

Государственное автономное профессиональное образовательное учреждение
«Тетюшский государственный колледж гражданской защиты»



УТВЕРЖДАЮ

Директор ГАПОУ

«Тетюшский государственный колледж гражданской защиты»

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**ФОНД ОЦЕНОЧНЫХ СРЕДСТВ
ПО ДИСЦИПЛИНЕ**

СГ.02 Иностраный язык в профессиональной деятельности

наименование дисциплины

по специальности

25.02.08 Эксплуатация беспилотных авиационных систем

код и наименование специальности

Фонд оценочных средств разработан на основе:
- федерального государственного образовательного стандарта среднего профессионального образования по специальности:

25.02.08 Эксплуатация беспилотных авиационных систем

код и наименование специальности

- рабочей программы учебной дисциплины

СГ.02 Иностранный язык в профессиональной деятельности

наименование учебной дисциплины

- локальных актов ГАПОУ «Тетюшский государственный колледж гражданской защиты»

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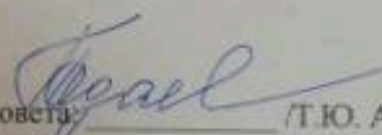
Рассмотрен и одобрен на заседании предметно-цикловой комиссии гуманитарных дисциплин ГАПОУ «Тетюшский государственный колледж гражданской защиты»,

протокол № 1, от 28.08.2023 г.

председатель ЦК:  /М.Р. Шакирова/

Рассмотрен педагогическим советом ГАПОУ «Тетюшский государственный колледж гражданской защиты»,

протокол № 1, от 28.08.2023 г.

председатель педагогического совета:  /Т.Ю. Адаева/

1. Паспорт фонда оценочных средств по дисциплине

1.1. Общие положения

Фонд оценочных средства (ФОС) предназначены для контроля и оценки образовательных достижений обучающихся, освоивших программу учебной дисциплины ***СГ.02 Иностранный язык в профессиональной деятельности.***

ФОС включают оценочные материалы для проведения текущего контроля успеваемости и промежуточной аттестации в форме ***зачета в 4,6 семестрах, экзамена – в 8 семестре.***

1.2. Планируемые результаты освоения дисциплины

Содержание образовательной программы учебной дисциплины ***СГ.02 Иностранный язык в профессиональной деятельности*** обеспечивает достижение студентами следующих результатов освоения дисциплины подлежащих проверке

Знания:

- лексический минимум (в объеме 1200-1400 лексических единиц) авиационной направленности;
- авиационные термины и сокращения;
- основы работы со справочными информационными материалами на английском языке авиационной направленности;
- правила построения простых и сложных предложений на профессиональные темы;
- особенности произношения.

Умения:

- общаться (устно и письменно) на английском языке на авиационные темы;
- воспринимать на слух и понимать информацию на авиационные темы в пределах программы;
- читать и переводить (со словарем) тексты авиационной направленности;
- понимать общий смысл четко произнесенных высказываний на известные темы (профессиональные и бытовые);
- кратко обосновывать и объяснить свои действия (текущие и планируемые).

Результаты освоения дисциплины направлены на формирование общих и профессиональных компетенций, результатов воспитания:

Общие компетенции:

ОК 01. Выбирать способы решения задач профессиональной деятельности, применительно к различным контекстам.

ОК 04. Эффективно взаимодействовать и работать в коллективе и команде.

ОК 06. Проявлять гражданско-патриотическую позицию, демонстрировать осознанное поведение на основе традиционных российских духовно-нравственных ценностей, в том числе с учетом гармонизации межнациональных и межрелигиозных отношений, применять стандарты антикоррупционного поведения.

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

Профессиональные компетенции:

ПК 1.3. Осуществлять взаимодействие со службами организации и управления воздушным движением при организации и выполнении полетов и авиационных работ беспилотными воздушными судами самолетного типа.

ПК 2.3. Осуществлять взаимодействие со службами организации и управления воздушным движением при организации и выполнении полетов и авиационных работ воздушными судами вертолетного типа.

ПК 3.3. Осуществлять взаимодействие со службами организации и управления воздушным движением при организации и выполнении полетов и авиационных работ беспилотными воздушными судами смешанного типа.

Личностные результаты:

- **ЛР 4.** Проявляющий и демонстрирующий уважение к людям труда, осознающий ценность собственного труда. Стремящийся к формированию в сетевой среде личностно и профессионального конструктивного «цифрового следа».
- **ЛР 13.** Демонстрирующий готовность и способность вести диалог с другими людьми, достигать в нем взаимопонимания, находить общие цели и сотрудничать для их достижения в профессиональной деятельности.
- **ЛР 15.** Проявляющий гражданское отношение к профессиональной деятельности как к возможности личного участия в решении общественных, государственных, общенациональных проблем.
- **ЛР 19.** Демонстрирующий уровень подготовки, соответствующий современным стандартам и передовым технологиям, потребностям регионального рынка.

1.3. Распределение оценивания результатов обучения

Результаты освоения дисциплины	Результаты освоения дисциплины направлены на формирование		Формы и методы оценки
	ОК и ПК	ЛР	
Уметь: - общаться (устно и письменно) на английском языке на профессиональные темы;	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	-оценка результатов выполнения практических заданий; -оценка результатов аудирования; -тестирование; -контрольная работа -практические задания -тестовый контроль рецептивных видов речевой деятельности (тесты на выбор правильного ответа, на восстановления логического порядка, на установление соответствий) -контроль высказываний по предложенной теме -зачет -экзамен
- воспринимать на слух и понимать информацию на авиационные темы в пределах программы;	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
- читать и переводить (со словарем) тексты авиационной направленности;	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
- понимать общий смысл четко произнесенных высказываний на известные темы (профессиональные и бытовые);	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
- кратко обосновывать и объяснить свои действия (текущие и планируемые).	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
Знать: - лексический минимум (в объеме 1200-1400 лексических единиц) авиационной направленности;	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	– оценка результатов выполнения практических заданий по работе с информацией, документами, литературой; - оценка результатов аудирования; - представление результатов, выполненных внеаудиторных самостоятельных работ; - экзамен
- авиационные термины и сокращения;	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
- основы работы со справочными информационными материалами на английском языке авиационной направленности;	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
- правила построения простых и сложных предложений на профессиональные темы;	ОК 01, ОК 04, ОК 06, ОК 09	ЛР 04, ЛР 13, ЛР 15, ЛР 19	
- особенности произношения	ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3	ЛР 04, ЛР 13, ЛР 15, ЛР 19	

