Государственное автономное профессиональное образовательное учреждение

Чувашской Республики «Чебоксарский экономико-технологический колледж»

Министерства образования Чувашской Республики

**ФОНД ОЦЕНОЧНЫХ СРЕДСТВ**

**ПО УЧЕБНОЙ ДИСЦИПЛИНЕ СГ.02. ИНОСТРАННЫЙ ЯЗЫК**

**В ПРОФЕССИОНАЛЬНОЙ ДЕЯТЕЛЬНОСТИ**

по программе подготовки специалистов среднего звена по специальности

**20.02.05 Организация оперативного (экстренного) реагирования в чрезвычайных ситуациях**

Чебоксары 2024

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| Разработан в соответствии с требованиями Федерального  Государственного образовательного стандарта среднего профессионального образования по специальности 20.02.05 Организация оперативного (экстренного) реагирования в чрезвычайных ситуациях | УТВЕРЖДЕН  приказом от «\_\_\_» \_\_\_\_\_\_\_ 2024 г. № 22 |

РАССМОТРЕНА

на заседании цикловой комиссии

общегуманитарных и социальных дисциплин

Протокол №\_\_\_ от "\_\_" \_\_\_\_\_\_\_\_\_\_. 2024 г.

Председатель ЦК: \_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_ /

Разработчик: Государственное автономное профессиональное образовательное учреждение Чувашской Республики «Чебоксарский экономико-технологический колледж» Министерства образования Чувашской Республики

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**1.ПОЯСНИТЕЛЬНАЯ ЗАПИСКА**

ФОС предназначен для проверки результатов освоения учебной дисциплины и состоит из программы текущей аттестации и программы промежуточной аттестации разработан на основе:

- федерального государственного образовательного стандарта по специальности 20.02.05 Организация оперативного (экстренного) реагирования в чрезвычайных ситуациях;

- рабочей программы учебной дисциплины СГ.02. Иностранный язык в профессиональной деятельности

Текущий контроль осуществляется на каждом занятии в ходе освоения материала в форме устного опроса, выполнения письменных заданий по теме занятия. В ходе текущего контроля осуществляется индивидуальное корректирующее общение преподавателя с обучающимся. При наличии трудностей и (или) ошибок у обучающегося преподаватель в ходе текущего контроля дублирует объяснение нового материала с учетом особенностей восприятия и усвоения обучающимся содержания материала учебной дисциплины.

**Перечень основных показателей оценки результатов, знаний и умений, подлежащих текущему контролю и промежуточной аттестации.**

В результате освоения **СГ.02. Иностранный язык в профессиональной деятельности** обучающийся должен обладать предусмотренными ФГОС СПО следующими **умениями (У)**:

У1. Общаться (устно и письменно) на английском языке на профессиональные и повседневные темы;

У2. Переводить (со словарем) иностранные тексты профессиональной направленности;

У3. Самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас;

**знаниями (З**):

З1. Лексический (1200 - 1400 лексических единиц) и грамматический минимум, необходимый для чтения и перевода (со словарем) иностранных текстов профессиональной направленности;

**общими компетенциями (ОК)**:

ОК 05. Осуществлять устную и письменную коммуникацию на государственном языке Российской Федерации с учетом особенностей социального и культурного контекста;

ОК 09. Пользоваться профессиональной документацией на государственном и иностранном языках.

**2. ПРОГРАММА ТЕКУЩЕЙ АТТЕСТАЦИИ**

**Формы и методы текущего контроля:** устный и письменный опрос, тестирование, выполнение практических работ, выполнение и защита реферата, аудиторная самостоятельная работа, исследовательское задание – создание и защита электронной презентации, самостоятельная работа и т.п.

При проведении аудиторной контрольной работы обучающийся прочитывает задания соответствующего варианта контрольной работы и отвечает письменно на вопросы (решает задания) в любом порядке. Время выполнения контрольной работы: 45 мин.

Реферативное задание является формой самостоятельной работы обучающихся. Реферат выполняется в соответствии с методическими рекомендациями по его выполнению, оформляется в бумажном варианте в соответствии со стандартом колледжа и по желанию обучающегося может сопровождаться электронной презентацией. Защита реферата проводится в устной форме в рамках теоретических занятий.

Аудиторная самостоятельная работа проводится после выполнения практической работы по изученной теме. Задания выполняются обучающимся в строгой последовательности без консультации преподавателя.

Выполнение исследовательского задания, результатом которого выступает разработка электронной презентации, является формой самостоятельной работы обучающихся. Электронная презентация разрабатывается обучающимися индивидуально Защита презентации проводится в устной форме в рамках теоретических занятий. При подготовке выступления по презентации можно руководствоваться рекомендациями к подготовке устного сообщения.

Устный опрос – контроль, проводимый после изучения материала по одному или нескольким темам (разделам) дисциплины в виде ответов на вопросы и обсуждения ситуаций.

Письменный контроль – контроль, предполагающий работу с поставленными вопросами, решением задач, анализом ситуаций, выполнением практических заданий по отдельным темам (разделам) курса.

Комбинированный опрос – контроль, предусматривающий одновременное использование устной и письменной форм оценки знаний по одной или нескольким темам.

Защита и презентация домашних заданий – контроль знаний по индивидуальным или групповым домашним заданиям с целью проверки правильности их выполнения, умения обобщать пройденный материал и публично его представлять, прослеживать логическую связь между темами курса.

Тесты – система стандартизированных заданий, позволяющая автоматизировать процедуру измерения уровня знаний и умений, обучающегося.

При проведении текущего контроля успеваемости обучающихся используются следующие критерии оценок:

1) критерии оценки выполнения устного опроса, контрольной работы, тестовых заданий, аудиторной самостоятельной работы:

|  |  |  |
| --- | --- | --- |
| Процент результативности | Оценка уровня подготовки | |
| балл (отметка) | вербальный аналог |
| 90 ÷ 100 | 5 | отлично |
| 70 ÷ 89 | 4 | хорошо |
| 50 ÷ 69 | 3 | удовлетворительно |
| менее 49 | 2 | неудовлетворительно |

Все запланированные контрольные, самостоятельные работы и тесты по дисциплине обязательны для выполнения.

2) критерии оценки реферата:

**Оценка «отлично»** выставляется за реферат, который носит исследовательский характер, содержит грамотно изложенный материал, с соответствующими обоснованными выводами.

**Оценка «хорошо»** выставляется за грамотно выполненный во всех отношениях реферат при наличии небольших недочетов в его содержании или оформлении;

**Оценка «удовлетворительно»** выставляется за реферат, который удовлетворяет всем предъявляемым требованиям, но отличается поверхностностью, в нем просматривается непоследовательность изложения материала, представлены необоснованные выводы;

**Оценка «неудовлетворительно»** выставляется за реферат, который не носит исследовательского характера, не содержит анализа источников и подходов по выбранной теме, выводы носят декларативный характер.

3) критерии оценки электронной презентации:

| Критерии оценки | Содержание оценки |
| --- | --- |
| 1. Содержательный критерий  (0-20 баллов) | обоснование выбора темы, знание предмета и свободное владение материалом, грамотное использование научной терминологии, импровизация, речевой этикет |
| 2. Логический критерий  (0-20 баллов) | стройное логико-композиционное построение речи, доказательность, аргументированность |
| 3. Речевой критерий  (0-20 баллов) | использование языковых (метафоры, фразеологизмы, пословицы, поговорки и т.д.) и неязыковых (поза, манеры и т.д.) средств выразительности; фонетическая организация речи, правильность ударения, четкая дикция, логические ударения и т.д. |
| 4. Психологический критерий  (0-20 баллов) | взаимодействие с аудиторией (прямая и обратная связь), знание и учет законов восприятия речи, использование различных приемов привлечения и активизации внимания |
| 5. Критерий соблюдения дизайн-эргономических требований к компьютерной презентации  (0-20 баллов) | соблюдение требований к первому и последнему слайдам, прослеживание обоснованной последовательности слайдов и информации на слайдах, необходимое и достаточное количество фото- и видеоматериалов, учет особенностей восприятия графической (иллюстративной) информации, корректное сочетание фона и графики, органичное соответствие дизайна презентации ее содержанию, грамотное соотнесение устного выступления и компьютерного сопровождения, общее впечатление от мультимедийной презентации |

|  |  |  |
| --- | --- | --- |
| Количество набранных баллов  по критериям оценки презентации | Оценка уровня подготовки | |
| балл (отметка) | вербальный аналог |
| 90 ÷ 100 | 5 | отлично |
| 80 ÷ 89 | 4 | хорошо |
| 70 ÷ 79 | 3 | удовлетворительно |
| менее 70 | 2 | неудовлетворительно |

В соответствии с принципами технологии групповой работы при оценивании электронной презентации выставляется одна оценка всем участникам микрогруппы. Обучающиеся, не представившие готовую электронную презентацию или представившие работу, которая была оценена на «неудовлетворительно», не допускаются к сдаче дифференцированного зачета по дисциплине.

4) критерии оценки выполнения работы на практических занятиях:

**«Зачет»** ставится, если обучающийся выполнил работу в полном объеме с соблюдением необходимой последовательности действий; проявил самостоятельность, в отчете правильно и аккуратно выполняет все записи, таблицы, рисунки, чертежи, графики, вычисления; правильно выполняет анализ ошибок.

**«Незачет»** ставится, если обучающийся выполнил работу не полностью или объем выполненной части работы не позволяет сделать правильных выводов.

Оценка по результатам выполнения практических занятий выставляется после выполнения и сдачи отчета.

