONCEPTS OF GUIDANCE ON THE SUBJECT

3.1. Teaching methods

It is recommended to use the following teaching methods during mastering the subject:

- explanatory and illustrative method;
- method of problem presentation;
- reproductive method;
- research method.

The implementation of these methods are carried out during practical classes, demonstrations, self-study, work with the educational material, analysis and solution of problems.

3.2. List of references

Basic literature

3.2.1. Aviation English: non-routine situations in flight. Nemlii L. Guide to the practical classes for the students of speciality 272 “Aviation Transport”. – K.: NAU, 2020. – 32 p.

3.2.2 Aviation English Nemlii L. Guide to the practical classes for the applicants for higher education of speciality 272 “Aviation Transport”. – K.: NAU, 2021. – 32 p.

3.2.3. Evans Virginia, Dooley Jenny, Espaza Jacob. Civil Aviation. – Express Publishing, 2012 – 108 p.

3.2.4. H. Emery, A. Roberts Aviation English for ICAO Compliance. Oxford: Macmillan, 2008 – 128 p.

3.2.5. H. Emery, A. Roberts Check your Aviation English. Oxford: Macmillan, 2008 – 128 p.

3.2.6. S. Ellis, T. Gerighty English for Aviation for Pilots and Air Traffic controllers. Oxford: University Press, 2008 – 96 p.

3.2.7. Авіаційно-технічна англійська мова для інженерно-технічного складу./ Під редакцією Вітряка А.М.- Кіровоград, 2010-116с.

Additional Literature

3.2.8. Jenny Dooley, Virginia Evans. Grammarway. Express Publishing. 2012 – 192p.

3.2.9. Dictionary of aviation terms/ ред. Кулик М.С. – К.: НАУ, 2007.

3.2.10. Dictionaries.

3.3. Internet Information resource


3.3.1. <https://aviationenglishblog.com/aviation-grammar/>

3.3.2. http://www.ulc.gov.pl/download/personel_lotniczy/ICAO_LPR/text.html

3.3.3. <https://cfapp.icao.int/rssta/RSSTA.cfm>

3.3.4. <https://www.liveatc.net/>

3.3.5. <https://learnenglish.britishcouncil.org/grammar>

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4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Assessment of certain kinds of student academic work is carried out in accordance with table 4.1.

Table 4.1. (credit)

Kind of Academic Work	Maximum Grade Values
	Full-time
№ 8 (8-9) semester	
Module № 1-2	
Reading and analysis of professionally oriented texts	5/5
Listening to the professionally oriented texts	5/5
Writing information related to the topic	5/5
Monologue speaking based on the topic	5/5
Dialogic speaking based on the topic	5/5
Preparation of a report on a topic/ / Test (homework)	10/10
<i>For admission to complete module test №1-2, a student must receive not less than</i>	21/21
Carrying out Module Test №1-2	15/15
Total by module №1-2	50/50
Semester Grade	100
Total by the subject	100

4.2. Completed types of educational work are credited to the student, if he received a positive rating for them (Table 4.1).

The credit rating is determined (in points and on a national scale) based on the results of all types of educational work during the semester.

4.3. The sum of rating assessments received by the student for certain types of completed educational work is the current modular rating assessment, which is recorded in the module control.

4.4. The sum of current and control modular ratings is the final modular rating, which in points and on a national scale is recorded in the module control.

4.5. The final semester rating in points, on the national scale and the ECTS scale is entered in the test report, study card and student record book, for example, as follows: 92 / Excellent / A, 87 / Good / B, 79 / Good / C, 68 / Set / D, 65 / Set / E, etc.

4.6. The final rating of the subject is equal to the final semester rating. The specified final rating assessment in the subject is entered in the Diploma Supplement.



(Ф 03.02 – 04)

АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

№ пор.	Прізвище ім'я по-батькові	Дата ревізії	Підпис	Висновок щодо адекватності

(Ф 03.02 – 03)

АРКУШ ОБЛІКУ ЗМІН

№ зміни	№ листа (сторінки)				Підпис особи, яка внесла зміну	Дата внесення зміни	Дата введення зміни
	Зміненого	Заміненого	Нового	Анульованого			

(Ф 03.02 – 32)

УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				
Узгоджено				