Код и наименование формируемых компетенций	Раздел/Тема	Контрольно-оценочные средства
ОК 01. Выбирать способы решения задач профессиональной деятельности, применительно к различным контекстам.	Темы: 1 - 10	КОС по темам: 1 – 10 КОС: ПА
ОК 04. Эффективно взаимодействовать и работать в коллективе и команде.	Темы: 2 - 10	КОС по темам: 2 – 10 КОС: ПА
ОК 06. Проявлять гражданско-патриотическую позицию, демонстрировать осознанное поведение на основе традиционных российских духовно-нравственных ценностей, в том числе с учетом гармонизации межнациональных и межрелигиозных отношений, применять стандарты антикоррупционного поведения.	Темы: 2 – 4, 8 - 10	КОС по темам: 2 – 4, 8 – 10 КОС: ПА
ОК 09. Пользоваться профессиональной документацией на государственном и иностранном языках.	Темы: 2 - 10	КОС по темам: 2 – 10 КОС: ПА
ПК 1.3. Осуществлять взаимодействие со службами организации и управления воздушным движением при организации и выполнении полетов и авиационных работ беспилотными воздушными судами самолетного типа.	Темы: 3,4,8,9,10,13	КОС по темам: 3,4,8,9,10,13 КОС: ПА
ПК 2.3. Осуществлять взаимодействие со службами организации и управления воздушным движением при организации и выполнении полетов и авиационных работ воздушными судами вертолетного типа.	Темы: 3,4,8,9,10,13	КОС по темам: 3,4,8,9,10,13 КОС: ПА
ПК 3.3. Осуществлять взаимодействие со службами организации и управления воздушным движением при организации и выполнении полетов и авиационных работ беспилотными воздушными судами смешанного типа.	Темы: 3,4,8,9,10,13	КОС по темам: 3,4,8,9,10,13 КОС: ПА

2. Фонды оценочных средств для текущего контроля успеваемости и промежуточной аттестации

2.1. Оценочные средства текущего контроля успеваемости

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.

Формы и методы текущего контроля: устный и письменный опрос, тестирование, выполнение практических работ, самостоятельная работа и т.п.

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.

При проведении письменного опроса обучающийся прочитывает задания и отвечает письменно на вопросы (решает задания) в любом порядке. Время выполнения работы: 45 мин.

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

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

При проведении текущего контроля успеваемости обучающихся используются следующие критерии оценок:

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

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.

2) критерии оценки выполнения письменной практической работы (в том числе в рамках зачета, экзамена):

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 работы по дисциплине обязательны для выполнения.

3) критерии оценки выполнения работы на практических занятиях, 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.

4) критерии устного ответа на экзамене:

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.

Тема 1. Английский язык как средство межкультурного общения

Опрос по теме «Английский язык как средство межкультурного общения»

Answer the questions:

1. Why are millions of people learning English today?
2. Why do young people want to learn English?
3. Why do you learn English?
4. What do we need foreign languages for?
5. What is the best way to learn a language?
6. What is the most important thing for you in learning a foreign language?
7. It is easy to learn foreign languages?
8. When did you begin learning English?
9. Why is it necessary to learn English?
10. What advantages have the people who know foreign languages?

Match the proverbs

- | | |
|--|-------------------------------|
| 1) Live and learn. | Терпение и труд всё перетрут. |
| 2) No pains, no gains. | Без труда нет плода. |
| 3) It is never too late to learn. | Меньше слов — больше дела. |
| 4) Industriousness is the mother of good luck. | Учиться никогда не поздно. |
| 5) Knowledge is power. | Век живи, век учись. |
| 6) All things are difficult before they are easy | Знания — сила. |

Answer the question using the phrases. Why should I know English?

English must be learnt ...

to have a chance to go abroad and get experience in a foreign company
to study at a college
to communicate with people of the world
to understand films and songs in English
to get a better job
it's easier than other subjects you could study
it gives you a chance to meet new people
it is useful when you travel
to do business

The best way to learn English is ...

to work hard and thoughtfully
to listen attentively
to use a dictionary
to use a cassette recorder
to read aloud
to revise often
to check for mistakes
to do exercises carefully

Useful learning strategies are...

reading English newspapers/magazines/books
watching English movies
studying at a language school in the UK/
living in a country where it's spoken
communicating with native speakers

Самостоятельная работа

Составить монолог о важности английского языка в профессиональной деятельности:

«Why is it Important to Learn a Foreign Language?»

Тема 2. Путешествие по воздуху.

Тема 3. Аэропорт.

Опрос по темам

Вопросы к теме 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 3. Аэропорт.

1. What do you know about new modern terminals in Russia?
2. How do you see terminal in the future?

Практическая работа по грамматике

Тема «Употребление артиклей»

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.
6. If you want to get ... room at ... hotel in Nice in summer time you must reserve ... accommodation in advance.
7. In ... morning ... engineers look through ... Russian and English newspapers and journals.
8. There is ... whole range of specialist vehicles at ... airports.
9. Passengers for ... flight 452 to Spain, please, collect your hand luggage and go to ... gate 4.
10. ... last month our manager went to St. Petersburg by ... plane.

Тема «Предлоги»

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?
6. The plane will arrive ... a delay ... 40 minutes. Will you go ... the departure lounge and wait ... the announcement?
7. It is used ... electrical power ... the parking place.

8. ... front ... the Arrival hall is everything you need to continue your journey.
9. These terminals must be fitted ... facilities such ... shops, banks and restaurants.
10. As the hotels are full ... weekends Mr. Blake phoned ... the Hove hotel and reserved rooms ...advance.

Тема «Времена английского глагола»

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.
6. When you (arrive) in London, it (rain) heavily.
7. We (be) the ground controllers.
8. They just (discuss) the time of the departure.
9. I (know) the results in a week.
10. Then you (go) through customs and passport control.

Тема «Степени сравнения имен прилагательных и наречий»

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.
6. This London airport is becoming (efficient) and (attractive) nowadays.
7. One of the (important) factors is the design of the plane itself.
8. This is (busy) airport I have ever seen.
9. These modern airports must be fitted out with (long) and (wide) runways.
10. Are our cars (comfortable) than German ones?