5) критерии оценки самостоятельной (аудиторной и внеаудиторной) работы:

**Оценка «отлично»** - обучающийся свободно применяет знания на практике; не допускает ошибок в воспроизведении изученного материала; выделяет главные положения в изученном материале и не затрудняется в ответах на видоизмененные вопросы; усваивает весь объем программного материала; материал оформлен аккуратно.

**Оценка «хорошо»** - обучающийся знает весь изученный материал; отвечает без особых затруднений на вопросы преподавателя; умеет применять полученные знания на практике; в ответах не допускает серьезных ошибок, легко устраняет определенные неточности с помощью дополнительных вопросов преподавателя; материал оформлен недостаточно аккуратно.

**Оценка «удовлетворительно»** - обучающийся усвоил основной материал, но испытывает затруднения при его самостоятельном воспроизведении и требуются дополняющие вопросы преподавателя; материал оформлен не аккуратно.

**Оценка «неудовлетворительно» -** обучающийся имеет отдельные представления об изучаемом материале, но все, же большая часть не усвоена; материал не оформлен.

6) критерии устного ответа на дифференцированном зачете

**Оценка** «**отлично»** - исчерпывающий, точный ответ, демонстрирующий хорошее знание вопроса, умение использовать критические материалы для аргументации и самостоятельных выводов; свободное владение научной терминологией; умение излагать материал последовательно, делать обобщения и выводы.

**Оценка** «**хорошо**» - ответ, обнаруживающий хорошее знание и понимание учебного материала, умение анализировать, приводя примеры; умение излагать материал последовательно и грамотно. В ответе может быть недостаточно полно развернута аргументация, возможны отдельные недостатки в формулировке выводов; допускаются отдельные погрешности в речи.

**Оценка** «**удовлетворительно**» - ответ, в котором материал раскрыт в основном правильно, но схематично или недостаточно полно, с отклонениями от последовательности изложения. Нет полноценных обобщений и выводов; допущены ошибки в речевом оформлении высказывания.

**Оценка** «**неудовлетворительно**» - ответ обнаруживает незнание материала и неумение его анализировать; в ответе отсутствуют примеры; нарушена логика в изложении материала, нет необходимых обобщений и выводов; недостаточно сформированы навыки устной речи.

**Контрольно-оценочные средства для проведения текущей аттестации (для оценки уровня освоения умений, усвоения знаний при проведении текущего контроля)**

# Материалы текущего контроля успеваемости: *Курс: 2, семестр: 4*

Раздел 1. Основной модуль Тема 1.1 Введение.

Тема 1.2. Путешествие по воздуху. Тема 1.3. Аэропорт.

# Опрос по темам.

Продолжительность опроса – 45 минут.

Количество опрашиваемых обучающихся – все присутствующие.

*Цель* - проверить коммуникативные навыки обучающегося на примере конкретной темы.

*Задача -* дать оценку лексико-грамматическим знаниям и языковым компетенциям обучающегося.

# Вопросы к теме 1.2. Путешествие по воздуху.

1. Are you fond of travelling?
2. Where do you usually spend your holidays?
3. Where did you spend your last holidays?
4. Where would you like to spend your next holidays?
5. What is your idea of an ideal holiday?
6. Some people prefer to travel on their own and hate travelling in a group. What about you?
7. What do you think about travelling by air? What are advantages and disadvantages of travelling by air?
8. How do you see aviation in the future?
9. What would the world be like if we couldn’t fly?

# Вопросы к теме 1.3. Аэропорт.

1. What do you now about new modern terminals in Russia? How do you see terminal in the future?
2. What can you say about ground movement incidents: vehicles on the field, collisions, vehicle breakdown, aircraft damage caused by airport vehicles?
3. What problems linked to activities on the field can cause departure delays?
4. Have you ever had ground movement incidents? What happened? How was the problem resolved?

# Критерии оценки

**Оценка «неудовлетворительно»** - обучающийся отказывается выполнять задание

**Оценка «удовлетворительно»** - устное сообщение не соответствует в полной мере заявленной теме или содержит большое количество фонетических, лексико-грамматических ошибок (более 4-5)

**Оценка «хорошо»** - устное сообщение соответствует заявленной теме, фонетические неточности не искажают смысл, количество лексико-грамматических ошибок - не более 3.

**Оценка «отлично»** - устное сообщение соответствует заявленной теме, фонетические неточности незначительны или отсутствуют, количество лексико-грамматических ошибок - не более 1-2.

# Письменная работа.

Пояснительная записка

Цель письменной работы:оценить знания, полученные в процессе обучения.

Форма письменной работы: выполнение практических заданий.

Продолжительность: 2 академических часа.

**TEST № 1.**

**VARIANT 1.**

1. **Grammar exercises:**
   1. Insert the articles ***a, an, the*** where necessary.
      1. … customs officers will board … plane in … afternoon.
      2. To get to … main airport building from your arrival pier follow … yellow EXIT signs.
      3. There will be … 20-minute delay, so your flight will be boarding in about half … hour.
      4. My company is interested in buying … aeroplanes.
      5. There is … lot of accommodation at … seaside in Great Britain, but … accommodation is very expensive.
   2. Insert the correct ***prepositions*** where necessary.
      1. What do you think about travelling … air?
      2. What days are the planes … London?
      3. When shall we arrive … the airport?
      4. We have got some vacant seats … that flight.
      5. What type … aircraft do you fly?
   3. Use the ***verbs*** in the correct tense-forms.
      1. While they (wait) for their flight to be called, passengers (sit) in a lounge where they can have a drink and a meal.
      2. The first plane to Moscow (leave) at 6.05.
      3. There (be) a lot of traffic now.
      4. He (work) as a pilot.
      5. An electronic boards (give) flight details and warns of delays.
   4. Use the correct ***forms of comparison.***
      1. Flying is one of the (safe) forms of transport known to man.
      2. A modern airport is just like a (small) city.
      3. This sentence is (difficult) than the first one.
      4. In years to come the number of flights will rise (steadily).
      5. This film is (bad) than I saw last week.

# Translate the following text into Russian:

At the check-in desks the passengers present their tickets to the clerks who checks the booking with the airline computer. They next weigh the luggage, label it for its destination, and send it off on a conveyor belt for loading. They then issue the passenger with a card for boarding the plane. While the passengers are waiting for their flight, other people are busy at work. The luggage is loaded on to the plane. The loaders use special belts which take the cases right into the hold of the plane.

**TEST № 1.**

**VARIANT 2.**

1. **Grammar exercises:**
   1. Insert the articles ***a, an, the*** where necessary.
      1. If you want to get … room at … hotel in Nice in summer time you must reserve … accommodation in advance.
      2. In … morning … engineers look through … Russian and English newspapers and journals.
      3. There is … whole range of specialist vehicles at … airports.
      4. Passengers for … flight 452 to Spain, please, collect your hand luggage and go to … gate 4.
      5. … last month our manager went to St. Petersburg by … plane.
   2. Insert the correct ***prepositions*** where necessary.
      1. The plane will arrive … a delay … 40 minutes. Will you go … the departure lounge and wait … the announcement?
      2. It is used … electrical power … the parking place.
      3. … front … the Arrival hall is everything you need to continue your journey.
      4. These terminals must be fitted … facilities such … shops, banks and restaurants.
      5. As the hotels are full … weekends Mr. Blake phoned … the Hove hotel and reserved rooms …advance.
   3. Use the ***verbs*** in the correct tense-forms.
      1. When you (arrive) in London, it (rain) heavily.
      2. We (be) the ground controllers.
      3. They just (discuss) the time of the departure.
      4. I (know) the results in a week.
      5. Then you (go) through customs and passport control.
   4. Use the correct ***forms of comparison.***
      1. This London airport is becoming (efficient) and (attractive) nowadays.
      2. One of the (important) factors is the design of the plane itself.
      3. This is (busy) airport I have ever seen.
      4. These modern airports must be fitted out with (long) and (wide) runways.
      5. Are our cars (comfortable) than German ones?

# Translate the following text into Russian:

After a plane landed at a big modern airport, the flight crew are told by the controllers where to turn off the runway and which taxi track to take towards the terminal building. Airports have many parking places or stands, where airliners finish and start journeys, and where the passengers get off and on. While buses whisk passengers away to the terminal, the customs officers board the plane. As soon as the passengers and their luggage have been unloaded, the plane is made ready for its next flight.

Письменная работа содержит задания по всем лексико-грамматическим темам дисциплины «Иностранный язык в профессиональной деятельности» и выполняется в 2 вариантах.

Каждый вариант включает в себя 5 заданий. Номер варианта определяется преподавателем. Работа, выполненная по другому варианту, возвращается обучающемуся без проверки.

***Курс: 2, семестр: 4***

Раздел 2. Развивающий модуль

Тема 2.1. Авиационные профессии

Тема 2.2. На борту самолета.

Тема 2.3. Полет.

# Опрос по темам.

Продолжительность опроса – 45 минут.

Количество опрашиваемых обучающихся – все присутствующие.

*Цель* - проверить коммуникативные навыки обучающихся на примере конкретной темы. *Задача -* дать оценку лексико-грамматическим знаниям и языковым компетенциям.

# Вопросы к теме 2.1. Авиационные профессии.

1. What kind of work do you have?
2. What company are you working for?
3. What are your functions and tasks?
4. What are you responsible for?
5. Why do you like your job?
6. What do you enjoy about your work?
7. What do you dislike about your work?
8. What are your future plans?
9. Do you have any ambitions and prospects for the future?
10. What recommendations would you give to pilots (air traffic controllers, flight attendants) to be successful in their profession?

