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\_\_\_\_\_\_\_\_\_\_\_М.В. Иванова

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Цикловая комиссия общеобразовательных и естественнонаучных дисциплин

**УЧЕБНО – ПРАКТИЧЕСКОЕ ПОСОБИЕ**

**Сборник текстов для чтения по авиационной тематике**

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| --- | --- | --- | --- |
| по дисциплине | | «Иностранный язык» | |
|  | | | |
| для студентов | | 2-4 | курсов |
|  | | | |
| специальностей | 24.02.01 Производство летательных аппаратов | | |
| 25.02.06 Производство и обслуживание авиационной техники | | | |

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| РАССМОТРЕНО | | | | | | | | |  | СОСТАВИЛА: | |
| на заседании предметно-цикловой комиссии | | | | | | | | |  | Широкая Е.В. | |
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**2020**

Учебное пособие по английскому языку предназначено для студентов 2-4 курса специальностей 24.02.01 Производство летательных аппаратов и 25.02.06 Производство и обслуживание авиационной техники.

Данное пособие составлено в соответствии с Федеральным государственным образовательным стандартом и программой по иностранному языку по техническим специальностям для учреждений среднего специального образования.

Целью пособия является подготовка студентов к использованию иностранного языка в их будущей профессиональной деятельности, т.е. обучение как письменной, так и устной формам. Кроме того, полученные навыки и умения могут служить базой для дальнейшего самообразования.

Совокупность текстов, составляющих каждый раздел, предусматривает развитие навыков по основным видам чтения. Тексты сопровождаются системой упражнений, направленных на усвоение специальной лексики и терминологии, развитие умения анализировать и обобщать информацию.

В каждом разделе предусматривается повторение наиболее значимых грамматических явлений. С этой целью раздел содержит обширную систему практических упражнений.

Предлагаемый ряд разнообразных дискуссионных видов деятельности, творческих заданий предоставляет студентам возможность совершенствовать навыки устной и письменной речи, повысить уровень речевой компетентности.

Материал пособия охватывает следующую тематику: радиолокационные системы (РЛС), функционирование РЛС, система посадки по приборам ILS, автоматический радиопеленгатор, в аэропорту (обслуживание пассажиров, оформление багажа, система информирования пассажиров), двигатели, столкновение с птицами.

Учебное пособие может использоваться для аудиторной и самостоятельной работы студентов.

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# Unit 1 Radar

**Vocabulary**

|  |  |
| --- | --- |
| aeroplane [ˈe(ə)rəpleɪn] | самолет |
| air traffic control | управление воздушным движением |
| ILS (instrument landing system) | система посадки по приборам |
| air-ground communication | связь «воздух – земля» |
| surveillance radar | радиолокатор кругового обзора |
| occur [əˈkɜː] | происходить |
| radar environment | условия с использованием радиолокационного контроля |
| air traffic controller | авиадиспетчер |
| radar map | радиолокационная карта |
| position report | сообщение о местоположении |
| handle | управлять (воздушным судном), пилотировать |
| separation | эшелонирование (полётов) |
| ability [əˈbɪlɪtɪ] | способность, возможность |
| heading | курс полета, направление |
| by passing | путем передачи, посредством передачи |
| steer | управлять; вести; пилотировать |
| track | 1. линия пути (полёта)2. направление; курс | |
| commencement [kəˈmensmənt] | начало |
| manoeuvring [məˈnuːvərɪŋ] | маневрирование |
| excessive [ɪkˈsesɪv] | чрезмерный |
| confined [kənˈfaɪnd] | ограниченный |
| extensively used [ɪksˈtensɪvlɪ juːzd] | широко используемый |
| controlled airspace | контролируемое воздушное пространство |
| fitted | оснащенный |
| transponder [trænˈspɒndə] | ответчик |
| secondary surveillance radar [ˈsekəndərɪ sɜːˈveɪləns ˈreɪdɑː] | вторичный обзорный радиолокатор (ВОР) |
| radar controller | диспетчер радиолокационного контроля |
| unique signals [juːˈniːk ˈsɪgnəlz] | уникальные сигналы |
| thereby [ðeəˈbaɪ] | таким образом |

**1. Read and translate the text**

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 vectors 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.

