МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
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МОДУЛЬНА КОНТРОЛЬНА РОБОТА № 1, 2
З дисципліни «Авіаційна англійська мова (частина 2)»

Галузь знань: 27 Транспорт
Спеціальність: 272 Авіаційний транспорт
Освітньо-професійні програми: «Обслуговування повітряного руху»
«Системи аеронавігаційного обслуговування»
«Безпілотні авіаційні комплекси»

MODULE TEST 1

1. Read the text and answer the questions.

Gottröra Crash

Scandinavian Airlines Flight 751, a McDonnell Douglas MD-81 with 122 passengers on board, took off from Stockholm-Arlanda Airport, Sweden, in the early morning of December 27, 1991 and was headed to Warsaw, Poland through Copenhagen, Denmark.

After 25 seconds of flight, noise and vibrations from the engines were first noticed. The flight crew responded by throttling down, but an automatic system simultaneously increased throttle as a response to increasing altitude. 39 seconds later problems with the other engine began, and finally both engines failed at 76 and 78 seconds into the flight, at 980 meters of altitude. A No. 1 engine fire warning made the crew activate the fire extinguishing system. The pilot responded to the engine loss by pitching the aircraft down before levelling it, to try and make the aircraft glide the longest possible distance without stalling. The pilots requested a return to Arlanda and attempted the restart procedure, but with the plane breaking through the cloud cover at 270 meters, the pilot chose an opening in the forest near Gottröra for the immediate emergency landing. The wheels were selected down and Stockholm control was informed of the imminent crash-landing.

The plane hit the trees before touching down, losing a large part of the right wing, then struck ground tail-first and slid along the ground for 110 m. The fuselage was broken into three pieces, but there was no fire. 25 people were injured, two of them seriously. Nobody died in the accident, which is known in Sweden as the "Gottröra crash". One of the reasons for the lack of fatalities was the passengers' "brace position".

It was found out later that the crash had been caused by ice from the wings which had entered both rear-mounted engines, known as "foreign object damage". Apparently the maintenance crew had failed to notice the ice, which had formed during the night before when temperature decreased below freezing point. Another contributory cause of the accident was insufficient training of the crew for this particular aircraft: they were not informed about an automatic thrust system (ATR for "Automatic Thrust Restoration"), and they were not trained in restoring engine operation after they repeatedly surged. The reason they were not informed was that McDonnell Douglas had not informed SAS that the ATR system was installed. After the Gottröra accident,

airports and airlines operating in cold regions had to re-evaluate and modify their de-icing procedures.

1. What happened on December 27, 1991?
2. What was the pilots' reaction?
3. What destruction did the plane suffer?
4. What was found later about the crash?
5. How many victims were in the accident?

2. Match the definitions numbers with the letters.

1. A fairly sudden loss of effectiveness of an aerodynamic surface
2. An instruction that can be given to prepare for an aircraft crash when it must make an emergency landing over land or water.
3. Reduce the engine power
4. Happening or done at the same time as something else
5. Fly without the use of engine thrust
6. A loss of compressor performance leading to a reduction in the fuel flow to the engine
7. The state of not having something or not having enough of something

a) throttle down
b) glide
c) lack
d) stall
e) surge
f) brace for impact
g)simultaneously

3. Match the words in column A with their opposites in B.

A	**B**
1. skilled	a) retract
2. select down	b) actually
3. make sb do sth	c) manage to do sth
4. noise	d) untrained
5. fail to do sth	e) silence
6. apparently	f) prevent sb from doing sth

4. Insert the prepositions where it is necessary:

1. We are going ____ land ____ your field due fuel problem.
2. Unable to continue my flight returning ____ the aerodrome ____ departure.
3. We are coming back. Suspect severe fuel ____ leak.
4. Fuel spill ____ the port side.
5. Pressure is low ____ fuel feed system.
6. I'm short ____ fuel. Request priority ____ landing.
7. Suspect fuel consumption system ____ failure. The aircraft is banking ____ the port wing.
8. We are low ____ fuel. Request the nearest available ____ aerodrome.
9. It seems we haven't got enough ____ fuel.
10. We need to dump fuel ___ landing weight.
11. We intend to jettison fuel because ____ the excessive weight.
12. I have burnt out fuel ___ landing weight.
13. Request quick release ____ fuel.
14. We cannot land now because ____our weight.
15. Will report when ready ____ landing.
16. We've got the safe value ____ landing weight.