# Вопросы к теме 2.2. На борту самолета.

1. What are your company priorities?
2. How do you feel about making announcements?
3. What events can create a great deal of anxiety with the passengers?
4. What do you do to make passengers feel comfortable and safe during the flight?
5. In what ways do people behave badly when flying?
6. Have you ever seen or heard about someone misbehaving on a plane?
7. What airsickness symptoms can you name?
8. What are the main passengers’ health problems and in – flight medical emergencies?
9. What do you know about medical assistance for passengers?
10. What medical training do cabin crews of your company receive?

# Вопросы к теме 2.3. Полет.

1. How did you get started in Aviation?
2. Why do you like your job?
3. Why do you decide to become a pilot (an air traffic controller, a flight attendant)?
4. What aircraft do you fly?
5. How do you see aviation in the future?
6. What are your future plans?
7. Where do you see yourself in 10 years?

# Критерии оценки

**Оценка «неудовлетворительно»** – обучающийся отказывается выполнять задание

**Оценка «удовлетворительно»** – устное сообщение не соответствует в полной мере заявленной теме или содержит большое количество фонетических, лексико-грамматических ошибок (более 4-5)

**Оценка «хорошо»** – устное сообщение соответствует заявленной теме, фонетические неточности не искажают смысл, количество лексико-грамматических ошибок (не более 3).

**Оценка «отлично»** – устное сообщение соответствует заявленной теме, фонетические неточности незначительны или отсутствуют, количество лексико-грамматических ошибок (не более 1-2).

# Письменная работа.

# Цель письменной работы: оценить знания обучающихся, полученные в процессе обучения.

Форма работы: выполнение практических заданий.

Продолжительность: 2 академических часа.

# TEST

**A Short History of Flight**

1. The first actual flight man made was that in the **balloon**. At that time man knew that cold air pushed warm air up as warm air was lighter than cold air. That is why the first balloon that rose into the air was a hot-air balloon.
2. The invention of the balloon was the first great **achievement** in regard to flight but free balloons had two main disadvantages. First, the balloon was not a practical device for transportation because it was almost entirely dependent on the wind. Secondly, the balloon slowly **dropped** as the air in the bag cooled.
3. Then there came the idea to fill the balloon with hydrogen. Hydrogen was the lightest gas man knew. Still the balloon was not a practical air transport vehicle. There were **attempts** to provide the balloon with controls but they were quite useless as a means of directional control. The problem was how to propel the balloon.
4. In the 18-th century man knew that flight was possible on motionless wings with the help of air current. Research began to follow two lines, one, which dealt with lighter-than-air aircraft and the other - with heavier-than-air aircraft.
5. The real history of mechanical flight began with the 19-th century. In the second half of the century there appeared gliders. The glider was a heavier-than-air craft which supported a man who could, to a certain extent, control it. The glider stayed in the air as it took advantage of the air currents that rose upwardly. The glider was not a practical device either. It could not remain in **still** air and could not cover long distances.
6. The invention of the engine opened the way for aerial **navigation.** With the help of it man had control over all directions. The greatest success with the lighter-than-air principle came when there appeared dirigibles. They carried engines as a means of propulsion.
7. The first powered flight in a man-carrying aeroplane was made by A.F. Mojaisky in 1884. It was 19 years before the Wright brothers flight. The Mojaisky and Wright aeroplanes **led the way** into the air age. These aeroplanes had all essential features of the modern aeroplane. However it was to take many years before the aeroplane developed into a successful, stable, controllable, highly maneuverable and reliable machine.
   1. Find the definition of a glider in the text.
   2. Find the English equivalents to the following words and word combinations in the text:

толкать; достижение; относительно; падать; попытка; средство; поток; приводить в движение; движение вперед; до известной степени; вверх; летательные аппараты легче воздуха; иметь дело с; появляться; воздушная навигация; проложить дорогу; основные черты; маневренный и надежный аппарат.

* 1. Complete the following sentences using the ideas from the text.
     1. The first balloon that rose into the air was …
     2. The balloon was not a practical device because …
     3. The glider took the advantage of …
     4. With the help of engines man had …
     5. The greatest success with the lighter-than-aircraft came when…
     6. The aeroplanes developed into …
  2. Agree or disagree with the statements. Correct the wrong ones.

The first actual flight man made was that in the glider. Free balloons had a lot of disadvantages.

* + 1. Then there came the idea to fill the balloon with oxygen.
    2. The real history of mechanical flight began with the 20-th century.
    3. The glider was a lighter-than-air craft and could cover long distances.
    4. The first powered flight in an aeroplane was made by the Wright brothers.

Письменная работа содержит задания по лексико-грамматическим темам дисциплины «Иностранный язык в профессиональной деятельности » и выполняется в 1 варианте.

Каждый вариант работы включает в себя текст и 4 задания по тексту

***Курс 3, семестр: 6***

Раздел 2. Развивающий модуль

Тема 2.4. Погода. Климат.

Тема 2.5. Безопасность полётов.

# Опрос по темам:

Продолжительность опроса – 45 минут.

Количество опрашиваемых обучающихся – все присутствующие.

*Цель* - проверить коммуникативные навыки на примере конкретной темы.

*Задача -* дать оценку лексико-грамматическим знаниям и языковым компетенциям обучающихся.

# Вопросы к теме 2.4. Погода. Климат.

* + - 1. What weather conditions are hazardous for the operation of the flight?
      2. What are the causes and possible effects of natural disasters?
      3. Have you ever seen any of these disasters: earthquakes, volcanic eruption, flooding, severe thunder storms, hurricanes, tsunami, cyclones, hailstones, droughts?
      4. Have there been any natural disasters in your country?
      5. Have you ever had a good or bad experience as a result of the weather?
      6. How do aircraft emissions affect the environment?
      7. What are the ways to protect the atmosphere?

# Вопросы к теме 2.5. Безопасность полётов.

1. What can cause hazards in the vicinity of the aerodrome?
2. CFIT – what are risk factors?
3. Why are flight planning and pre-flight briefing necessary for avoiding hazards?
4. What may cause engine shut down?
5. What may be the reasons for aborting take-off?
6. What methods of wildlife do you know?
7. What goods are considered to be dangerous?
8. What are the motives for aircraft hijacking now?
9. What are the most effective means of deterring hijacking?
10. What security systems do you know?

# Критерии оценки

**Оценка «неудовлетворительно»** – обучающийся отказывается выполнять задание

**Оценка «удовлетворительно»** – устное сообщение не соответствует в полной мере заявленной теме или содержит большое количество фонетических, лексико-грамматических ошибок (более 4-5)

**Оценка «хорошо»** – устное сообщение соответствует заявленной теме, фонетические неточности не искажают смысл, количество лексико-грамматических ошибок (не более 3).

**Оценка «отлично»** – устное сообщение соответствует заявленной теме, фонетические неточности незначительны или отсутствуют, количество лексико-грамматических ошибок (не более 1-2).

# Письменная работа.

# Цель письменной работы: оценить знания обучающихся, полученные в процессе обучения.

Форма письменной работы: выполнение практических заданий.

Продолжительность: 2 академических часа.

# VARIANT 1

# WEATHER

Weather is composed of a number of elements such as the temperature and humidity of the air, atmospheric pressure, the speed and direction of the wind, air visibility and of special phenomena such as fog, storms and others.

Pilots need the information about weather conditions along the route of flight and at the destination aerodrome. The object of the meteorological service is to contribute to safety, efficiency and regularity of air traffic.

There exist some sources of aviation weather information: surface observation, radar observation, automatic meteorological observation, pilot reports and others.

At every airport there is a meteorological station which is equipped with special instruments recording all changes in the atmosphere. They indicate air pressure and temperature, record wind speed and direction as well as the movements of clouds. All the observations are summed up on special weather charts. The observations at the airports are made every 30 minutes and every 15 minutes if the weather suddenly gets worse or better.

Preparing for the flight the pilot is to get the latest weather information and weather forecasts along the planned route and at the point of destination and the alternates.

At a great number of met. stations situated along the airways complete weather observations are made and then transmitted to weather forecast centres by telephone, telegraph, radio and thousands of miles of teletype circuits. Thus, the pilot has a complete picture of the weather. 20-30 minutes before entering the aerodrome area the controller gives the pilot full information about the terminal weather. At many airports the information helpful for landing and take off is continuously broadcast on a navigational aid frequency. Prior to descent the pilot requests the actual weather and aerodrome conditions for the airport he is going to land. It is considered that landing of an aircraft is probably the most difficult operation which a pilot has to perform and the standards of visibility required are higher than for any other phase of flight.

It is known that fog, rain and clouds often affect the aircraft operation. For many decades attempts were made to make flying independent of weather conditions or, in other words, to allow an aircraft to land under very low or zero visibility.

Now there exist several categories set up by ICAO:

Category I - 200 ft ceiling and 1/2 mile visibility; Category II- 100 ft ceiling and I/4 mile visibility; Category III - landing under zero-zero conditions.

Met. services for aviation require much work to collect data and prepare weather charts. This work is especially difficult for long-distance flights over vast areas with different climatic conditions.

Nowaday met. services for aviation are almost fully automated. Automated Surface Weather Systems are installed at the airports of many countries. The System provides for the measurements, processing and display of the following meteorological parameters: wind direction and speed, air temperature and dew point t°, runway visual range, minimum cloud height, barometric pressure.

The use of lazers makes it possible to give pilots all the necessary information when they land under low visibility conditions. The introduction of these systems has greatly increased the reliability and safety of flights.

Satellite meteorology has become an independent area of science. Weather forecasts based on information from outer space make forecasts more accurate and help to save a great sum of money annually.

At present the work of meteorologist becomes easier thanks to computers which make calculations quicker and due to them the weather forecast service is becoming more reliable. The use of satellites and computers greatly increases the accuracy of weather forecasts.