**2.**  **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» |

**3. 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.

**4. 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?

# Unit 2 Primary surveillance radar

**Vocabulary**

|  |  |
| --- | --- |
| responsibility | ответственность |
| simultaneously [sɪmlˈteɪnɪəslɪ**]** | одновременно |
| roughly [ˈrʌflɪ] | резко; примерно, приблизительно |
| radar controller | диспетчер радиолокационного контроля |
| area of responsibility | зона ответственности (за диспетчерское обслуживание воздушного движения) |
| to transmit pulses | передавать сигналы |
| towards [təˈwɔːdz] | к |
| to tilt | наклонять |
| conversely [kənˈvɜːslɪ] | наоборот |
| resemble [rɪˈzembl] | походить, напоминать |
| circular [ˈsɜːkjʊlə] | круглая форма |
| range mark | отметка дальности |
| aid in | помочь в чем-либо |
| estimating distance | определение расстояния |
| plan position indicator | индикатор кругового обзора |
| radar dish | параболическая радиолокационная антенна |
| faint line | слабая линия |
| align with | совпадать |
| blip | отметка, изображение (на экране локатора) |

**1. Read and translate the text**

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.

**2. 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 |

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

1. Радиолокатор кругового обзора сконструирован так, чтобы дать диспетчеру обзор всей зоны.
2. Большинство экранов локаторов представляют собой катодно-лучевую трубку.
3. Так как антенна радиолокатора медленно вращается, то и маленький пучок электронов на экране тоже вращается.

**4. 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?

# **Unit 3** How radar works

**Vocabulary**

|  |  |
| --- | --- |
| ADF(automatic direction finder) | автоматический радиопеленгатор |
| NDB(non-directional radio beacon) | всенаправленный радиомаяк |
| VOR (VHF Omnidirectional Radar) | всенаправленный УКВ-радиомаяк |
| ILS | система инструментальной посадки |
| X-rays | рентгеновские лучи |
| emanate | исходить, излучать |
| Morse code [mɔːs kəʊd] | Азбука Морзе |
| devastating effect [ˈdevəsteɪtɪŋ ɪˈfekt] | разрушительное действие |
| emanate | исходить |
| air-ground voice communication | речевая связь « ЛА – Земля» |
| radio detection and ranging | радиолокационное обнаружение и дальность действия |

**1. Read and translate the text**

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 (Instrument Landing System).

*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.

**2. Поставьте 5 вопросов к следующему предложению (общий, специальный, к подлежащему, альтернативный, разделительный.)**

Radio has played a central part in the development of aviation.

**3. Найдите в тексте следующие словосочетания:**

Способность передавать электромагнитную энергию, из одного места в другое, развитие авиации, волны электромагнитной энергии, исходящие от радиопередатчика, передавать информацию, Азбука Морзе, радиоприемники, обнаруживать и использовать сигналы, голосовое сообщение «воздух-земля», автоматический радиопеленгатор, всенаправленный радиомаяк, электромагнитное излучение, световые волны, например, на зеркале, радиоволны будут отражаться, отражения радиоволн, которые просто проходят через них, как рентгеновские лучи проходят через тело, принцип радиолокации, с разрушительным действием.