17. Fuel dumping completed
18. Request vectors to fly ____divertive aerodrome.

5.Read the text and complete the sentences using the correct words:

the failure; to fly; contamination; emergency; power; engines; the necessary; occurred; exhaustion; damage; to recover; detached

ENGINE FAILURE

Although aircraft are now designed _____ even after the failure of one or more aircraft engines, _____ of the second engine on one side for example is obviously serious. Losing all engine _____ is even more serious, as illustrated by Dominicana DC-9 air disaster, when _____ caused the failure of both _____ . To have an _____ landing place is then very important.

In the 1983 incident, an Air Canada flight suffered fuel _____ during cruise flight, forcing the pilot to glide the plane to an emergency landing. The automatic deployment of the Ram Air Turbine maintained _____ hydraulic pressure to the flight controls, so that the pilot was able to land with only a minimal amount of _____ to the plane, and minor (evacuation) injuries to a few passengers.

The ultimate form of engine failure, physical separation, _____ in 1979 when a complete engine _____ from American Airlines Flight 191, causing damage to the aircraft from which the pilots were unable _____ .

6.What are the opposites of the following?

a) descent
b) uncertainly
c) extend
d) further
e) full
f) begin
g) stop
h) initiate
i) right
j) southwest

7. Describe an aviation image (60-100 words)

Розробник: ст. викладач кафедри ААМ Олена СКІПАЛЬСЬКА

MODULE TEST 2

1. **Read the text and answer the questions:**

Aviation has come a long way since its invention at the start of the 20th century. In the early days of flying, pilots used a map, a compass, and little else. While this was often reliable, it was not always safe. Nowadays, we use something called NAVAIDS that can guide us to our destination easily. What are NAVAIDS, and why are they important for flying? Today, you will find out. We will explain why NAVAIDS are important and discuss some of the most common types you will see (and hopefully use). As we said in the introduction, pilots used to rely on a map and compass to find their way around. This method of navigating is surprisingly effective, however, there is a downside. Maps are only useful if you can see the ground. If there is bad weather, cloud cover, or flying in featureless terrains such as over the ocean or desert, navigating becomes tricky. NAVAIDS was created to provide a solution. Different NAVAIDS allow the aircraft to fly from one point to another without any visual references at all. When people talk about a pilot 'flying on instruments,' part of that flying will be navigating with reference to NAVAIDS. The term 'ILS' is an abbreviation for 'Instrument landing system.' It is one of the most commonly seen NAVAIDS the world over. It allows pilots to navigate both laterally and vertically. This system is highly accurate and has two parts. The lateral element tells the pilot where they are in relation to the runway centreline. The vertical element shows where they are in relation to the glideslope. This NAVAID allows the pilot to land on the runway in poor visibility conditions, even to the point where they can't actually *see* the runway at all. ILS's are only reliable within a relatively short range (normally around 21 miles). 'VOR' stands for 'very high-frequency omnidirectional range'. These NAVAIDS tend to look like a huge bicycle wheel, laid flat on its side. Each 'spoke' of the wheel is an antenna that broadcasts a radio beam or 'radial.' Pilots can follow these radials to navigate. VORs have a huge range (up to 360 nautical miles). Pilots can fly point to point using these NAVAIDS. 'NDB' is short for 'non-directional beacon.' They are some of the oldest aviation navigation technology in existence. Unlike a VOR, an NDB emits a single frequency ping. Onboard sensors called 'ADF' (automatic direction finding) pick this up. Essentially this instrument is a compass disc with an arrow. The arrow will point to the NDB station. It acts as a point of reference for the pilot to work out their location. They are a rough and ready solution. They are not especially accurate and are prone to all sorts of errors. GPS or 'global positioning systems' are highly accurate and fast becoming the future navigational technology. Using satellite positions and triangulation of electrical signals, they can give height information, positional information, and even tell airplanes what speed they are traveling. They are ideal as they can be used for navigation *anywhere* globally, without reliance on any ground equipment whatsoever. This makes them ideal for use in remote airports, where logistically positioning a ground-based navigation aid could be impossible. This technology is advanced in that it is possible to navigate entire journeys without referencing anything other than a satellite signal, all the way down to touchdown on the runway. 'INS' is an abbreviation of 'inertial navigation systems.' While they are highly accurate, they also utilize older technology. It works using gyroscopes and acceleration centers. The basic premise is that to move an object takes a force. If you can measure the sum of all of the forces, you can predict where that object will be at a given time with a high degree of accuracy. In the case of aviation, the 'object' is an aircraft. The benefit of INS is that it is entirely self-contained within the aircraft. It is impossible to get lost as the INS runs constantly. The downside is that if an INS breaks down, you can have no navigational information. Most commercial jets have 3 INS systems just to be on the safe side.