Работа по тексту

Translate the following text into Russian:

1. 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.

1. 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.

Тема 4. Авиационные профессии

Тема 5. Полет

Опрос по темам

Вопросы к теме «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 «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?

Письменная работа по лексико-грамматическим темам

A Short History of Flight

A. 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.

B. 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.

C. 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.

D. 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.

E. 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.

F. 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.

G. 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.

Задания по тексту:

1. Дайте определение слову «*glider*».

2. Найдите в тексте эквиваленты следующим словам и словосочетаниям:

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.

3. Закончите предложения, используя текст.

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 ...

4. Согласитесь или не согласитесь с высказываниями.

1. The first actual flight man made was that in the glider.
2. Free balloons had a lot of disadvantages.
3. Then there came the idea to fill the balloon with oxygen.
4. The real history of mechanical flight began with the 20-th century.
5. The glider was a lighter-than-air craft and could cover long distances.
6. The first powered flight in an aeroplane was made by the Wright brothers.

Самостоятельная работа

Подготовка проектов “Travelling by Air” (*Путешествие по воздуху*)

Практика в использовании терминов и сокращений по изученным в практических занятиях темам; подбор диалогов по указанным темам

Тема 6. Беспилотные авиационные системы

Ответьте на вопросы:

- 1) Why has the use of drones become widespread in civilian sphere?
- 2) What advantages have drones over vehicles?
- 3) In what directions are the most commercial drones used?
- 4) How are drones used in agriculture?
- 5) Why does the use of drones in agriculture has become widespread?
- 6) What advantages over manned vehicles have drones apart from the material component?
- 7) What requirements are presented to pilots and technicians serving the equipment?
- 8) What advantages over manned vehicles have drones?

Письменная работа по лексико-грамматическим темам

A Brief History of Drones: The Remote Controlled Unmanned Aerial Vehicles (UAVs)

Прочитайте и переведите текст.

1. Although originally built for military purposes, drones have seen rapid growth and advancements and made a break to consumer electronics.

Their original use was as weapons, in the form of remotely-guided aerial missile deployers. However, today, drones have found a wide range of applications for civilian use, especially in the form of small quadcopters and octocopters.

Today, drones are used for a wide range of functions, including monitoring climate change, delivering goods, aiding in search and rescue operations, and in filming and photography.

Of course, UAVs are also an increasingly important part of the military in many countries. What is considered to be a drone?

Before we get into the nitty-gritty of the history of drones, it might be useful to actually define what we are talking about.

According to various dictionaries, a drone tends to be defined as: -"An unmanned aircraft or ship guided by remote control or onboard computers." - Merriam Webster.

While the term also has other meanings, for the context of this article, a drone is, in effect, an unmanned flying object either controlled remotely or operating completely autonomously.

"A drone, in technological terms, is an unmanned aircraft. ... Essentially, a drone is a flying robot that can be remotely controlled or fly autonomously through software-controlled flight plans in their embedded systems, working in conjunction with onboard sensors and GPS." - Internet of Things Agenda.

Here we will focus on this particular aspect of drone technology. Some of the earliest military drones appeared in the mid-1850s. The concept of drones may well date back to 1849, when Austria attacked Venice using unmanned balloons stuffed with explosives. Austrian forces, who were besieging Venice at the time, launched around 200 of these incendiary balloons over the city. Each balloon carried anywhere between 24 (11 kg) to 30 (14 kg) pounds of bombs.

Once in position, these bombs were dropped from their carrier balloons to wreak havoc on the city below. Fortunately for the Venetians, only one bomb found its mark, as most of the balloons were blown off-course due to a sudden change in wind direction. As innovative as this event was in the field of military technology, the use of balloons does not really meet the current definition of drones, especially military drones, as we have seen above. That being said, it is very interesting to see the basic concept of drones was being considered by military technologists more than 170 years ago. It is this kind of thinking that would drive drone technological development over the coming centuries and decades.

1.1. Выпишите определение «дрона» на английском языке.

1.2. Выпишите из 1-ой части все глаголы, определите их видо-временную форму и залог.

One common feature of many modern commercial drones is the quadcopter configuration. Early development of this technology appeared in 1907, when brothers Jacques and Louis Bréguet, with help of French Physiologist Professor Charles Richet, developed an early example with their gyroplane, a forerunner of the helicopter.

For its time, the design of the copter was visionary. Although it achieved the first ascent of a vertical-flight aircraft with a pilot, it only reached a height of 0.6 meters. It was also not a free flight, as four men were needed to steady the structure. That being said, it did demonstrate that the concept of a quadcopter would work for flight -- it would just take more technological development to make it viable.

Again, like the incendiary balloon used by the Austrian army more than 50 years before, this was still not, technically speaking, a drone as we know it today.

2.2. Найдите английские эквиваленты данным словосочетаниям:

Одна из общих характеристик; первые разработки; разработали первый образец; для своего времени; что, как говорится; это просто займет; сделать это жизнеспособным.

2.3. Выпишите из 2-ой части все глаголы, определите, к какой группе они относятся (правильные, или неправильные).

Самостоятельная работа

Практика в использовании терминов и сокращений по указанным в практических занятиях темам; подбор диалогов по изученным темам

Тема 7. Погода. Климат.

Тема 8. Безопасность полётов.

Опрос по темам:

Вопросы к теме «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, tsunamis, 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 «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?

Письменная работа по лексико-грамматическим темам

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 1/4 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 lasers 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

I. 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 lasers help the pilots?
13. What is the advantage of satellite meteorology?
14. What other instruments make weather forecast service more reliable?

II. 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

III. 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. Сейчас большинство метеостанций почти полностью автоматизированы.
8. Автоматическая система погоды показывает скорость и направление ветра, температуру воздуха, точку росы, дальность видимости на полосе, высоту облачности.
9. Использование спутников и компьютеров повышает точность прогноза погоды.

Тема 7. Безопасность полетов.

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 manoeuvres even the dangerous ones.

EXERCISES

I. 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?

II. 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.

Тема 8. Предотвращение авиакатастроф.

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

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?

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.

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.

Тема 10. Технологии будущего

Опрос по теме:

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?

DRONES AND MODERN LIFE

1. Прочитайте, переведите текст, выписывая незнакомые слова.