EXERCISES

1. Ответьте на вопросы:
   1. What elements are included in weather report?
   2. What is the object of meteorological service?
   3. How often is weather observation made at the airport?
   4. What do the instruments at the meteorological stations indicate?
   5. What weather information does the pilot get before the flight?
   6. Do the pilots obtain weather information while in flight?
   7. When does the controller give the pilot full information about the terminal weather?
   8. What phase of flight does especially depend on weather conditions?
   9. What weather phenomena affect the aircraft operation?
   10. What categories are set up by ICAO?
   11. What does Automated Surface Weather System provide?
   12. When do lazers help the pilots?
   13. What is the advantage of satellite meteorology?
   14. What other instruments make weather forecast service more reliable?
2. Переведите слова, обращая внимание на словообразующие элементы: direct – direction

visual – visually – visibility observe – observation – observer equip – equipment

transmit – transmission – transmitter regular – regularity

depend – dependence – dependent – independent provide – provision

accurate – accurately – accuracy – inaccurate rely – reliable – reliability – unreliable

1. Найдите в тексте эквивалент следующим словосочетаниям:

сводки погоды, погодные условия, давление воздуха, скорость ветра, направление ветра, нижняя граница облачности, прогноз погоды, центр прогнозирования погоды, прогностические карты, станция обеспечения полета, погода аэродрома посадки

1. Переведите на английский язык:
   1. Погода состоит из таких элементов как температура и влажность воздуха, атмосферное давление, скорость и направление ветра, видимость.
   2. Дождь, гроза, туман, шторм и другие явления опасны для полета.
   3. Перед полетом пилот идет в метеобюро, чтобы получить сводку погоды и прогноз не только по своему маршруту, но и в пункте назначения.
   4. В каждом аэропорту есть метеостанция со специальными приборами, регистрирующими все изменения в атмосфере.
   5. Имея все данные о погоде, синоптики составляют погодную карту.
   6. Во многих аэропортах информация о погоде непрерывно транслируется на определенной частоте.
   7. Посадка самолета – самая трудная операция.
   8. Стандарты видимости для посадки выше, чем для любой другой фазы полета.
   9. Сейчас большинство метеостанций почти полностью автоматизированы.
   10. Автоматическая система погоды показывает скорость и направление ветра, температуру воздуха, точку росы, дальность видимости на полосе, высоту облачности.
   11. Прогноз погоды, полученный со спутников, делает его точнее.
   12. Использование спутников и компьютеров повышает точность прогноза погоды.

Раздел 2. Развивающий модуль

Тема 2.6. Предотвращение авиакатастроф.

Тема 2.7.Технологии будущего.

# Опрос по темам:

Продолжительность опроса – 45 минут.

Количество опрашиваемых – все присутствующие.

*Цель* - проверить коммуникативные навыки обучающегося на примере конкретной темы .

*Задача -* дать оценку лексико-грамматическим знаниям и языковым компетенциям обучающегося.

# Вопросы к темам 2.6. Предотвращение авиакатастроф.

**2.7. Технологии будущего**

1. Have you ever had an emergency? How did you deal with it?
2. What is a safety pilot?
3. What modern technology to aid safety has been introduced in your country?
4. What can you say about advanced equipment, modernized service stations for ATC?
5. Has modern technology changed the job of ATC?
6. What problems can you foresee in the future?
7. What changes need to be made?
8. Have you ever had pilot-controller misunderstanding? What was it caused by?
9. What are the main reasons for miscommunications? How to avoid it?

# Критерии оценки

**Оценка «неудовлетворительно»** – обучающийся отказывается выполнять задание

**Оценка «удовлетворительно»** – устное сообщение не соответствует в полной мере заявленной теме или содержит большое количество фонетических, лексико-грамматических ошибок (более 4-5)

**Оценка «хорошо»** – устное сообщение соответствует заявленной теме, фонетические неточности не искажают смысл, количество лексико-грамматических ошибок (не более 3).

**Оценка «отлично»** – устное сообщение соответствует заявленной теме, фонетические неточности незначительны или отсутствуют, количество лексико-грамматических ошибок (не более 1-2).

# Письменная работа.

Цель письменной работы: оценить знания обучающихся полученных в процессе обучения.

Форма письменной работы: выполнение практических заданий

Продолжительность: 2 академических часа.

# Variant 1

**AIR TRAFFIC CONTROL**

The ATC’s first concern is safety, that is the prevention of collision between aircraft in the air and orderly flow of traffic.

To perform their exacting duties air traffic controllers need adequate facilities. The introduction of radars greatly assists in expediting the flow of traffic reducing the separation minima. Computers are also a powerful tool. They give assistance by taking over routine tasks but they must not dominate the system. The human controller is much more efficient than any current system because it is he who takes responsibility for

controlling aircraft and it is he who takes final decisions in all situations including conflicting and emergency.

During periods of heavy traffic controllers work under high stress. They may control several aircraft simultaneously, their number sometimes exceeding 15 and even more. Controllers’ slightest error may cause loss of human lives and property.

Top physical and mental condition is a vital requirement for ATC controllers. Therefore they undergo strict medical examination which are repeated at periodic intervals.

The problem of the selection and training of ATC personnel is extremely important. The controllers should possess a number of qualities which are absolutely necessary for them: a high degree of morality, a very good nervous and emotional balance, a sound critical judgment, a readiness for decisions and an instinct for team work. To become a highly professional controller one must be proficient not only in specialized aviation English but also in plain language because aviation safety depends on accurate pilot – controller communications.

The training of ATC personnel is carried out by different methods using various teaching aids, systems and simulators. Modern simulators can reproduce the whole ATC task from take-off to landing including all manoeuvers even the dangerous ones.

EXERCISES

1. Ответьте на вопросы:
   1. What is the main task of ATC activity?
   2. How can controllers expedite the flow of traffic?
   3. What aids and systems do controller use to control air traffic?
   4. Can any aids or systems substitute a human controller? If not, then why?
   5. What are the working conditions of controllers?
   6. How many aircraft may controllers control at peak traffic periods?
   7. What is one of the vital requirements for ATC controllers?
   8. How often do they undergo medical examinations?
   9. What qualities should a person possess to become a controller?
   10. What can you say about the role of the English language in controller’s work?
   11. How are controllers trained?
   12. Can modern simulators reproduce conflicting and emergency situations?
2. Переведите слова, обращая внимание на словообразовательные элементы: prevent – prevention – preventive

provide – provision – provider – provisional order – orderly

perform – performance exact – exactly – exactness

introduce – introduction – introductory

reduce – reduction

power – powerful – powerless efficient – efficiently – efficiency

responsible – responsibility – response – respond decide – decision – decisive

strict – strictly – strictness necessary – unnecessary – necessity

depend – dependent – dependence – independent train – trainer – trainee – training

carry – carrier – carriage

differ – different – indifferent – differently simulate – simulator – simulation

1. Переведите на английский язык:
   1. Существует много технических средств, помогающих диспетчерам в их работе.
   2. Главным элементом в системе УВД является диспетчер, т.к. он принимает окончательное решение в любой ситуации.
   3. Так как работа диспетчера очень ответственна необходим строгий отбор и подготовка персонала УВД.
   4. Диспетчер должен иметь хорошее физическое здоровье умение принимать решение и работать в команде.
   5. Различные тренировочные средства, системы и специальные тренажеры используются для подготовки персонала УВД.
   6. Современные тренажеры позволяют имитировать все этапы полета, включая аварийные ситуации.
   7. 15 или даже больше самолетов находятся под контролем диспетчера в период интенсивного движения.
   8. Электронные средства не могут заменить диспетчера. Они могут только помогать ему.
   9. Диспетчер не должен допускать ошибок, так как это может привести к потере человеческих жизней.
   10. Минимумы эшелонирования будут уменьшены в ближайшем будущем.
   11. Какой европейский центр подготавливает диспетчерский персонал?
   12. Этот тренажер не может воспроизводить аварийные ситуации.

# Variant 2

**HUMAN FACTORS IN AVIATION**

Human factors is a critical aspect of aviation safety, one that ICAO began to address more than a decade ago.

ICAO convened the first in a series of global symposia on flight safety and human factors in 1990. From the beginning, when the first event was held in a city known then as Leningrad, there was a conviction that international aviation could make enormous progress in improving safety through the application of human factors knowledge.

The first symposium was a turning point and the stage for following meetings in the United States in 1993, in New Zealand in 1996 and, finally in Chile in 1999. There have been encouraging developments since 1990, but we still have challenges to pursue: after the Leningrad symposium, human error remains a significant safety concern.

The purpose of the worldwide symposia and 10 regional seminars which were held in the past decade was to increase the awareness of States, industry and organizations in all ICAO regions about the importance of human factors. The ongoing implementation of the ICAO communication, navigation, surveillance and air traffic management (CNS/ATM) systems concept has introduced new challenges, and also new possibilities for human factors. The reason the community must respond to is, of course, to ensure that civil aviation continues to achieve its ultimate goal: the safe and efficient transportation of passengers and goods.

The ICAO flight safety and human factors programme is safety–oriented and operationally relevant. Moreover, it is practical since it must deal with real problems in a real world.

Through the programme, ICAO has provided the aviation community with the means and tools to anticipate human error and contain its negative consequences in the operational environment. Furthermore, ICAO’s efforts are aimed at the system – not the individual.

The global aviation safety plan (GASP) was developed by the ICAO Air Navigation Commission in 1997 and subsequently approved by the ICAO Council and endorsed by the ICAO Assembly. GASP was designed to coordinate and provide a common direction to the efforts of States and the aviation industry to the extent possible in safety matters. It is a tool that allows ICAO to focus resources and set priorities giving emphasis to those activities that will contribute the most to enhancing safety. Therefore the flight safety and human factors programme is among the six major activities that comprise the plan.