**4. Match words on the left with their equivalents on the right.**

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | radar (*radio detection and ranging)* | 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 |

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

1. *Радио использует возможность передачи электромагнитной энергии.*
2. *Волны электромагнитной энергии могут нести информацию.*
3. *Электромагнитное излучение может отражаться от определенных поверхностей.*
4. *Обнаружение отраженных радиоволн в точке, откуда они были первоначально переданы, называется радиолокацией.*
5. *Принцип радиолокации был использован для обнаружения таких объектов, как самолеты.*

**6 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?

# Unit 4 Instrument landing system

**Vocabulary**

|  |  |
| --- | --- |
| ILS (instrument landing system | система посадки по приборам |
| a precision approach | точный заход на посадку |
| particular runway | определенная ВПП |
| slope guidance | наведение по глиссаде |
| tracking guidance | вывод (воздушного судна) на линию пути |
| localizer (LLZ) | курсовой радиомаяк |
| glideslope | глиссада |
| marker beacon | маркерный радиомаяк |
| outer marker | дальний радиомаркер |
| middle marker | средний радиомаркер |
| ILS approach | заход на посадку по курсоглиссадным маякам |
| marker beacon | маркерный радиомаяк |
| outer marker | дальний радиомаркер |
| middle marker | средний радиомаркер |
| ILS approach | заход на посадку по курсоглиссадным маякам |
| locator beacon | приводной радиомаяк |
| substitute | заменять |
| DME (distance measuring equipment) | дальномерное оборудование |
| locator beacon | приводной радиомаяк |
| substitute | заменять |
| DME (distance measuring equipment) | дальномерное оборудование |
| fix | местоположение, коoрдинаты |
| PAPI (precision path approach indicator) | указатель точной траектории захода на посадку |
| descent path | траектория снижения |
| finding | определение местонахождения |
| flare | выравнивание (перед посадкой) |

**1. Read and translate the text**

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:

The localizer (LLZ), which provides tracking guidance along the extended centerline of the runway (guidance in azimuth left or right of the extended centerline)

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).

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.

**2. 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 |

**3. 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.

**4. 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?

# Unit 5 VHF Direction finding (VDF)

**Vocabulary**

|  |  |
| --- | --- |
| ADF (automatic direction finder) | автоматический радиопеленгатор |
| to equip [ɪˈkwɪp] | оборудовать, оснащать |
| aerial [ˈe(ə)rɪəl] | антенна |
| to sense | улавливать |
| air traffic controller | авиадиспетчер, диспетчер службы УВД |
| readout | считывание показаний (прибора) |
| bearing[ˈbe(ə)rɪŋ] | пеленг |
| homer | радиопеленгаторная станция |
| direction finding | пеленгация, пеленгование |
| very high frequency direction finding | ОВЧ-радиопеленгация |
| installation [ɪnstəˈleɪʃn] | установка |
| transmission [trænzˈmɪʃn] | радиопередача |
| VHF communication frequency | ОВЧ – частота радиосвязи |
| designate [ˈdezɪgnɪt] | обозначать |
| abbreviate [əˈbriːvɪeɪt] | сокращать |

**1. Read and translate the text**

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.

VDF ground equipment from years ago was known as a **manual homer,** and used an 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.

**2. 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 |

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

1. Некоторые аэродромы оборудованы антеннами.
2. Информация передается диспетчеру в виде радиала на катодно-лучевую трубку.
3. На борту воздушного судна не требуется никакого специального оборудования для VDF.

**4. 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?
5. What kind of equipment did the operator use in the past?

**5. Find in the text of the sentence in the Passive Voice**

# Unit 6 Passenger Handling

**Vocabulary**

|  |  |
| --- | --- |
| passenger handling- обслуживание пассажиров | strong- надежный |
| universally- повсеместно, везде | individual[ɪndɪˈvɪʤʊəl] gate lounge [laʊnʤ]- зал ожидания выхода на посадку |
| entirely [ɪnˈtaɪəlɪ]- исключительно | to lease [tuː liːs]- сдавать в аренду |
| air transport hub- авиатранспортный узел | designated area- специально отведенное место |
| mutual competition[ˈmjuːʧʊəl kɒmpɪˈtɪʃn]- взаимная конкуренция | ramp area-зона стоянки |
| corporate image [ˈɪmɪʤ]- имидж компании, представление о компании | airport authority [ˈeəpɔːt ɔːˈθɒrɪtɪ]- администрация аэропорта |
| facilities- оборудование | check-in desk- стойка регистрации |
| physical facilities- материальная база | check-in area- зона регистрации на рейс |
| airport facilities- оборудование аэропорта | common user terminal equipment (CUTE)- система регистрации и посадки пассажиров CUTE |
| designation [dezɪgˈneɪʃn]-предназначение | check-in clerk- служащий на стойке регистрации (в аэропорту) |
| result in [rɪˈzʌlt ɪn]- привести, приводить | immigration- иммиграционный контроль (пассажиров) |
| projection-прогнозирование | lounge [laʊnʤ]-комната отдыха |