Business Insider, one of the world's leading news portals, for example, expects global shipments of drones to rise to 2.4 million by 2023 - that is a 66.8% compound annual growth rate." Drone growth will occur across the four main segments of the enterprise

industry: agriculture, construction and mining, insurance, and media and telecommunications," told Business Insider.

For military applications, drones are expected to become smaller and lighter with much longer battery life and flight times. There will also be developments in improving drone optics and other capabilities further. In the civilian market, developments in improving flight times are allowing them to serve as delivery platforms, for use in emergency services, and for data collection in a number of areas too dangerous for humans, such as in power plants or fires. Drones have also been deployed for home security and crowd control in some countries. While a worrying development, authorities in some areas are likely to continue the use of drones for this type of surveillance. Miniaturization is also likely to play a massive role in the future of drones. As components are made smaller and smaller, drones will also be dramatically reduced in size.

It is not inconceivable that micro-drones will become commonplace in military and commercial/industrial applications in the not too distant future. Who knows, perhaps microscopic drones might not be too far away. Development in flight control algorithms, machine vision, and onboard processing power will further enable drones to make decisions themselves, rather than relying on human input, further improving the drones' reaction time and speed.

Despite the great potential for drones to be used as a weapon, a number of groups have also raised questions about the ethics of this type of remote weaponry, given the possibility of errors resulting in the deaths of civilians because of inaccurate data.

While some claim that UAVs are a threat to privacy and safety, others believe that this is outweighed by their potential to be used for the better. Whatever the opinions are, drones are expected to increase in number as they become smarter and more capable, and find uses in a wider number of industries and a wider number of roles in the future.

2. Напишите русские эквиваленты следующим выражениям из текста:

one of the world's leading news portals; annual growth rate; construction and mining; insurance; media and telecommunications; battery life; developments in improving; for use in emergency services; in the civilian market; to serve as delivery platforms; in a number of areas; While a worrying development; miniaturization is also likely to play; As components are made smaller and smaller; it is not inconceivable that; who knows; onboard processing power; to make decisions themselves; a number of groups; given the possibility of errors; because of inaccurate data; while some claim that; others believe; this is outweighed by their potential; whatever the opinions are; in a wider number of industries.

3. Выпишите из текста глаголы, стоящие в Present Simple Tense и переведите их на русский язык.

4. Составьте собственное высказывание о том, что вы думаете о будущем применении дронов (не менее 10 предложений).

Тема 11. Летательные аппараты

TYPES OF AIRCRAFT

A. Modern heavier-than-air aircraft can be divided into two main classes according to the principle of flying: 1) aircraft flying due to aerodynamical action and 2) aircraft performing ballistic flight.

B. Aircraft of the first class are gliders, airplanes, helicopters, autogiros and winged missiles. Ballistic rockets belong to the second class.

C. Gliders have no power plant and are supported in the air by up and down air streams or air flows encountering the wing. The glider is lighter than the airplane and covers long distances with little loss of height. Thanks to them much of the early advance in aviation became possible. Now the gliders serve mostly for sport and training.

D. Airplanes are controllable machines and have engines which give power for forward motion. The lifting force of airplanes is created by the wing itself while it is propelled by the thrust produced by the airscrew or by a jet engine. The arrangement and number of the wings subdivide the airplanes into the classification as follows:

- 1) the biplane which is a two wing plane with an upper and lower of wings;
- 2) the monoplane which is an airplane with wings in one level.

These are divided into four general types according to the wing position:

- a) the mid wing monoplane with the wing secured midway between the top and bottom of the fuselage;
- b) the high wing monoplane having the wing attached to the top of the fuselage;
- c) the low wing monoplane with the wing attached to the bottom of the fuselage;
- d) the parasol wing monoplane having its wing placed a short distance above the fuselage and attached to it by struts and braces.

E. Many airplanes are equipped to take off water and land on water. Such airplanes are called flying boats if the boat hull replaces the airplane fuselage, or seaplanes if floats take the place of wheels on a conventional land plane. If flying boats and seaplanes are also equipped with wheels for landing on the ground they are called amphibians.

F. At present VTOL and STOL aircraft are becoming popular but for vertical take-off it is necessary to produce the lift force exceeding the aircraft weight. The source of the lift is the energy developed by the propulsion system. The following methods of vertical take-off are suggested now:

- a) the direct application of power plant thrust,
- b) the application of lifting properties of airfoil.

G. The helicopter largely differs from the airplane. The main thing that distinguishes a helicopter from an airplane is that the necessary lift force for helicopter is produced by a rotor instead of wings. The helicopter has a fuselage but there is no conventional propeller in the nose. Instead it has rotor blades on the top. The engine drives them. The power of a helicopter engine is transmitted to the rotor which produces the thrust for vertical take-off, hovering and forward propulsion. The helicopter is able to rise straight off the ground, fly forward, backward, sideward and descend vertically to the ground. Yet it has a few disadvantages. One of them is its inability to fly at high speed.

H. The autogiro is flying on the same principles, but the difference is that in addition to a rotor the autogiro has also a tractor airscrew. The power developed by the autogiro engine is transmitted to the airscrew while the rotor is freely revolving under the action of airflow, thus creating the lifting force.⁴⁹

I. Ballistic rockets (missiles) belong to the second class of aircraft. They do not require any lifting force produced by means of a wing. The rocket engine is to impart them the necessary energy for propulsion. The rocket engines are mostly operated on liquid or solid fuels.

1. Прочтите текст и решите, верны эти утверждения или нет. Исправьте неправильные.