EXERCISES

1. Ответьте на вопросы:
   1. When did ICAO begin to address to the aspect of human factors?
   2. When and where was the first symposium on flight safety held?
   3. What can improve aviation safety?
   4. How many symposia on flight safety were held by ICAO?
   5. What was the purpose of the symposia and seminars?
   6. Where can the knowledge of human factors be applied?
   7. What is the ultimate goal of civil aviation?
   8. What is the ICAO flight safety and human factors programme?
   9. What for was the global aviation safety plan developed?
   10. Why is the flight safety and human factors programme so important?
2. Переведите слова, обращая внимание на словообразующие элементы: safe – safety – safely – unsafe

navigate – navigation – navigator – navigable – navigability

operate – operation – operative – operator – operational - operationally industry – industrial – industrious - industrialist – industrialization

communicate – communication – communicative – communicable – communicator progress – progressive – progression – progressionist

improve – improvement – improvable – improver organize - organization – organizer - disorganization

efficient – efficiency – inefficient – efficiently – inefficiency

1. Найдите в тексте эквивалент следующим словосочетаниям:

знание человеческого фактора; важное дело для безопасности; идея систем связи, навигации, обзора и управления воздушным пространством и воздушным движением; программа ИКАО по безопасности полетов и человеческому фактору; план по авиационной безопасности в мировом масштабе; комиссия ИКАО по воздушной навигации; вопросы безопасности.

1. Переведите на английский язык:
   1. Человеческий фактор является одним из важнейших аспектов авиационной безопасности.
   2. В течение последнего десятилетия ИКАО провела несколько симпозиумов и семинаров, связанных с человеческим фактором в авиации.
   3. Знание человеческого фактора может значительно повысить безопасность полетов.
   4. Для повышения безопасности новые системы связи, навигации и обзора постоянно широко внедряются.
   5. Совершенствование управления воздушным движением будет продолжаться.
   6. Программа по безопасности полетов и человеческому фактору является инструментом, который позволяет предупреждать человеческие ошибки при выполнении полетов.
   7. Вопросы безопасности в авиации и человеческий фактор являются самыми важными в плане авиационной безопасности в мировом масштабе.

Письменная работа содержит задания по всем лексико-грамматическим темам дисциплины «Иностранный язык» и выполняется в 2 вариантах.

Каждый вариант включает в себя 4 задания. Номер варианта определяется преподавателем.

Работа, выполненная по другому варианту, возвращается обучающемуся без проверки.

***Курс: 4, семестр: 8***

Раздел 3. Профессионально направленный модуль

Тема 3.1. Чтение текстов по специальности.

Тема 3.2. Техника перевода со словарем профессиональных текстов.

Тема 3.3. Работа с текстом по специальности.

Тема 3.4. Чтение и реферирование текстов по специальности.

# Перевод текстов:

Продолжительность– 45 минут.

Количество опрашиваемых обучающихся – все присутствующие.

*Цель* - проверить навыки работы студента с текстами на примере конкретной темы.

*Задача -* дать оценку лексико-грамматическим знаниям и языковым компетенциямобучающегося.

# LANGUAGE PROBLEMS IN AVIATION

Nowadays many people of different tongues are using aeroplanes everywhere. And this is the language problem for an airport, airspace user and navigation personnel.

It is known that the working languages of ICAO are those of English, French, Spanish and Russian. But it is known as well that many aviation specialists in the world are very limited in the knowledge of one of these languages or even do not undergo sufficient training in English to master radio communication. This results in some problems facing both pilots and controllers, namely: accent, mispronunciation, inaccurate grammar, speed of delivery, the persistent use of non-standard radio-telephony (RT) phraseology and some others.

A prerequisite to becoming a controller or pilot should be a high standard of spoken English. A non-native speaker monitoring another speaking English over the RT may be confused by inaccurate grammar or pronunciation.

Speed of delivery is another frequently head complaint, especially about aerodrome terminal information services (ATIS) and meteorological broadcasts to aircraft in flight (VOLMET). It is not less important to speak without pauses and stumbles over words. The best recommendation is the rate of 100-120 words per minute.

Another difficulty is that of accent which is not easily rectified. This problem is connected with the peculiarities of pronunciation. For example, there exist peculiarities in pronunciation inherent in certain geographical regions in the South Pacific.

The ICAO RT phraseology has been designed to limit each instruction to the minimum number of words. It is for this reason that a controller does not want to waste time listening to extraneous language, particularly at busy times when the traffic flow is heavy.

It sometimes happens that the user may be able to speak the limited number of phrases quite well and may react to them correctly. But it does not mean that he is really speaking the language. He is treating it as a code without being aware of adequate meaning of the words spoken. This will do in a standard situation, but in an emergency communication is absolutely impossible. It follows that any course of teaching RT phraseology by rote without language teaching is dangerous as the student is unable to cope with emergencies.

These are several recommendations to improve the situation:

1. A high standard of English is essential as a precondition for qualification either a controller or a pilot. Proficiency is required both in speaking and comprehension.
2. In service tuition in English should be mandatory for both controllers and pilots with stress on pronunciation.
3. Radio traffic should be monitored, either regularly or from time to time by a qualified assessor.
4. English speakers should abstain non-standardized chat and especially from developing regional jargon.
5. Language training should take place in the area in which the trainee will be operating, i.e. teachers should go where the trainees will work.
6. ATISs and VOLMETs should be subject to specified word flow rates.
7. On purely logic grounds and without any nationalistic bias English should be made the primary official language for all RT communications relating to air traffic control. This would greatly enhance flight safety.

# SOME WORDS ABOUT EARLY FLYING

It is known that the desire to fly is as old as humanity. Observations for flying birds gave man the idea of human flight. Every nation has many legends and tales about birdmen and magic carpets. The earliest of these legends comes from China.

One of the most famous Greek legends is the legend of Daedalus and Icarus who made wings and fastened them on with wax. Daedalus landed in safety. Icarus was not so careful as his father and he flew closer and closer to the sun. The closer he was the hotter it became. The wax melted, his wings came off and he fell into the sea.

It is clear that in those old days people knew little about nature. They could not understand much about the air and its nature and were unable to explain most of the phenomena of nature.

As time went on there came a stage when people no longer regarded flight as a supernatural phenomenon. The desire to fly was the desire to control nature. People imitated birds when they used wings. They had to fight against many prejudices because there was common belief that man could not fly.

The first scientific principles of human flight appeared in the 14th century. The great scientist Leonardo de Vinci recorded a few of them. He found that a knowledge of the air and its currents helped to understand the phenomenon of flight.

Daedalaus was a Greek; Garuda was Indian; Leonardo de Vinci Italian; Lilienthal was German; Montgolfier and Bleriot were French; Hargrake was Australian; Captain Mozhaiski was a Russian; the Wright brothers were American. They were the pioneers. Nor is this the end of this truly international story. The air captured the imagination of all. It was the efforts of men of many countries who pioneered civil aviation, who brought it to the art that we know today, and who now help its rapidly developing growth. The aeroplane is a creature of no one country's knowledge and effort. So it became clear from the very start that without international agreement the development of aviation would be greatly limited. The most successful attempt came in 1944 at a Conference of 52 nations held in Chicago, at the invitation of the United States. It was at this conference that the International Civil Aviation Organization was created.

# ICAO

In November 1944 in Chicago 52 nations signed the Convention on International Civil Aviation. The 96 Articles of the Convention provide for the adoption of international standards and recommended practices. It was decided that ICAO would come into being (start working) after the Convention was ratified by 26 states. It happened on the 4-th of April in 1947. Montreal was chosen as the headquarters of the Organization.

The ICAO activities are numerous. The main task is to provide the necessary level of standardization for the safe and regular air operations. SAHRS (International Standard and Recommended practices) regulate air navigation, recommend installation of navigation facilities and suggest the reduction of customs formalities. International standards must be strictly observed by all member States. Recommended practices are desirable but not essential.

ICAO has a Sovereign body, the Assembly, and a governing body, the Council. The Assembly meets once in 3 years and reviews the work in the technical, economic and legal fields in detail.

The Council is a permanent body composed of representatives of the Contracting states. Its first President was Edward Warner.

The Council is assisted by the Air Navigation Committee, the Legal Committee, the

Committee on Unlawful Interference and some others. One of the major Council duties is to adopt International Standards and Recommended Practices. It may act as an arbiter between Member States. And, in general, it may take any steps necessary to maintain the safety and regularity of air operations.

There are 18 Annexes to the Convention, they cover all aviation problems.

The Secretariat staff, headed by the Secretary General, provides the permanent organizational work. ICAO has 6 regional offices. The working languages of ICAO are English, French, Spanish and Russian.

In 1958 the Warner Awards were established by ICAO for outstanding contributions to international civil aviation.

# SOME CIVIL AVIATION ORGANIZATIONS

1. IATA - International Air Transport Association is the second in its importance organization after ICAO for international civil aviation. It was founded in 1945 and is uniting world airlines. The main objective of this organization is to provide safe and regular development of civil aviation and cooperation of world airlines. The IATA Technical Committee deals with the problem of safety, standardization of aviation equipment, training of flying personnel, communications, meteorology, aerodromes, navigational aids, etc.
2. International Civil Airports Association (ICAA) is the major international airports association. It is an organization permitting a constant exchange of experience, information and documentation among airports as well as contacts between airport managements. Founded in 1962 ICAA is doing much to help countries in developing both domestic and international airports providing specialists and equipment.
3. International Federation of Air Traffic Controllers' Associations (IFATCA) was founded in 1963 with the purpose to enable the national associations to study and solve the problems for the development of air traffic control art and to create a better understanding among the controllers serving the international aviation.
4. Eurocontrol is the European organization working for air navigation safety. It was created in 1963 for better service of European airspace. The increase of fast flying civil transport aircraft brought a number of difficulties and resulted in the necessity of new operating methods and use of advanced technology. Some European countries signed an agreement to organize common air traffic control in the upper airspace.