**Read and translate the text**

Passenger handling in the terminal is almost universally entirely an airline function. In most countries of the world, certainly at the major air transport hubs, the airlines are in mutual competition. Especially in the terminal area the airlines wish to project a corporate image and passenger contact is almost entirely with the airline, with the obvious exceptions of the govern­mental controls of health, customs, and immigration. Airline influence is perhaps seen at its extreme in the United States, where individual airlines on occasions construct facilities. In these circumstances, the airlines play a significant role in the planning and design of physical facilities that they will operate. Even where there is no direct ownership of facilities, industry practice involves the designation of various airport facilities that are leased to the individual airlines operating these areas. Long-term designation of particular areas to an individual airline results in a strong projection of airline corporate image, particularly in the ticketing and check-in areas and even in the individual gate lounges.

A more common arrangement worldwide is for airlines to lease desig­nated areas in the terminal, but to have a large proportion of the ground handling in the ramp area carried out by the airport authority, a special handling agency, or another airline. At a number of international airports, the airline image is considerably reduced in the check-in area when common user terminal equipment (CUTE) is used to connect the check-in clerk to the airline computers. The use of the CUTE system can substantially reduce the requirements for numbers of check-in desks particularly where there is a large number of airlines, where some airlines have very light service schedules or where the airline presence is not necessary throughout the whole day.

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | passenger handling | a | зона регистрации на рейс |
| 2 | terminal | b | зона продажи билетов |
| 3 | air transport hub | c | обслуживание пассажиров |
| 4 | airline | d | зал ожидания |
| 5 | customs | e | расписание |
| 6 | ramp area | f | авиатранспортный узел |
| 7 | facilities | g | авиакомпания |
| 8 | ticketing area | h | таможня |
| 9 | check-in area | i | аренда, наем |
| 10 | lounge | j | аэропорт назначения, аэровокзал |
| 11 | schedule | k | оборудование |
| 12 | a lease | l | зона стоянки |

1. **Match words on the left with their definitions on the right**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | passenger handling | a | the central and the most important airport where a lot of routs meet |
| 2 | terminal | b | a legal agreement which allows you to use a building, car etc. for a period of time, in return for rent |
| 3 | air transport hub | c | rooms, equipment, or services that are provided for a particular purpose |
| 4 | airline | d | the process or system of selling or printing tickets for planes, trains, concerts |
| 5 | customs | e | a list that shows the times that buses, trains etc leave or arrive at a particular place |
| 6 | immigration | f | the way in which passenger is served at the airport |
| 7 | facilities | g | a place where passengers report their arrival at an airport |
| 8 | ticketing | h | a room for waiting in an airport |
| 9 | check-in | i | the process of entering another country in order to live there permanently |
| 10 | lounge | j | a large building at an airport where passengers wait to get on planes |
| 11 | schedule | k | a company that takes passengers and goods to different places by plane |
| 12 | a lease | l | the place where bags are checked for illegal goods when you go into a country |

1. **Replace the italicized words or word-combinations with a synonym from the box**

|  |  |
| --- | --- |
| check-in | lounge [laʊnʤ] |
| schedule | ticketing |
| air transport hub | terminal |
| passenger handling | facilities |