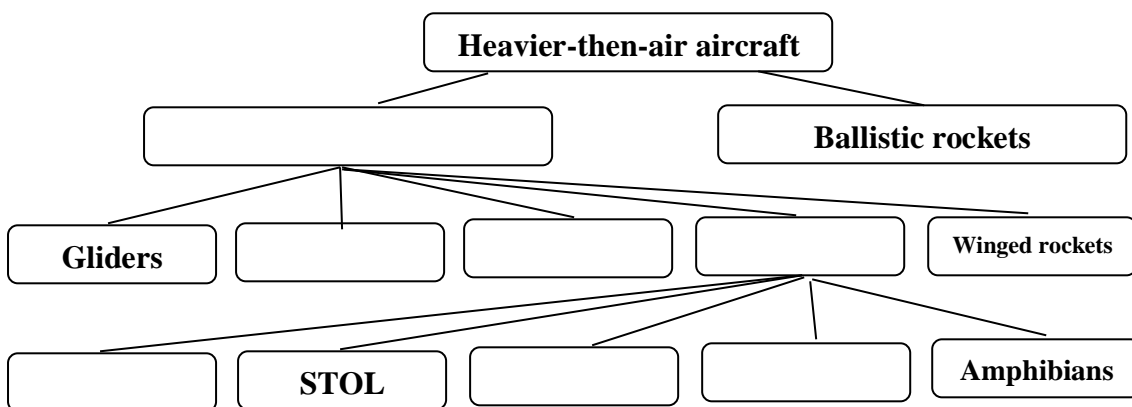
1. Modern heavier-than-air aircraft are classified into two classes according to their flying principle.
2. Airplanes fly due to up and down air stream.
3. Gliders are equipped with airscrew and power plant.
4. Airplanes can be fitted with floats to take off and land on water.
5. In helicopters lifting force is produced by the wing itself.
6. The helicopters can take off and land vertically.
7. The autogiros and ballistic rockets fly on the same principles.
8. Ballistic rockets do not produce lifting force by means of a wing.

2. Заполните пропуски словами и выражениями:

wing position, engines, the autogiro, the parasol wing, flying boat, seaplanes, the wing itself, a rotor, ballistic rockets, up and down airstreams

1. Gliders are supported in the air by_____.
2. The lifting force of the wing is created by _____ when it moves through the air.
3. The monoplanes are divided into four types according to_____ .
4. _____ monoplane has its wing placed a short distance above the fuselage.
5. In _____ the boat hull replaces the airplane fuselage.
6. _____ are equipped with floats to take off water and land on water.
7. The helicopters produce lifting force by_____.
8. _____ is equipped with a tractor airscrew and a rotor.
9. The rocket engine provides energy for propulsion for_____.
10. In airplanes _____ supply power for forward motion.

3. Заполните диаграмму недостающей информацией из текста.



Тема 12. Радионавигационные и визуальные средства

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, bringing 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 identify a particular aeroplane on a radar screen.

Tasks

1. 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»

2. 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.

3. 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?

Тема 12. Работа оператора БПЛА

Тема 13. Путь к карьере

Опрос по теме:

1. Where can a UAV operator find work?
2. What does determine the professional knowledge of the drone operator?
3. What do we call a “drone”?
4. Where are the unmanned systems used?
5. When did the profession of drone operator officially appear in Russia?
6. What are the responsibilities of a drone operator?
7. What is a drone operator distinguished by?

Test of Multiple Choice

1. What is the minimum age to become a drone pilot according to the Federal Aviation Administration (FAA)?
 1. 8 years old
 2. 13 years old
 3. 16 years old
 4. 18 years old
2. What is the name of the test you need to pass to become a drone pilot?
 1. Unmanned Aircraft General Small (UAG)
 2. Drone Operator Knowledge Test (DOKT)
 3. Remote Pilot Certificate Test (RPCT)
 4. Aeronautical Knowledge Exam (AKE)
3. What should you do before flying your drone over the neighbor`s yard?
 1. ask for permission each time you fly
 2. fly without permission
 3. avoid asking permission
 4. ignore the neighbor`s yard
4. How often must certificate holders complete recurrent training to maintain aeronautical knowledge recency?
 1. every 6 months
 2. every 12 months
 3. every 18 months
 4. every 24 months
5. What is recommended age for a child to fly a toy drone on their own according to Droneblog?
 1. 5 years old
 2. 8 years old
 3. 10 years old
 4. 13 years old

2.2. Оценочные средства для промежуточной аттестации

Комплект оценочных средств предназначен для контроля и оценки результатов освоения учебной дисциплины **СГ.02 Иностраный язык в профессиональной деятельности** по специальности: **25.02.08 Эксплуатация беспилотных авиационных систем**.

Оценка освоения образовательной программы предусматривает сдачу *зачета в 4,6 семестрах, экзамена – в 8 семестре*.

Критерии оценивания:

I. Устные темы:

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.

II. Лексико-грамматические упражнения

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 работы по дисциплине обязательны для выполнения.

3. Информационное обеспечение: перечень рекомендуемых учебных изданий, Интернет-ресурсов, дополнительной литературы.

Основная литература:

1. Григоров В.Б. Английский язык для студентов авиационных вузов и техникумов. – М.: ООО «Издательство Астрель»: ООО «Издательство АСТ», 2022. – 382 с.

2. Кузьменкова Ю.Б. Английский язык для технических колледжей. – Москва: Издательство Юрайт, 2023.- 207 с.

3. Кохан О.В. Английский язык для технических специальностей: учебное пособие для среднего профессионального образования. - Москва: Издательство Юрайт, 2023.- 226 с.

4. Лахмаков В.Л. Английский язык: беспилотные летательные аппараты. Практикум: учебное пособие. – Москва: Кнорус, 2023

Дополнительная литература:

1. Агабекян, И.П. Английский язык для ссузов: учебное пособие / И.П. Агабекян. – М.: ООО «Издательство Проспект», 2022. – 280с.

2. Голицынский Ю.Б. Грамматика: Сборник упражнений. – 8- е изд., - СПб.: КАРО, 2022. – 544 с.

Интернет – ресурсы:

1. Грамматика английского языка // «STUDY - ENGLISH.INFO»:URL.: <http://study-english.info/grammar.php>.

2. <https://www.englishclub.com/english-for-work/airline.htm>

3. <http://study-english.info/vocabulary-airport.php#ixzz3t4hVtsys>

Комплект оценочных средств
для контроля и оценки результатов освоения

учебной дисциплины **СГ.02 Иностранный язык в профессиональной деятельности**
по специальности: **25.02.08 Эксплуатация беспилотных авиационных систем**
форма промежуточной аттестации: **зачет**

период: **IV семестр**

проверяемые темы:

Тема 1. Английский язык как средство межкультурного общения

Тема 2. Путешествие по воздуху

Тема 3. Аэропорт

Тема 4. Авиационные профессии

Тема 5. Полет

проверяемые компетенции: ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3.