# Критерии оценки

**Оценка «неудовлетворительно»** – обучающийся отказывается выполнять задание

**Оценка «удовлетворительно»** – устное сообщение не соответствует в полной мере заявленной теме или содержит большое количество фонетических, лексико-грамматических ошибок (более 4-5)

**Оценка «хорошо»** – устное сообщение соответствует заявленной теме, фонетические неточности не искажают смысл, количество лексико-грамматических ошибок (не более 3).

**Оценка «отлично»** – устное сообщение соответствует заявленной теме, фонетические неточности незначительны или отсутствуют, количество лексико-грамматических ошибок (не более 1-2).

# Письменная работа.

Цель письменной работы: оценить знания, полученные обучающимися в процессе обучения.

Форма письменной работы: выполнение перевода.

Продолжительность: 2 академических часа.

Письменная работа содержит задания по всем лексико-грамматическим темам дисциплины «Иностранный язык в профессиональной деятельности».

# Answer the questions.

1. What is ICAO ?
2. When and where was ICAO created ?
3. Where is the ICAO's headquarters ?
4. What are the working languages of ICAO ?
5. What is the main task of ICAO ?
6. Where are the main aims of ICAO spelt out ?
7. How does ICAO ensure the safe and efficient aviation operation ?
8. What for are the uniform rules and procedures required ?
9. What other international Civil Aviation Organizations do you know ?
10. What is IATA ? IFATCA ? Eurocontrol ?

# Translate into English.

1. Ясно, что невозможно обеспечить безопасный полет без международного сотрудничества.
2. В настоящее время в ИКАО около 200 стран – членов ИКАО.
3. ИКАО решает много проблем, но главная из них - безопасность полетов.
4. Существуют общие правила полета и процедуры, которые все страны – участники должны соблюдать.
5. Имеется несколько других международных авиационных организаций гражданской авиации.

# Put the verbs in brackets into Past Simple or Past Perfect and translate the sentences into Russian.

1. The girl (to be) glad that she (to find) the seat near the window.
2. When we (to get) home we (to find) that someone (to steal) my bicycle.
3. By the time we (to come) to see him, he (to return) home.
4. I only (to want) to know why he (to lose) his job.
5. By two o’clock the teacher (to examine) all the students.

# Put the verbs in brackets into Future Simple, Future Continuous or Future Perfect and translate the sentences into Russian.

1. I hope they (to receive) my letter by that time.
2. Before going to the South she (to finish) all her work.
3. You (to sell) the flat by the end of the month?
4. He (not to visit) his relatives tonight. He (to prepare) for exams the whole evening.
5. Don’t call him. He (to take) his driving test at 10 a.m. tomorrow.

**Вариант 2**

**1.Read the Text**

**FROM THE HISTORY OF AVIATION**

Men have wanted to fly for more than two thousand years. Observations of flying birds gave man the idea of human flight. Every nation has many legends and tales about birdmen and magic carpets.

The first scientific principles of human flight appeared in the 14-th century. The problem was studied by the great scientist Leonardo de Vinci. He observed the flight of birds, studied the air and its currents and designed a flying machine the wings of which were operated by a man.

But the first actual flight which man made was that in the balloon. In October 1783 the Montgolfier brothers in France sent two men almost 25 metres up in a balloon which descended 10 minutes later, about 2.5 kilometres away.

The first Russian aircraft designer was Alexander Mozhaisky. His airplane, a monoplane, with two light steam engines was tested on August I, 1882. With the first Russian pilot, I.N. Golubev the plane rose into the air and flew a distance of 200 metres before it landed.

At that time the same work was being conducted by Otto Lilienthal, a remarkable German inventor. In 1891 he made his flight in a glider covering 35 metres. In 1903 two Americans, the brothers Wilbur and Orville Wright, built their aeroplane. It flew only 32 metres but it was the first aeroplane with an internal combustion engine that was a big step forward.

In the following years aviation made big advances. In 1908 Henry Farman, in France, made a circular flight of one kilometre. A year later Bleriot crossed the English Channel. 1913 a Russian student Lobanov invented aeroplane skis and this enabled to land and take off in winter.

In 1913 the Russian designer Igor Sikorsky built the world's first multiengined heavy aircraft. That same year the Russian pilot Nesterov executed the first loop. Another Russian pilot, Artseulov, in 1916 proved that a pilot can take his plane out of a corkscrew.

At the beginning of the 20-th century the dirigible was invented. The most known inventor of a dirigible is Count Ferdinand von Zeppelin*,* a retired German army officer. His famous *"*Graf Zeppelin" in 1929 began a cruise which took 21 days 8 hours and 26 minutes to circle the world.

An outstanding event in the history of aviation took place in Petersburg in 1913. That year a heavy multiengined aeroplane "Russky Vityaz» was constructed. It weighed 4,940 kg and had a 1,440 kg useful load. On August 2, 1913 with seven passengers on board it set up a world record by remaining in the air for 1 hour 34 minutes. Its top speed was over 90 km/hr.

In 1914 an improved version of the multiengined heavy bomber of the Ilya Murometz type was built. It weighed 3,000 kg and had a 1,760 kg useful load, a maximum cruising range of 700 km and a top speed of more than 110 km/hr.

Special services in science belong to another famous scientist who is called "father of Russian aviation". And this is N.E.Zhukovsky. He was the first to develop a scientific wing theory and the principles of airscrew design. From that time aerodynamics has been a science combining theoretical knowledge with practical experiments. All modern aerodynamical calculations are based on his outstanding theoretical works.

# Answer the questions.

1. When did the first scientific principles of human flight appear?
2. Who was the first to study the problem of human flight?
3. What was the first actual flight man made?
4. Who was the first Russian aeroplane designer?
5. What plane was designed by him?
6. What distance did the plane cover?
7. Who designed the first glider?
8. How long did “Russky Vityaz” stay in the air?
9. Who is called “the father of Russian aviation”?
10. Did you read about the history of aviation at school?

# Translate into English.

1. Научные принципы полета человека изучались великим ученым Леонардо де Винчи.
2. Первый фактический полет был сделан на воздушном шаре в 1783 г.
3. Большим шагом вперед было создание первого самолета с двигателем внутреннего сгорания, сконструированного двумя американцами, братьями Райт.
4. Ученые и конструкторы многих стран работали над созданием и совершенствованием летательных аппаратов.
5. В 1913 г. в Петербурге был сконструирован тяжелый многомоторный самолет

«Русский витязь».

# Put the verbs in brackets into Past Simple or Present Perfect and translate the sentences into Russian.

1. I just (to see) our teacher.
2. Alex (to meet) his friend two hours ago.
3. The builders already (to decide) what to do with the drainpipe.
4. The wind (to blow) off the man’s hat, but he caught it
5. Last night I (to feel) tired and (to go) to bed very early.

# Put the verbs in brackets into Past Simple or Past Perfect and translate the sentences into Russian.

1. He (not to know) French before he (to visit) France.
2. He (to be) glad to return home because he (to travel) a lot.
3. I suddenly (to remember) I (not to switch off) the iron.
4. She (to cook) five meals for dinner when we (to come).
5. When I (to phone) him yesterday, he already (to go) to Kiev.

Письменная работа выполняется в 2 вариантах.

Каждый вариант письменной работы включает в себя 5 заданий. Номер варианта определяется преподавателем.

Работа, выполненная по другому варианту, возвращается обучающемуся без проверки.

**Оценочные средства для промежуточной аттестации**

**Содержание дифференцированного зачёта по учебной дисциплине СГ.02 «Иностранный язык в профессиональной деятельности» для групп, осваивающих программу подготовки специалистов среднего звена**

***Курс: \_3, семестр: 6***

Промежуточная аттестация по учебной дисциплине проводится в форме

**дифференцированного зачёта**. Зачёт представлен в форме письменной работы, которая включает в себя работу с текстом, послетекстовые задания, грамматические задания. Зачетная работа представлена в 3 вариантах (4 задания в каждом варианте).

Продолжительность: 2 академических часа

**Вариант № 1**

# Прочитайте текст и переведите на русский язык.

**First flights**

On December 17, 1903, Orville and Wilbur Wright capped four years of research and design efforts with a 120-foot, 12-second flight at Kitty Hawk, North Carolina – the first powered flight in a heavier-than-air machine. Prior to that, people had flown only in balloons and gliders.

The first person to fly as a passenger was Leon Delagrange, who rode with French pilot Henry Farman from a meadow outside of Paris in 1908. Charles Furnas became the first American airplane passenger when he flew with Orville Wright at Kitty Hawk later that year.

The first scheduled air service began in Florida on January 1, 1914. Glenn Curtiss had designed a plane that could take off and land on water and thus could be built larger than any plane to date, because it did not need the heavy undercarriage required for landing on hard ground. Thomas Benoist, an auto parts maker, decided to build such a flying boat, or seaplane, for a service across Tampa Bay called the St. Petersburg – Tampa Air Boat Line. His first passenger was ex-St. Petersburg Mayor A.C.Pheil, who made the 18-mile trip in 23 minutes, a considerable improvement over the two-hour trip by boat. The single-plane service accommodated one passenger at a time, and the company charged a one-way fare of

$5. After operating two flights a day for four months, the company folded with the end of the winter tourist season.

# Ответьте на вопросы.

* + 1. How did people use to fly before the invention of a heavier-than-air machine?
    2. Who became the first American airplane passenger?
    3. What kind of plane did Glenn Curtiss design?
    4. What was A.C. Pheil famous for?
    5. How much did a flight cost?