1. *Serving passengers* in the terminal is almost universally entirely an airline function.
2. Heathrow is the largest *air centre* in the UK, and it is 20 miles to the west of London.
3. The airlines play a significant role in the planning and design of *equipment* that they will operate.
4. There are 8 operating airline *buildings for serving passengers* at JFK Airport in New York.
5. The airline apologizes for long delays at *the procedure of registration passengers* today.
6. Some airlines have very light service *lists of flights*.
7. Most airlines are using electronic *system of selling tickets* now*.*
8. The new *waiting room* will maximise pre-flight enjoyment, with consoles and games to keep the children entertained.
9. **Answer the questions to the text**
10. Where do the airlines wish to project a corporate image?
11. Where do passengers contact the airline?
12. What does the CUTE mean?
13. Where do the airlines play a significant role?
14. What helps to reduce the requirements for numbers of check-in desks?

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# UNIT 7 Baggage handling

**Vocabulary**

|  |  |
| --- | --- |
| airport operations | обслуживание аэропортов, работа аэропортов |
| processing of baggage | оформление багажа |
| ramp | трап |
| airside operations | эксплуатация воздушного судна |
| sensitive issue | больной вопрос, болезненная тема |
| perceive [pəˈsiːv] | воспринимается |
| check back | перепроверить |
| an alert | оповещение, предупреждение |
| baggage handling | оформление и обработка багажа |
| to delay [dɪˈleɪ] | задерживаться |
| extended parking | длительная стоянка |
| congestion [kənˈʤesʧən] | перегрузка |
| sensitive issue [ˈsensɪtɪv ˈɪʃuː] | больной вопрос, болезненная тема, деликатная проблема |
| survey [ˈsɜːveɪ] | опрос |
| perceive [pəˈsiːv] | воспринимать |
| advent [ˈædvent] | появление |
| specific controls | конкретный механизм контроля, конкретные меры контроля |
| traveling public | пассажиры |
| narrow-bodied jet | узкофюзеляжный реактивный самолет |
| charge | плата |
| impose | облагать |
| have repercussions | отражаться |

**Read and translate the text**

Within the total airport operations system, an essential element is the handling of passengers’ luggage. If there are any different with the processing of baggage, either on departure or arrival, it can have repercussions across a wide range of airport operations. If baggage for departing flights is delayed then aircraft are kept at the gate longer than planned, and extended parking on the ramps inevitably leads to congestion and a general slowing down of airside operations and with this, possible delays also to the parking of arriving aircraft.

Baggage handling is a particularly sensitive issue from the passengers’ point of view, as indicated by numerous surveys, which place the subject very high, if not at the top, of the passengers’ priority list. The subject figures predominantly in correspondence between passengers and airport/airline management. Even though the handling of baggage is more often than not performed by non-airport personnel – airline or handling company – it is still all too often perceived by passengers as the airport operational responsibility.

Until the advent of the wide bodies, baggage seemed to be a manageable element of passenger service. It was subject to specific controls, and these were generally accepted by the traveling public. Manifestly there was a limit to what could be carried on a narrow-bodied jet, especially on a long-distance flight. Excess baggage charges were imposed for baggage above a specific weight (Economy, 44 pounds [20 kg]; First Class, 66 pounds [30 kg]), whether it was contained in one or more bags. The greatly increased capacity available on the wide bodies, however, brought about considerable relaxation of baggage constraints in the interest of simplified procedures.

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | luggage | a | осмотр, опрос |
| 2 | handling | b | место стоянки |
| 3 | departure | c | плата, оплата |
| 4 | arrival | d | руководство |
| 5 | charge | e | прибытие |
| 6 | flight | f | выход на посадку |
| 7 | gate | g | рейс |
| 8 | ramp | h | отправление |
| 9 | survey [ˈsɜːveɪ] | i | обслуживание |
| 10 | management | j | вместимость |
| 11 | responsibility | k | багаж |
| 12 | capacity | l | ответственность |