1. Why is it important to use navaids for flying?

2. Name the reasons why navigating can become tricky.

3. What are types of navaids used in aviation today?

4. What are the oldest aviation navigation technology in existence?

5. What works using gyroscopes and acceleration centers?

2. Write a word to the given definition: *threat, violence, collide, revenge, interference, expansion, unlawful; hostage, explosion; impact, prevent;*

a) someone who is kept as a prisoner by an enemy;
b) you hurt or punish someone because they have done something bad to you;
c) when something increases in size, number or amount;
d) when something such as a bomb explodes, or the noise it makes;
e) formal not legal;
f) an occasion when someone says they will hurt you or cause problems;
g) to crash violently into something or someone;
h) to stop something from happening;
i) when someone penetrates in something;
j) the force of one object hitting another or the moment;

3. Match a word in column A with its synonym in column B.

A	B
1. deploy	a) ruin
2. preceding	b) make certain
3. include	c) extreme
4. destroy	d) hurt
5. ensure	e) previous
6. injured	f) aft
7. display	g) comprise
8. intense	h) use something effectively
9. rear	i) show

4. Match the words on the left with their definitions on the right. Use a dictionary if it is necessary.

misinterpretation	friendly agreement and understanding between people.	
rank	the position or level that someone holds in the army, navy etc	
friction	not good enough, skilled enough for a particular purpose	
over anticipation	something that stops you paying attention to what you are doing	
inadequate	a feeling that something is not true or does not exist	
distractions	when you are expecting something to happen with anxiety	
ambiguous	words and expressions used in a particular profession or by a particular group of people;	
rapport	misunderstanding the correct meaning of something that someone says or does	
disbelief	disagreement, angry feelings, or	

	unfriendliness between people	
jargon	something that is unclear, confusing, or not certain, especially because it can be understood in more than one way	

5. Find the term that matches the description: *change - inoperative - identify - checks - survive - fiercely - several - adequate - release - in doubt - overshoot - impact -obtain - tail - access*

1. Not working _____
2. Alter _____
3. Get _____
4. Way to a place _____
5. Remain alive after _____
6. Three or more _____
7. Hitting of one object against another _____
8. Control _____
9. Uncertain, undecided _____
10. Set free _____.
11. Satisfactory in quantity or quality, sufficient _____
12. Apart at the end of a plane _____
13. Violently and angrily _____
14. Go further or beyond _____
15. Recognize _____

6. Insert the following words into the text.

to ensuring safety \ at a distance \ verbal message \ at their disposal \ an unreasonably long time \ The interaction between \ both parties need to be able to check \ to have a good command of basic grammatical structures \ sufficiently clear and intelligible

English language training of pilots and controllers focuses almost exclusively on improving their listening and speaking skills. Effective verbal communication is essential _____in civil aviation. Communications are voice only, that is controllers and pilots talk to each other_____, through radiotelephony communications. The _____is the only communication tool _____(though basic routine messages are sometimes exchanged electronically).

A certain degree of fluency is required because controllers have to communicate with several aircraft at the same time and they cannot wait for _____for a pilot to pass a message. Pilots need to receive information and instructions in good time to react accordingly. _____pilots and controllers must be effective, as_____, confirm and clarify when misunderstandings occur. Controllers and pilots require sufficient vocabulary to be able to communicate in both the routine and non-routine situations which may occur in their jobs. In addition, controllers and pilots need _____ so that they can communicate information in a format which will be understood by their interlocutor. And finally, pronunciation needs to be _____to the international aviation community.

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