# Найдите в тексте предложения с Past Simple Tense (не менее 5 предложений) и запишите их.

* 1. **Раскройте скобки, поставьте глаголы в Past Simple или Past Perfect.**

1. When the teacher (to enter) the classroom, the students already (to open) their books.
2. The teacher (to understand) that John (not to prepare) for the exam well enough.
3. We (to return) from the cinema by nine o’clock.
4. I (to do) all my work at six o’clock.
5. She said that she (to spend) her holiday in Spain.

**Вариант №2**

# Прочитайте текст и переведите на русский язык.

**World War I**

Early flights were headline events, but commercial aviation was very slow to catch on with the general public, most of whom were afraid to ride in the new flying machines. Improvements in aircraft design also were slow. However, with the advent of World War I, the military value of aircraft was quickly recognized and production increased significantly to meet the soaring demand for planes from governments on both sides of the Atlantic. Most significant was the development of more powerful motors, enabling aircraft to reach speeds of up to 130 miles per hour, more than twice the speed of pre-war aircraft. Increased power also made larger aircraft possible.

At the same time, the war was bad for commercial aviation in several respects. It focused all design and production efforts on building military aircraft. In the public’s mind, flying became associated with bombing runs, surveillance and aerial dogfights. In addition, there was such a large surplus of planes at the end of the war that the demand for new production was almost nonexistent for several years – and many aircraft builders went bankrupt. Some European countries, such as Great Britain and France, nurtured commercial aviation by starting air service over the English Channel. However, nothing similar occurred in the United States, where there were no such natural obstacles isolating major cities and where railroads could transport people almost as fast as an airplane, and in considerably more comfort. The salvation of the U.S. commercial aviation industry following World War I was a government program, but one that had nothing to do with transportation of people.

# Ответьте на вопросы.

* + 1. Why was the commercial aviation very slow?
    2. What was the most significant thing with the advent of World War I?
    3. Why did many aircraft builders go bankrupt?
    4. What were the things with aviation in the USA?
    5. What was the U.S. commercial aviation industry connected with?

# Составьте 5 предложений в Past Simple Tense, используя следующие выражения.

*Commercial aviation, improvements in aircraft design, the soaring demand for planes, a large surplus of planes, natural obstacles, transportation of people.*

# Раскройте скобки и поставьте глаголы в Past Simple или Past Perfect.

1. The girl (to be) glad that she (to find) the seat near the window.
2. When we (to get) home we (to find) that someone (to steal) my bicycle.
3. By the time we (to come) to see him, he (to return) home.
4. I only (to want) to know why he (to lose) his job.
5. By two o’clock the teacher (to examine) all the students.

**Вариант № 3**

# Прочитайте текст и переведите абзацы 2, 3, 4 на русский язык.

**History of commercial aviation**

When most people think of commercial aviation huge fleets of sleek, fast jets of large passenger airliners crisscrossing the world immediately spring to mind. Few of the people who witnessed the first flights of commercial aviation would ever have dreamt of the speed, luxury, and diversity of what airlines would become.

After the First World War many combat pilots were looking for a way to keep flying, and often toured on the barnstorming circuit, charging a nominal fee for a few minutes in the air. The taste for air travel took flight after that, and with the development of the air mail system in the decade after the Great War, the potential uses for air power were limited only by technology and imagination.

The airline industry grew directly out the companies who took up the contacts for the postal service to transport mail between the central hubs of New York and San Francisco, Carriers for passenger service began in the 1920s, and although new advancements in engine technology made travelling by air faster and safer, relative luxuries such as heated, pressurized cabins were still decades away. Nevertheless, new planes such as the Boeing 247 and the Douglas DC-3 and the rise of international flights through Pan-Am, air travel was becoming one of the most popular and glamorous ways to travel.

The Second World War disrupted much commercial air travel as resources were needed to supply the frontlines, but after the war the airline industry more than rebounded for a number of reasons. First, the United States was relatively untouched by the ravages of war, so many people simple picked up where they left off. Second, the number of pilots and surplus planes allowed many carriers to double their staff and inventory. Third, contracts with the military provided capital to invest in new technologies, and many plants still had their military production lines running. Combining a sense of victory with a desire for adventure, people living after WWII embraced air travel like never before.

Jet travel and the Space Race drove the popular imagination of people who thought technology would bring them the future, today. In fact the same year of the moon landing saw the introduction of Boeing*'s* 747. Both these technologies would, in their own ways, increase the ability of people to travel the globe unhindered. Further developments such as supersonic Concorde shrank the world even more, allowing people to cross the Atlantic in luxury and speed in a few hours.

Commercial aviation suffered a major setback after the terrorist attacks on September 11th, 2001. Many people became afraid to fly, but new preventive regulations have made air travel safer than ever before. The future of commercial aviation is filled with promise however as new technologies and advances unite people around the globe more than ever before. Furthermore, new technologies that drive private spaceflight will soon provide people the same experience the first barnstormers gave to people across the country right the First World War. For everyone in the 21st century the sky is no longer the limit.

# Ответьте на вопросы.

* 1. What were the first flights of commercial aviation?
  2. When did the carriers for passenger service begin?
  3. Why was air travel embraced after the war?
  4. What were the first most famous developments in commercial aviation?
  5. Why did commercial aviation suffer from a setback?

# Найдите в тексте предложения с Past Simple Tense (не менее 5 предложений) и запишите их.

1. **Раскройте скобки, поставьте глаголы в Past Simple или Past Perfect.**
2. He (not to know) French before he (to visit) France.
3. He (to be) glad to return home because he (to travel) a lot.
4. I suddenly (to remember) I (not to switch off) the iron.
5. She (to cook) five meals for dinner when we (to come).
6. When I (to phone) him yesterday, he already (to go) to Kiev.

# Содержание дифференцированного зачёта по учебной дисциплине СГ.02 «Иностранный язык в профессиональной деятельности » для групп, осваивающих Программу подготовки специалистов среднего звена

# Промежуточная аттестация по учебной дисциплине проводится в форме дифференцированного зачёта. Зачёт представлен в форме письменной работы, которая включает в себя работу с текстом, послетекстовые задания, грамматические задания.

# Зачетная работа представлена в 5 вариантах (текст и 3 задания по тексту в каждом варианте).

Продолжительность: 2 академических часа.

**Вариант 1**

**Read and translate the text**

**Radar**

Most air traffic control in busy airspace occurs in *a radar environment*. This means that the air traffic controller has a radar map of the area showing the position of the various aircraft within it, brining enormous advantages, such as:

* A significant reduction in the amount of air-ground communication. For instance, there is no need for pilots to transmit regular position reports.
* The ability to handle an increased number of aeroplanes in the same airspace, with reduced, but still safe, separation distances.
* The ability to *radar vector* an aeroplane along various tracks by passing headings to steer to the pilot.
* The ability to feed aeroplanes onto final approach to land, either to the commencement of an instrument approach such as an ILS (instrument landing system) or until the pilot becomes “visual”, without the need for excessive manoeuvring, and with more than one aeroplane on the approach at any one time.

This use of radar is known as **surveillance radar**. Surveillance radar, although extensively used in air traffic control, is not confined to controlled airspace.

Most aeroplanes are now fitted with a secondary surveillance radar **transponder**, which transmits a unique signal in response to a radar signal from the ground, thereby allowing the radar controller to indentify a particular aeroplane on a radar screen.

*Tasks*

# Match words on the left with their equivalents on the right

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | air traffic control | a) | воздушное пространство |
| 2) | radar map | b) | система посадки по приборам |

|  |  |  |  |
| --- | --- | --- | --- |
| 3) | aircraft | c) | подход, приближение |
| 4) | reduction | d) | управление воздушным движением |
| 5) | air-ground communication | e) | ответчик |
| 6) | airspace | f) | уменьшение |
| 7) | ILS (instrument landing system) | g) | радиолокационная карта |
| 8) | approach | h) | радиолокатор кругового обзора |
| 9) | surveillance radar | i) | воздушное судно |
| 10) | transponder | j) | связь «воздух – земля» |

* 1. **Translate the following sentences from Russian into English**

1. У диспетчера есть радиолокационная карта воздушного пространства аэропорта.
2. Карта показывает положение воздушного судна в пространстве.
3. Одним из преимуществ радиолокационной карты является возможность обслуживать большое количество самолетов в том же воздушном пространстве.

# Answer the questions to the text

1. Does a radar map reduce the amount of air-ground communication?
2. What advantages does a radar map bring?
3. What does ILS mean?
4. What is known as surveillance radar?
5. What are most aeroplanes fitted with now?

**Вариант 2**

**Read and translate the text**

**Primary surveillance radar**

Surveillance radar is designed to give a radar controller an overview of his area of responsibility. It does not transmit pulses in all directions simultaneously, but rather as a beam, which is slowly rotated. For an aeroplane to be detected, the beam must be directed roughly towards it. If the radar controller has his radar tilted up, then it may miss lower aircraft at a distance; conversely, nearby high aeroplanes may not be detected if the tilt is down.

Most radar screens are simply cathode ray tubes (CRT) that resemble circular television screens. Using the same principle as television, a beam of electrons is directed onto fluorescent coating of the CRT to provide a radar picture. Radar controllers generally have circular displays showing the position of the radar antenna in the centre, with range marks to aid in estimating distance. The radar screen is also known as a **plan position indicator (PPI)**.

The actual radar dish may be located away from the position of the radar controller, possibly on a nearby hill or tower. As the radar antenna rotates slowly, the small electron beam in the controller’s CRT also rotates, leaving a faint line or trace on the screen in a direction aligned with the direction of the antenna at that moment. Any radar return signal appears as a *blip* or *paint* at the appropriate spot on the screen.