I. Fill in the blanks in the text.

The airport, which is associated with Great Britain, is called Heathrow. It is the (1)_____. Last year (2)_____ used its services. Heathrow has four operational terminals with a cargo one, and two parallel runways. There are over (3)_____, and they can bring you to about 170 destinations. As every world class airport it has (4)_____, chaplains of different religions, snack bars, departure lounges, duty free shops etc. There are facilities for business, (5)_____, many online services and assistance. The most popular destination is (6)_____. Working since 1929 it is the fourth busiest airport in the world. Other London airports are (7)_____. All of them have a very high security level because of constant terrorist attacks. Three main airports (8)_____, while the others are under protection due to police officers present there.

Фразы для подстановки:

1. an expanded car park
2. house body scanners
3. Gatwick, Stansted, Luton, John Lennon and City Airport
4. more than 70 million people
5. 90 airlines working there
6. disabled travelers and kids
7. chief international and the busiest airport of the country
8. New York City

II. Choose the right word in the dialogue.

Registration agent: Hello, could you show your passport and (e-ticket/e-mail), please?

Man: Here they are.

Registration agent: OK, would you prefer an aisle or (door/window) seat?

Man: A window, please.

Registration agent: Is it all your (luggage/bags)?

Man: Yes, I have only one bag.

Registration agent: Put it on the conveyor (floor/belt) to weigh.

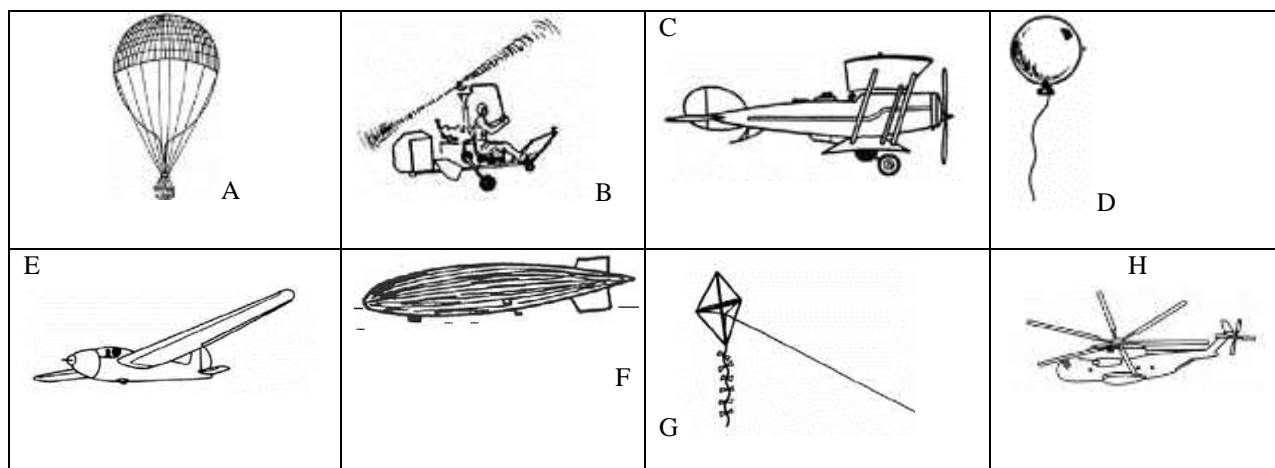
Man: Isn't it too heavy?

Registration agent: It is OK, do you have any (forbidden/legal) items or things to be declared?

Man: No.

Registration agent: This is your boarding (pass/place). Boarding is at gate 22 at 4 p.m.

III. Match:



Flying boat, glider, biplane, kite, autogiro, balloon, airship, parachute, helicopter.

IV. From the History of Flying

A. The desire to fly was one of the oldest desires of man. But in old times people knew little about air and its nature.

B. The Greek philosopher Aristotle believed that air had weight and pressed on bodies which were in the air. 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.

C. Later men of science like Galileo, Roger Bacon and Pascal came to conclusion that air was gas and that the higher you went the less its pressure was.

D. People who like to read books on aviation development may take interest in the book "On the Flight of Birds" by Leonardo da Vinci. That human flight is possible is the fundamental idea of the book. In the book the famous Italian artist and scientist recorded the first scientific principles of human flight. He found that the faster the flow of the air the greater the lift was. As a result of these studies he designed a flying device. In his device the pilot had to operate movable wings with the help of his arms and feet. But the machine did not fly.

E. In the course of many centuries scientists tried to make a flying device. But the development of a practical flying device on a really scientific basis began later. The first flying machine man could control in the air appeared only in the 19-th century.

F. And this first in the history of civilization plane was the one designed by Alexander Mozhaisky. It went up in the summer of 1832.

J. There are many glorious chapters in the history of flying in our country. There were the famous flights by the crews of V. Chkalov and M. Gromov, who flew their planes from the Soviet Union to the United States via the North Pole and will forever be considered models of courage and skill.

H. Devoted courage was displayed by our pilots in the Great Patriotic War. More than 2000 Soviet pilots won the title of Hero of the Soviet Union, and 69 won this award twice. Alexander Pokryshkin and Ivan Kozhedub, the famous fighter aces, became triple Heroes of the Soviet Union.

I. Following the glorious traditions of the Soviet aviation our pilots are establishing new world records for altitude, range and speed. In our days air forces have undergone a qualitative reequipment. New supersonic jet planes have replaced the piston-engined aircraft. Air force equipment and armaments are being improved continually. Aviation has given birth to astronautics, it has provided the theoretical and practical bases for the conquest of outer space. The time is not far away when passengers aircraft will be doing regular service on space lines.

1. Какое из следующих предложений резюмирует основную идею абзаца D?

- a) Human flight is possible due to moving wings.
- b) Flight principle was known from the ancient Greeks.
- c) Scientific principle of the human flight was recorded by Leonardo da Vinci.
- d) Leonardo da Vinci predicted conquest of outer space.

2. В тексте найдите определение основного научного принципа полета человека.

3. Просмотрите еще раз текст и ответьте на вопросы.

- 1. Who believed that air had weight?
- 2. Who wrote the book "On the Flight of Birds"?
- 3. What is the fundamental idea of the book "On the Flight of Birds"?
- 4. What did Leonardo da Vinci record in his book "On the Flight of Birds"?
- 5. When is the lift of the aircraft greater?
- 6. When did the first flying machine appear?
- 7. Who designed the first plane?

4. В тексте найдите антонимы к словам в рамке.

danger, lose, slower, the newest, impossible, irregular, moveless, impractical

5. Дополните предложения ниже подходящими словами из текста.