**2. Match words on the left with their definitions on the right**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | luggage | a | a duty or task that you are required or expected to do |
| 2 | handling | b | the area where aircraft park next to a terminal to load passengers and baggage |
| 3 | departure | c | the activity of controlling and organizing the work that a company or organization does |
| 4 | arrival | d | the amount of space a container, room etc. has to hold things or people |
| 5 | range | e | the place where people leave an airport building to get on a plane |
| 6 | flight | f | a set of questions to view in detail, especially to inspect, examine, or appraise formally or officially in order to ascertain condition, value, etc. |
| 7 | gate | g | a journey in a plane or space vehicle, or the plane or vehicle that is making the journey |
| 8 | ramp | h | a number of people or things that are all different, but are all of the same general type |
| 9 | survey | i | the manual or mechanical method or process by [which](http://dictionary.reference.com/browse/which) something is moved, carried, transported, etc. |
| 10 | management | j | the cases, bags etc. that people carry when they are travelling |
| 11 | responsibility | k | an act of leaving a place, especially at the start of a journey |
| 12 | capacity | l | the act and [the](http://www.macmillandictionary.com/search/british/direct/?q=the) [time](http://www.macmillandictionary.com/search/british/direct/?q=time) [when](http://www.macmillandictionary.com/search/british/direct/?q=when) [someone](http://www.macmillandictionary.com/search/british/direct/?q=someone) [or](http://www.macmillandictionary.com/search/british/direct/?q=or) [something](http://www.macmillandictionary.com/search/british/direct/?q=something) [comes](http://www.macmillandictionary.com/search/british/direct/?q=arrives) to [a](http://www.macmillandictionary.com/search/british/direct/?q=a) [place](http://www.macmillandictionary.com/search/british/direct/?q=place) [from](http://www.macmillandictionary.com/search/british/direct/?q=from) [somewhere](http://www.macmillandictionary.com/search/british/direct/?q=somewhere) [else](http://www.macmillandictionary.com/search/british/direct/?q=else) |

**3. Replace the italicized words or word-combinations with a synonym from the box**

|  |  |
| --- | --- |
| luggage | arrival |
| gate | range |
| departure | management |
| flight | survey |

1. They searched his *bags* for illegal drugs.
2. So passengers should check back often or schedule an alert to let them know if the *exit* information has changed.
3. The *exits* are where the airplanes park for passenger boarding and deplaning.
4. There is typically, but not always, a message sent to an air traffic control centre on *leaving*.
5. He immediately booked a *journey* to Toulouse.
6. Some airports and airlines recommend even earlier airport *coming* times, two hours or more, especially for international flights.
7. *There are many roles* in airport operations, including airline check-in, ramp operations, maintenance, safety, aircraft cleaning, re-fuelling and security.
8. Border *activity of controlling and organizing* is directly linked to passenger facilitation.
9. The airport authority conducted an *inspection* to study some problems in baggage handling.

**4. Answer the questions to the text**

1. What is the essential element within the total airport operation system?
2. What does baggage for departing flights delaying lead to?
3. Why is baggage handling a particularly sensitive issue from the passengers’ point of view?
4. What was baggage before the advent of the wide bodies?
5. What limit of baggage was on a narrow-bodied jet?

# Unit 8 Check-in procedures

**Vocabulary**

|  |  |
| --- | --- |
| check-in procedure [prəˈsiːʤə] | процедура регистрации |
| handling agent | агент по оформлению (пассажиров) |
| on behalf of [ɒn bɪˈhɑːf ɒv] | от имени, от лица, по поручению |
| bag tag | бирка |
| staff | штат (сотрудников) |
| hazardous [ˈhæzədəs] | опасный, рискованный |
| queue [kjuː] | очередь |
| destination [destɪˈneɪʃn] | пункт назначения |
| desk | стойка (регистрации пассажиров) |
| to take charge of | взять на себя ответственность |
| to assume responsibility | нести ответственность |
| as appropriate | по необходимости |
| to issue | выдавать |
| checked baggage [ʧekt ˈbægɪʤ] | зарегистрированный багаж, сдаваемый багаж |
| disrupt [dɪsˈrʌpt] | нарушать |
| query [ˈkwɪərɪ] | вопрос |
| deal with | иметь дело, заниматься |
| to make efforts | прилагать усилия |
| to exercise control | осуществлять контроль |