*Tasks*

# Match words on the left with their equivalents on the right

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | surveillance radar | a) | наклон |
| 2) | pulse | b) | катодно-лучевая трубка |
| 3) | beam | c) | радиолокатор кругового обзора |
| 4) | tilt | d) | указатель |
| 5) | CRT (cathode ray tube) | e) | индикатор кругового обзора |
| 6) | screen | f) | сигнал |
| 7) | distance | g) | изображение |
| 8) | PPI (plan position indicator) | h) | экран |
| 9) | blip | i) | расстояние |
| 10) | mark | j) | луч |

1. **Translate the following sentences from Russian into English**
2. Радиолокатор кругового обзора сконструирован так, чтобы дать диспетчеру обзор всей зоны.
3. Большинство экранов локаторов представляют собой катодно-лучевую трубку.
4. Так как антенна радиолокатора медленно вращается, то и маленький пучок электронов на экране тоже вращается.

# Answer the questions to the text

* 1. What does surveillance radar give to a radar controller?
  2. Can a radar miss a lower aircraft at a distance?
  3. What principle is used in most radar screens?
  4. What provides a picture on the screen?
  5. What do we call a radar return signal?

**Вариант 3**

**Read and translate the text**

**How radar works**

Radio uses the ability to transmit electromagnetic energy, in the form of radio waves, from one place to another. Radio has played a central part in the development of aviation, and radar is an important type of radio system.

Waves of electromagnetic energy emanating from a radio transmitter can carry information, such as speech, music and Morse code, out into the surrounding environment. Radio receivers tuned to the *same* frequency can detect and use signals, often at long distances from the transmitter.

Common uses for radio in aviation are:

* air-ground voice communication; and
* radio navigation (the ADF/NDB combination, VOR and ILS).

Electromagnetic radiation can be reflected from certain surfaces. Light waves, for instance, will be reflected by the metallic coating on a mirror. Similarly, radio waves of certain frequencies will be reflected from metallic and other surfaces, with some of the radio energy returning to the point from which it was transmitted as a return echo. Other surfaces and objects, such as wood, may not cause reflection of the radio waves, which will simply pass through like X-rays pass through a body.

Detection of the reflected radio waves at the point from where they were originally transmitted is known as radar. The principle of radar has been known since the mid-1930s, and was used with devastating effect during World War II (1939-45) to detect objects such as aeroplanes and measure their range. Indeed, the name *radar* was devised from *radio detection and ranging*.

*Tasks*

# 1 . Match words on the left with their equivalents on the right

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | radar | a) | автоматический радиопеленгатор |
| 2) | environment | b) | радио волна |
| 3) | radio receiver | c) | излучение |
| 4) | frequency | d) | частота |
| 5) | transmitter | e) | поверхность |
| 6) | radiation | f) | всенаправленный радиомаяк |
| 7) | surface | g) | радиоприемник |
| 8) | radio wave | h) | радиолокатор |
| 9) | ADF (automatic direction finder) | i) | условия, среда |
| 10) | NDB (non-directional radio beacon) | j) | передатчик |

1. **Translate the following sentences from Russian into English**
2. Радио использует возможность передачи электромагнитной энергии.
3. Волны электромагнитной энергии могут нести информацию.
4. Электромагнитное излучение может отражаться от определенных поверхностей.

# Answer the questions to the text

* 1. What ability does radio use?
  2. Can waves of electromagnetic energy carry information such as music, speech and Morse code?
  3. What frequency are radio receivers tuned to?
  4. How long has the principal of radar been known?
  5. What words was the name radar devised from?

**Вариант 4**

**Read and translate the text**

**The instrument landing system**

The instrument landing system is known as the ILS. It enables a suitable equipped aeroplane to make a **precision approach** to a particular runway. A precision approach is one in which slope guidance, as well as tracking guidance, is given. Each ILS is known by the runway it serves.

The instrument landing system has three main elements:

1. **The localizer** (LLZ), which provides tracking guidance along the extended centerline of the runway (guidance in *azimuth* left or right of the extended centerline)
2. **The glideslope**, which provides vertical guidance towards the runway touchdown point, usually at a slope of approximately 30 to the horizontal, or 1:20 (vertical guidance above or below the glideslope).
3. **Marker beacons**, which provide accurate range fixes along the approach (usually an outer marker and a middle marker).

On some ILS approaches, locator beacons may be substituted for the marker beacon(s) and, on others, a DME distance may be substituted for the outer marker. These can be used in place of marker beacons to provide the pilot with an accurate fix along the approach.

There may also be a PAPI (precision path approach indicator) system to provide slope guidance during the visual stage of the approach. This and other visual information will assist the pilot to maintain a stable descent path down to the runway surface and complete the flare and finding.

*Tasks*

# 1 . Match words on the left with their equivalents on the right

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | precision approach | a) | дальномерное оборудование |
| 2) | runway | b) | траектория полета |
| 3) | localizer | c) | планирование |
| 4) | guidance | d) | посадка |
| 5) | glideslope | e) | маркерный радиомаяк |
| 6) | touchdown | f) | курсовой радиомаяк |
| 7) | marker beacon | g) | глиссада |
| 8) | DME (distance measuring equipment) | h) | взлетно-посадочная полоса |
| 9) | flightpath | i) | точный заход на посадку |
| 10) | glide | j) | наведение, управление полетом |

* 1. **Translate the following sentences from Russian into English**

1. Система посадки по приборам дает возможность самолетам с соответствующим оборудованием совершить точный заход на посадку.
2. Курсовой радиомаяк обеспечивает наведение вдоль центральной линии взлетно- посадочной полосы.
3. Маркерный радиомаяк может быть заменен на приводной радиомаяк.

# Answer the questions to the text

* + 1. What does the ILS enable a suitable equipped aeroplane to make?
    2. How many elements does the ILS consist of?
    3. What does the localizer provide?
    4. What kind of beacon may a marker beacon be substituted for?
    5. What else may there be?

**Вариант 5**

**Read and translate the text**

**VHF Direction finding (VDF)**

Some aerodromes are equipped with radio aerials that can sense the direction of VHF- COM signals (normal voice signals) received from an aeroplane.

This information is presented to the air traffic controller (usually the approach controller) as a radial line on a cathode ray tube similar to a radar screen or, with the most modern VDF equipment, as a very accurate digital readout of bearing.

The controller can then give the pilot the bearing of the aircraft relative to the aerodrome. This is known as **very high frequency direction finding**, and is often abbreviated to VDF or VHF D/F/

An advantage of VDF is that no specific aircraft equipment is required other than a VHF-COM – normal VHF communications radio.

Ground stations that are equipped to provide VDF are sometimes designated by the term **homer**, e.g. *Shoreham Homer*, which operates on the VHF communication frequency of 123,15 MHz.

Whereas no special equipment is required in the aeroplane for VDF other than a VHF- COM radio, it does require a special installation at the ground station. Two typical designs for VDF aerials at aerodromes are the H-type aerial (a double-H dipole aerial in technical terms), or the Doppler-type VDF aerial.

VDF ground equipment from years ago was known as a **manual homer,** and used an ADF-type null-seeking aerial which the operator had to rotate manually to determine the direction of the aeroplane. It also required long transmissions from the aeroplane while the operator sought the null position.

Modern equipment is fully automatic. The direction of the aeroplane is displayed automatically following only a short VHF-COM transmissions from the pilot.

*Tasks*

# 1 . Match words on the left with their equivalents on the right

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | aerial | a) | радиопередача |
| 2) | VHF | b) | радиал (направление на радиостанцию) |
| 3) | radial | c) | очень высокая частота |
| 4) | readout | d) | установка |
| 5) | bearing | e) | наземное оборудование |
| 6) | homer | f) | автоматический радиопеленгатор |
| 7) | installation | g) | считывание показаний |
| 8) | ground equipment | h) | антенна |
| 9) | transmission | i) | радиопеленгаторная станция |
| 10) | ADF (automatic direction finder) | j) | пеленг |

1. **Translate the following sentences from Russian into English**
2. Некоторые аэродромы оборудованы антеннами.
3. Информация передается диспетчеру в виде радиала на катодно-лучевую трубку.
4. На борту воздушного судна не требуется никакого специального оборудования для VDF.

# Answer the questions to the text

1. What kind of information is presented to the air traffic controller?
2. What advantage has VDF?
3. Is special equipment required for VDF at the ground station?
4. What else was VDF ground equipment known from years ago? What kind of equipment did the operator use in the past

**Критерии устного ответа на дифференцированном зачете.**

Оценка «**отлично»** - исчерпывающий, точный ответ, демонстрирующий хорошее знание вопроса, умение использовать критические материалы для аргументации и самостоятельных выводов; свободное владение научной терминологией; умение излагать материал последовательно, делать обобщения и выводы.

Оценка «**хорошо**» - ответ, обнаруживающий хорошее знание и понимание учебного материала, умение анализировать, приводя примеры; умение излагать материал последовательно и грамотно. В ответе может быть недостаточно полно развернута аргументация, возможны отдельные недостатки в формулировке выводов; допускаются отдельные погрешности в речи.

Оценка «**удовлетворительно**» - ответ, в котором материал раскрыт в основном правильно, но схематично или недостаточно полно, с отклонениями от последовательности изложения. Нет полноценных обобщений и выводов; допущены ошибки в речевом оформлении высказывания.

Оценка «**неудовлетворительно**» - ответ обнаруживает незнание материала и неумение его анализировать; в ответе отсутствуют примеры; нарушена логика в изложении материала, нет необходимых обобщений и выводов; недостаточно сформированы навыки устной речи.