- 1. Later men of science came to conclusion that the higher you went air pressure was.
a) the higher b) the more c) the little d) the less
- 2. Leonardo da Vinci discovered that the flow of the air the lift was.
a) the faster, the less b) the faster, the greater c) the greater, the less
- 3. Supersonic jet planes have replaced
a) helicopters b) piston-engined aircraft c) subsonic aircraft
- 4. Air force equipment and armaments are being continually.
a) considered b) improved c) displayed d) controlled

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форма промежуточной аттестации: **зачет**

период: **VI семестр**

проверяемые темы:

Тема 6. Беспилотные авиационные системы

Тема 7. Погода. Климат

Тема 8. Безопасность полётов

проверяемые компетенции: ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3.

I. Прочитайте и переведите текст. Подберите подходящие заголовки к абзацам текста и выберите главный заголовок к тексту:

Attitude Mode, Beginner Mode, Sport Mode, Positioning Mode, Standard flight modes.

The basics of the basics. Standard flight modes are designed for aerial photography. Each mode is intended to be used according to the pilot's knowledge and experience.

1. A mode that was developed by the manufacturer specifically for beginners. Available on all DJI device models. What is the essence of the regime? The first is automatic speed and altitude limitation. In addition, the sensors will work permanently and cannot be disabled in this mode. With their help, a safe and stable flight is ensured, as well as the entire process of controlling the drone is simplified. The radius of removal of the drone from the pilot in the mode is also limited

- 30 meters. In fact, this is already a lot for a novice pilot. Thus, you can freely learn to fly and have complete control over the device.

2. It is also P-Mode, or simply P mode. Its main essence is the use of the GPS module and optical sensors for a stable and smooth flight. Typically, depending on the model of the drone, there are two types of mode: P-GPS and P-OPTI. In the first case, the drone uses location data from the GPS module. If the signal is lost, the aircraft can automatically enter P-OPTI mode. You can also choose it yourself if you are in doubt about a reliable connection. The difference is that in this mode the drone will be less stable in flight and may be affected by external factors (weather changes). But at the same time, optical sensors will allow the drone to better avoid obstacles. In the dark, however, it is better not to use the mode.

3. The name speaks for itself. Similar in meaning to P-OPTI, the orientation mode allows you to keep the device on the fly even in the most difficult situations. True, even experienced pilots cannot always master the mode. The difficulty of piloting in the flight attitude mode is associated with the need to constantly monitor the horizontal drifts to maintain a stable flight. The altitude is maintained here by the on-board barometer. And that's it, in this position there is a danger of drift, and the flight itself is carried out relative to the direction of its bow (front) part. This can disorient the pilot. The mode is most often used for professional shooting of commercials and films. Why? Everything is simple, it is thanks to the orientation mode that the flight becomes smoother, despite possible sudden braking due to GPS system failures. In addition, the lack of automatic braking, which is also disabled in orientation mode, helps the aircraft to stop more smoothly and naturally as soon as the pilot releases control. For filming, this is also an obvious advantage.⁷³

4. Finally, the last and most popular mode for aerial photography enthusiasts. With it, the drone picks up its maximum speed. True, the regime is dangerous for beginners - obstacle avoidance systems do not work. But when you are already an experienced pilot, the mode is able to present the best shooting of what is happening around.

II. Напишите предложения на английском, переведя их из пассивного залога в активный:

- 1) A mode was developed by the manufacturer specifically for beginners.
- 2) The sensors will work permanently and cannot be disabled in this mode.
- 3) The difficulty of piloting in the flight attitude mode is associated with the need to constantly monitor.
- 4) The altitude is maintained here by the on-board barometer.
- 5) The mode is most often used for professional shooting of commercials and films.
- 6) The lack of automatic braking, which is also disabled in orientation mode, helps the aircraft to stop more smoothly and naturally as soon as the pilot releases control.

III. Переведите следующие предложения из активного залога в пассивный и запишите их на английском языке:

- 1) Before flight, check if the obstacle avoidance system is disabled.
- 2) Some Intelligent Modes do not support Obstacle Avoidance.
- 3) Save flight routes and survey points
- 4) DJI's drone software allows pilots to create templates and save flight routes.
- 5) This is useful if you are planning a repeat flight at a given point or fulfilling a technical assignment.

IV. Составьте диалог, используя правила безопасности при использовании БАС. Обратите внимание на употребление модальных глаголов:

What is now possible:

- Fly at heights of no more than 150 meters;
- You do not need to submit a flight plan and approve a flight if your aircraft model weighs less than 30 kg.
- You also need to register an aircraft model with a takeoff weight of more than 250 grams and up to 30 kg!

What is not allowed:

- You cannot fly in control zones, near airports and control zones, security zones;
- You cannot fly over mass events (rallies, competitions, demonstrations, concerts and other cultural events).

Комплект оценочных средств
для контроля и оценки результатов освоения

учебной дисциплины **СГ.02 Иностранный язык в профессиональной деятельности**
по специальности: **25.02.08 Эксплуатация беспилотных авиационных систем**
форма промежуточной аттестации: **экзамен**

период: **VIII семестр**

проверяемые компетенции: ОК 01, ОК 04, ОК 06, ОК 09, ПК 1.3, ПК 2.3, ПК 3.3.

I. Устные темы:

1. Why is it Important to Learn a Foreign Language?
2. Travelling by Air.
3. My future profession.
4. What are drones?
5. Weather conditions and drones.
6. Drone control rules.
7. Types of aircraft.
8. Emergency situations.
9. Drones and modern life.
10. Types of aircraft.

II. Лексико-грамматические упражнения

Choose the correct answer:

1. Modern heavier-than-air aircraft (to divide) into two main classes according to the principle of flying.
 - a) can be divided
 - b) may be divided
 - c) should be divided
2. Gliders have no power plant and (to be supported) in the air by up and down air streams or air flows encountering the wing.
 - a) is supported
 - b) are supported
 - c) will be supported
3. The helicopter (to be able) to rise straight off the ground, fly forward, backward, sideward and descend vertically to the ground.
 - a) is able
 - b) are able
 - c) will be able
4. The helicopter largely (to differ) from the airplane.
 - a) differ
 - b) differs
 - c) differed
5. The power developed by the autogiro engine (to be transmitted) to the airscrew while the rotor is freely revolving under the action of airflow, thus creating the lifting force.
 - a) is transmitted
 - b) are transmitted
 - c) will be transmitted
6. The autogiro (to be flying) on the same principles, but the difference is that in addition to a rotor the autogiro has also a tractor airscrew.
 - a) is flying
 - b) are flying
 - c) will be flying
7. The glider is (light) than the airplane and covers long distances with little loss of height.