**Read and translate the text**

One of the several tasks involved in the check-in procedure is to ensure control of the numbers and weight of passengers' baggage. The number of bags carried by the individual passenger is recorded on that person's ticket, together with the weight when this is required. It is at this point that the airline (or handling agent acting on behalf of the airline) takes charge of the baggage and assumes responsibility for it, issuing reclaim tags to the passenger as appropriate. Prior to accepting the baggage, the airline should take the necessary steps to warn a passenger against including any dangerous or hazardous articles in the checked baggage.

These procedures will invariably lead to waiting lines and, for wide-bodied aircraft in particular, waiting lines might be very long. Typically, individual check-in time per passenger is somewhere between 45 seconds and 3 minutes. This can, however, be seriously disrupted if any query or problem arises, and because of this, most airlines/handling agents will have a procedure whereby the passenger with a query is removed from the check-in line and dealt with separately at another desk. Every effort must be made by airline and airport authorities to exercise control over the check-in lines, and this might be accomplished by stationing additional staff in front of the desks to direct passengers or, alternatively, by providing light barriers of one kind or another.

Many passengers make use of the widespread airline practice of allowing those carrying only hand baggage to avoid the ticket desk queue and proceed directly to the gate for their flight. There is also the added advantage that passengers then have no need to wait for checked baggage on arrival at their destination.

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | passenger | a | пункт назначения |
| 2 | weight | b | ручная кладь |
| 3 | ticket | c | широкофюзеляжный самолет |
| 4 | bag tag | d | стойка |
| 5 | wide-bodied aircraft | e | агент, представитель |
| 6 | hazardous | f | бирка |
| 7 | agent | g | штат (сотрудников) |
| 8 | desk | h | опасный, рискованный |
|  | staff | i | очередь |
| 10 | hand baggage | j | билет |
| 11 | queue | k | пассажир |
| 12 | queue [kjuː] | l | вес |

**2. Match words on the left with their definitions on the right**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | passenger | a | a line of people waiting to enter a building, buy something etc., or a line of vehicles waiting to move |
| 2 | weight | b | a small piece of paper, plastic etc. attached to bag to show what it is, who owns it etc. |
| 3 | ticket | c | a person or company that represents another person or company, especially in business |
| 4 | bag tag | d | the suitcases, bags, etc., that a passenger takes with him onto an aeroplane when he travels, as opposed checked baggage |
| 5 | wide-bodied aircraft | e | a measure of the heaviness of an object; the amount anything weighs |
| 6 | hazardous | f | a counter; a place where a passenger can get information or use a particular service in an airport |
| 7 | agent | g | a person who is travelling in a vehicle, plane, boat etc., but is not driving it or working on it |
| 8 | desk | h | the final point of travelling |
| 9 | staff | i | dangerous, especially to people's health or safety |
| 10 | hand baggage | j | (of an aircraft) having a wide fuselage, especially wide enough to contain three rows of seats abreast |
| 11 | queue | k | a printed piece of paper which shows that you have paid to travel on a bus, plane etc |
| 12) | destination | l) | the people who work for an organization |

**3. Replace the italicized words or word-combinations with a synonym from the box**

|  |  |
| --- | --- |
| staff | agent |
| passenger | hand baggage |
| destination | desk |
| bag tag | queue |

1. There is a big need for airport security *workers* throughout the U.S. and in other countries too.
2. An extra seat may be requested for a fat *travelling person* free of charge.
3. When planning your trip please take a look at airport info where you can find our partners who serve Estonian Air customers at *final* airports, ticket office open times, check-in info, transport to the city, etc.
4. The bag is then processed, the *small piece of paper* is activated and the bag is sent to the baggage handling system.
5. The cargo *representative* needs great communication skills for receiving and transmitting information from and to pilots, ground crew, and other personnel.
6. For example, 70% of Ryanair passengers only have *suitcases taken on board*.
7. Engineering is the lifeblood of Heathrow… from check-in *counters* to baggage carousels, from water supply to air conditioning, from airbridges to travelators – and everything else in between.
8. The baggage check-in time is reduced to between 15-45 seconds and *lines* at the check-in counter are also reduced.

**4. Answer the questions to the text**

1. What is involved in the check-in procedure?
2. What does the airline take charge of?
3. What should the airline warn a passenger against?
4. How much time does the check-in procedure per passenger take?
5. Why can the check-in procedure time increase?

**BIRD STRIKE**

**Vocabulary**

|  |  |
| --- | --- |
| bird ingestion | попадание птицы в двигатель |
| bird strike | столкновение с птицами |
| to ditch into the sea | производить посадку в море |
| to ditch onto the river | производить посадку в реку |
| dump | свалка (мусора) |
| to frighten birds away | отпугивать птиц |
| falcon | сокол |
| predator [ˈpredətə] | хищник |
| the vicinity of the airport | в районе аэродрома |
| to ingest a bird into an engine / to suck a bird into an engine | засасывать птицу в двигатель |
| flocks of birds | стаи птиц |
| to emit high frequency sounds | издавать звуки высокой частоты |
| to carry out a runway inspection | выполнять проверку ВПП |
| a pigeon [ˈpɪʤɪn] | голубь |

**Read and translate the text**

Bird strike is an aviation term for a collision between a bird and an aircraft. It is a common threat to aircraft safety and has caused a number of fatal accidents. In 1988 an Ethiopian Airlines Boeing 737 sucked pigeons into both engines during take-off and then crashed in an attempt to return to the Bahir Dar airport; of the 104 people aboard, 35 died and 21 were injured. Canada Geese were ingested into the engines of US Airways 1549 causing the engines to fail on the Airbus A320 that ditched onto the Hudson River. The highest risk of the bird strike is during the takeoff and landing, in low altitudes, which is in the vicinity of the airports. Some airports use active countermeasures from recorded sounds of predators to employing falconers. Poisonous grass can be planted that is not tasty to birds, nor to insects that attract birds. Passive countermeasures involve avoiding conditions attracting flocks of birds to the area (e.g. dumps). Another tactic found effective is to let the grass at the airfield grow taller (approximately 30 centimetres) as some species of birds won’t land if they cannot see one another.

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | to carry out an inspection | a | производить посадку в море |
| 2 | runway | b | столкновение с птицей |
| 3 | a collision | c | во время взлета |
| 4 | to emit sounds | d | столкновение |
| 5 | to ditch into the sea | e | разбиваться |
| 6 | bird strike | f | малая высота |
| 7 | during take-off | g | при попытке |
| 8 | low altitude | h | взлетно-посадочная полоса |
| 9 | in an attempt | i | издавать звуки |
| 10 | to crash | j | проводить проверку |

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

1. Столкновение с птицами представляет собой общую угрозу безопасности полетов воздушных судов.
2. Самолет засосал голубей в оба двигателя во время взлета, а затем разбился при попытке вернуться в аэропорт.
3. Самый высокий риск столкновения с птицами приходится на время взлета и посадки.
4. Некоторые аэропорты используют активные меры противодействия от записанных звуков хищников до использования соколов.

**2. Give Russian equivalents of the following words and word-combinations.**

What animals apart from birds, a collision between a bird and an aircraft, to cause problems, attempt to make the environment less attractive to animals and birds, to keep birds away from airports, flight safety, bird strike at high altitudes, what species of birds, to be a serious hazard, to ingest a bird into an engine, the rules governing the transportation of animals in the hold, to frighten birds away, to ditch into the sea, on cargo aircraft.

**3. Put 5 questions to this sentence.**

1. Bird strike has caused a number of fatal accidents.

2. The highest risk of the bird strike is during the takeoff and landing.

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