- a) lighter
 - b) the lightest
 - c) the most lightest
8. Without a doubt, Concorde is one of history's (recognizable) aircraft.
- a) more recognizable
 - b) most recognizable
 - c) recognizablest
9. These planes have (excellent) space than VLJs and a lavatory.
- a) more excellent
 - b) the most excellent
 - c) excellenter
10. Airplanes are controllable machines and have engines which (to give) power for forward motion.
- a) gives
 - b) give
 - c) gave
11. Air ambulances (transfer) victims of accidents, natural disasters, and medical crises to hospitals.
- a) transfers
 - b) transfer
 - c) will transfer
12. Commercial aircraft maintain their altitude (according ...) the laws of aerodynamics.
- a) according to
 - b) according with
 - c) according by
13. This article (to discuss) well-known and unique aircraft types for enthusiasts and prospective pilots.
- a) discusses
 - b) discuss
 - c) discussed
14. Airplanes and helicopters are the (common) types of aircrafts we may know.
- a) more common
 - b) most common
 - c) commonest
15. (Due ...) this multiple power and engine facility, the aircraft quality, capacity, speed, and climb rate is much higher than the usual air crafts.
- a) due with
 - b) due to
 - c) due on
16. (With the help ...) technological advances and breakthroughs, today's fighters have numerous other capacities and innovations such as data transmissions, sensors, secure cockpits, high bandwidth, and more.
- a) With the help of
 - b) With the help with
 - c) With the help to
17. While business jets are costly (due ...) their design, plush appearance, and very sophisticated looks, the business jets are used by different classes of people – from government officials to armed forces for special operations to companies and private ownership.
- a) due to
 - b) due with
 - c) due on
18. Gyroplanes are (similar ...) helicopters in appearance, although a bit narrow, and have an engine-driven propeller.

- a) similar to
 - b) similar with
 - c) similar by
19. (... most cases), biplanes are spotted and used for army and military purposes of specific countries.
- a) with most cases
 - b) in most cases
 - c) by most cases
20. (... most cases), this kind of aircraft is used by air services for their services and duties.
- a) with most cases
 - b) in most cases
 - c) by most cases
21. (Due ...) this multiple power and engine facility, the aircraft quality, capacity, speed, and climb rate is much higher than the usual air crafts.
- a) due with
 - b) due to
 - c) due on
22. Airplanes and helicopters are the (common) types of aircrafts we may know.
- a) more common
 - b) most common
 - c) commonest
23. This article (to discuss) well-known and unique aircraft types for enthusiasts and prospective pilots.
- a) discusses
 - b) discuss
 - c) discussed
24. Commercial aircraft maintain their altitude (according ...) the laws of aerodynamics.
- a) according to
 - b) according with
 - c) according by
25. Air ambulances (transfer) victims of accidents, natural disasters, and medical crises to hospitals.
- a) transfers
 - b) transfer
 - c) will transfer
26. Airplanes are controllable machines and have engines which (to give) power for forward motion.
- a) gives
 - b) give
 - c) gave
27. These planes have (excellent) space than VLJs and a lavatory.
- a) more excellent
 - b) the most excellent
 - c) excellenter
28. Without a doubt, Concorde is one of history's (recognizable) aircraft.
- a) more recognizable
 - b) most recognizable
 - c) recognizable
29. The glider is (light) than the airplane and covers long distances with little loss of height.
- a) lighter
 - b) the lightest
 - c) the most lightest

30. The autogiro (to be flying) on the same principles, but the difference is that in addition to a rotor the autogiro has also a tractor airscrew.

- a) is flying
- b) are flying
- c) will be flying

Ответы:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A	B	A	B	A	A	A	B	A	B	B	A	A	B	B

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
A	A	A	B	B	B	B	A	A	B	B	A	B	A	A

Билеты к экзамену

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № _____, от _____ 20__ г. Председатель ПЦК _____ / _____ /	Экзаменационный билет № 1 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. Why is it Important to Learn a Foreign Language?

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № _____, от _____ 20__ г. Председатель ПЦК _____ / _____ /	Экзаменационный билет № 2 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. Travelling by Air.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № _____, от _____ 20__ г. Председатель ПЦК _____ / _____ /	Экзаменационный билет № 3 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. My future profession.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № _____, от _____ 20__ г. Председатель ПЦК _____ / _____ /	Экзаменационный билет № 4 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. What are drones?

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № ____, от _____ 20__ г. Председатель ПЦК ____ / ____ /	Экзаменационный билет № 5 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. Weather conditions and drones.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № ____, от _____ 20__ г. Председатель ПЦК ____ / ____ /	Экзаменационный билет № 6 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. Drone control rules.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № ____, от _____ 20__ г. Председатель ПЦК ____ / ____ /	Экзаменационный билет № 7 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. Types of aircraft.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № ____, от _____ 20__ г. Председатель ПЦК ____ / ____ /	Экзаменационный билет № 8 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс	Утверждаю _____ 20__ г. Зам. директора по УР _____/Д.А. Владимиров/
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Вопрос 1. Emergency situations.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

<p>Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № _____, от _____ 20__ г. Председатель ПЦК _____ / _____ /</p>	<p>Экзаменационный билет № 9 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс</p>	<p>Утверждаю _____ 20__ г. Зам. директора по УР _____ /Д.А. Владимиров/</p>
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Вопрос 1. Drones and modern life.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____

<p>Рассмотрено на заседании ПЦК гуманитарных дисциплин протокол № _____, от _____ 20__ г. Председатель ПЦК _____ / _____ /</p>	<p>Экзаменационный билет № 10 По дисциплине СГ.02 Иностранный язык в профессиональной деятельности 4 курс</p>	<p>Утверждаю _____ 20__ г. Зам. директора по УР _____ /Д.А. Владимиров/</p>
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Вопрос 1. Types of aircraft.

Вопрос 2. Лексико-грамматические упражнения.

Преподаватель: _____